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CLINICAL SURGERY.—No. IV.

ON HIP DISEASE.

By THOMAS BRYANT, F.R.C.S.,
Assistant-Surgeon to Guy's Hospital.

That disease of the hip-joint differs in no single pathological point from disease of any other articulation is the most important point a Surgeon can have before him when commencing its consideration, for authors upon this subject have hitherto been too much disposed to lead their readers to look upon it as a special or peculiar affection, and to believe that it is both pathologically and clinically distinct from the diseases of other joints.

It has also with too much confidence been described as a "strumous disease," as if all diseases of the hip-joint or of any joint are generally of this nature, or are found only in subjects of a strumous diathesis, and have a constitutional, and not a local, origin.

To look upon hip-joint disease as a strumous affection is unquestionably wrong, pathologically as well as clinically. It is found in the so-called strumous subjects as frequently as, but not more frequently than, any other affection. It is always a local disease, and is too frequently set up by local causes. Moreover, it is as amenable to local treatment as any other local affection.

It is not, in the true sense of the word, a constitutional disease, and the sooner that idea is got rid of the better it will be for the Profession as well as for our patients. "The affection occurs very frequently in strumous children," says a recent able author (Mr. Holmes), "a circumstance which has led to its being denominated 'strumous,' but it seems to have no necessary connexion with struma, unless so wide a signification be assigned to that somewhat vague term as would render the designation itself unmeaning. If by struma be meant a state of the system which renders the subject of it prone to the deposit of tubercle in the viscera, I think that there is good reason for asserting that morbus coxarius often attacks children who are not strumous—*i.e.*, who display no such tendency to the deposit of tubercle—and therefore that no decisive proof of any strumous tendency is afforded by the presence of the affection. If, on the contrary, struma be defined as that condition of the system which disposes its subjects to the development of low inflammations of various kinds, then it is difficult to see what is the significance of the designation." In these remarks I cordially agree. It would, therefore, be well to get rid of the erroneous notion that hip disease, or any other joint disease, has its origin in a constitutional cause, for till that is effected the local treatment is likely to be disregarded, or only regarded as being of secondary importance, when all who have much experience in the treatment of these cases will admit that local treatment cannot be made of too prominent importance.

Hip disease should therefore clinically be looked upon as a local affection, and be treated principally by local means; such constitutional treatment being employed as the general condition of the patient may appear to warrant, the same principles of practice being in these cases applicable as are found of value in the treatment of any other joint affection.

Hip disease is unfortunately a very common affection. My own statistics of joint cases tell me that it forms about 30 per cent. of the joint cases admitted into a metropolitan Hospital.

It is also an affection of child life, for out of 360 cases, of which I have notes, 62 per cent., or nearly two-thirds, occurred in children under 10 years of age, and four-fifths in patients under 20—that is, it occurred during the growth and development of the bone, and not during the period of its full maturity. This point will be seen on reference to the following table:—

Table showing the Ages at which Hip Disease commenced.

Four years and under . .	. 126 cases	223 cases, or 61·9	
Between 6 and 10 years of age	. 97 „	} per cent.	
„ 11 „ 20 „	. 86 „	or 23·8 per cent.	
„ 21 „ 30 „	. 27 „	or 7·5 „	
„ 31 „ 40 „	. 13 „	or 3·6 „	
Above 40 years of age .	. 11 „	or 3 „	

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230 of these cases were collected by me when acting as Registrar to Guy's from 1853 to 1861; 130 are from the notes of cases which have been under my own care.

Hip disease is found in equal proportion in the male and the female subject. But it seems to attack the left limb more frequently than the right, 60 per cent. of my cases having occurred in the left side, and 40 in the right; this proportion being very similar to that published by Mr. Lonsdale in the *Lancet* for September 8, 1855, where, out of 112 cases of deformity of the hip, 65 were of the left side and 47 of the right.

With these preliminary remarks we will now proceed to consider briefly the pathology of the disease.

Pathology of Hip Disease.

It has been already stated that in a pathological point of view hip disease differs in no single respect from that of other joints, and that it is not a strumous affection, although it may occur in strumous subjects. It may be said also—as it has been said before—that it is a very rare thing to find strumous or tubercular matter in a diseased joint, and the hip-joint forms no exception to this remark. Disease of the hip-joint means therefore—excluding new growths involving the part—inflammation of the bones or soft parts entering into the articulation.

Few points in the pathology of joints have been more disputed probably than the seat of the disease in hip-joint affection; but, I take it, the difficulty has been entirely raised upon the mistaken notion that it had a special origin, and that the nature of the affection was different from other joint diseases. We have never heard much importance placed upon the point in diseases of the knee, shoulder, or other joints. The question has never been very warmly discussed as to the origin or not of disease of the knee in the crucial ligaments, or of the shoulder in the long tendon of the biceps. And yet we find men—good men and true—gravely discussing the question as to the origin of hip disease in the ligamentum teres. My late respected teacher, Mr. Aston Key, laid great stress upon this point, and believed that it was from that ligament and its attachments that disease of the hip-joint generally proceeded. Pathology has, however, made great advances since those days, and we now know that disease in a joint (hip or other) may have its origin in the bones which form the joint or in the soft parts or ligaments that hold them together. Experience has told us that we may have an acute inflammation of the synovial membrane of the hip-joint rapidly going on to complete disorganisation of the ligaments, cartilages, and soft parts of the joint, and even causing death of the bones entering into its formation. The inflammation may be so acute as to render it difficult at the post-mortem examination of such a case to read the pathological facts correctly, for when such changes take place as have just been indicated, it is fairly open to the question whether the inflammation originated in the synovial membrane, and from such a centre spread to the bones, cartilages, and ligaments causing their destruction, or began in an osseous centre and extended to the joint. In some cases the disease may have been so severe as to cause a separation of the pelvic bones into their original segments, or a dislocation of the epiphysis of bone forming the head of the femur from its normal attachment to the neck.

Under all these circumstances, the ligaments and soft parts, with the articular cartilage, will have been completely destroyed, and the exact locality in which the disease originated will be difficult to make out. When we find all the bones of the joint equally involved in such acute disease, it is probable that the disease began in the synovial membrane and spread to them in the same way as we meet with diseases of bone as a result of acute periostitis. But when we find one bone more diseased than another—*e.g.*, the femur than the acetabulum, or *vice versâ*—it is probable that acute inflammation originated in it and spread to the soft parts. These points, indeed, are to be looked upon as only feeble indications upon which an opinion may be formed, and not as definite guides. Nevertheless, they are based on observations of cases. In chronic disease of the hip-joint, however, the question as to the seat of the original disease is not so easily answered, and yet, from what I have observed clinically and pathologically, I do not put the question down as being one which it is impossible to answer. It may be difficult, in some cases it may be impossible; but, in the majority, I believe an opinion can be formed by a careful attention to clinical facts and pathological conditions.

When we find a joint disorganised, with its ligaments and cartilages gone and articular surfaces of the bones exposed, and perhaps diseased, there may be some difficulty in deciding as to the particular tissue in which the inflammation originated;

but when a section of the bone is made—the head of a femur, the head of a tibia, or any other bone—and a cavity is found communicating with the joint, a sequestrum of necrosed bone, or a suppurating bone, probabilities certainly point to the bone as being the original seat of the disease.

These cases do occur, and they are not far from common. I have the notes of many such now before me, and the different museums contain more. But it may be said that no one doubts the cause of the joint disease in such instances, and that the pathological conditions found to exist clearly prove it; yet the clinical histories of such cases differ in no single point from the clinical histories of others in which, perhaps, the same very marked evidence of disease is not to be seen—that is, by the pathological examination of the joint from its surface only. Indeed, to examine a pathological specimen of a bone or of a diseased joint it is absolutely necessary to make a vertical section through the bone; to look at it from the joint surface is most fallacious, and an opinion formed from the appearance thus acquired is too likely to be wrong.

If we make, therefore, a section of the bone, we shall in a large number of cases of disease of the joint, particularly in the young subject, find hyperæmia of the articular extremity of the bone, condensation from chronic inflammatory action of the bone, if not suppuration or necrosis—in fact, marked evidence of articular ostitis in one of its stages, for this is in my experience the most common form of disease which precedes joint mischief, and from which joint disease proceeds in the great bulk of cases during young life. This opinion is also well supported by the fact that in our museums almost every specimen of chronic joint disease reveals extensive bone mischief—mischief that extends beyond the surface of the bone and generally involves more or less of the articular end of one or more entering into the formation of the joint. In our own Hospital museum this point is very strongly displayed, and on looking over other museums and very extensive notes of joint cases the same truth comes out very clearly.

This pathological observation must be looked upon as being one of great clinical importance, for if the majority of cases of joint disease are to be attributed to the extension of inflammatory action from the articular extremity of a bone to the other tissues, it becomes a question of immense importance to recognise the disease of the bone in its early stage, and thus, if possible, to prevent its progress to the true joint—that is, to the tissues upon which the integrity of the joint itself depends—and clinically there is good reason to believe that such can frequently be done. In the hip-joint this point may be a difficult one to settle; that is, it is more difficult than it is in disease of other articulations, such as the knee, that are not so well covered in with soft parts. Nevertheless, even in the hip it is to be made out by care and discrimination. And perhaps it may be well to consider here the clinical points upon which our diagnosis is to be determined. They are not numerous.

The first clinical point to which I propose to draw attention has reference to synovitis; for inflammation of this membrane, of whatever kind, always shows itself within a few hours or days of its origin by effusion, and consequently by distension of the articulation. In the knee, ankle, elbow, wrist, shoulder, and other joints, this clinical condition, as a rule, makes itself manifest in a way which cannot be misinterpreted. The synovial sac becomes enlarged and distended by the effusion, so that it bulges between the bones and gives an outline to the joint, which is unlike that furnished by any other condition. In the hip-joint similar changes take place, but they are not quite so palpable: they can be made out by a careful examination, and particularly by a comparison of the affected with the sound side—a point of practice which should never be omitted in the examination of any injured or diseased joint. The soft parts in front of the joint will in synovial mischief be more prominent and full; pain will be produced by gentle pressure made upon the part, particularly behind the great trochanter; a soft swelling will also exist in lieu of the natural depression; and to the eye a greater fulness will be visible. Even fluctuation may be detected through the joint on careful palpation. At any rate, to the eye and hand there will be clearly some extra fulness of the soft parts, enough to lead one to suspect the true nature of the disease. This fulness or swelling is always an early symptom of the disease, for in a clinical point of view synovitis is in its earliest state indicated by enlargement of the affected joint.

In disease of the articular extremities of the bones a different clinical condition will be found to exist. At the commencement of the disease, and sometimes for a lengthened period, which varies in each case, an aching of the part is the only local symptom. This aching may be of greater or less intensity, the pain depending much on the severity of the disease. It is too often looked upon as "growing pains" or as rheumatism. But what I wish now to note is that local pain is the first clinical symptom, and not effusion: there is no enlargement of the affected joint. As the disease progresses, an enlargement may be detected. It may in the hip be made out by manipulation; in the knee or other joints it may be visible to the eye. It will, however, be an enlargement clearly of the bone, a thickening or expansion of the osseous structure unlike that existing in synovial disease. There will be no fluctuation, no soft yielding of the parts, but clearly an expansion of the osseous structure—an enlargement of the articular extremity of the bone. The soft parts will, as a rule, be quite natural over the enlarged bone. With this aching of the part there will also be increase of heat, this increase of heat being also an early symptom. It will not be constant, although tolerably uniformly so; it will be intermittent, and, as a rule, it will show itself as a general periodical flushing of the part.

At this period of disease other symptoms generally exist, which likewise differ in the two great classes of cases.

In chronic synovitis, which leads to joint changes, the joint may probably be moved quietly without exciting pain in the part, and without exciting spasm of the muscles that move the articulation. Pressure upon the part with the fingers will probably excite pain, although moderate pressure may be made between the two surfaces of bone without giving rise to any indications of distress. In disease of the bone entering into the formation of the joint, these clinical conditions do not all exist. The joint may be moved quietly, it is true, without exciting pain, but the attempt will, as a rule, excite spasm of one or more of the groups of muscles which move the articulation. Moderate manipulation also will be well borne. Firm pressure upon the bones or between the two surfaces of bone will always excite pain—not the pressure produced by a jar, such as in the hip is caused by a sudden blow upon the foot or trochanter, for such a mode of investigation must be looked upon as a rough and somewhat uncertain one; indeed, it is almost sure to excite a start of the patient and an expression of pain—but the pressure which is produced by a steady force applied by the hand to the trochanter towards the pelvis, or through the foot to the articular extremities of the bones, a pressure which, in synovial disease, rarely, if ever, gives rise to pain, but in osteal disease invariably excites it.

These symptoms in the two classes of cases appear clearly to indicate the two distinct affections in their early stage. They apply to all articulations, and may be thus summarised:—

In synovial disease swelling is the earliest clinical symptom, with more or less fluctuation, each joint showing this in its own way. As a rule, this swelling is unattended with much pain. Pressure on the joint causes pain, although gentle movement may be made without increasing it or exciting spasm of the muscles which surround the joint. Interarticular pressure can generally be tolerated.

In articular ostitis pain is the earliest and most constant symptom—pain of an aching character, varying in intensity, generally increased by firm local pressure. There will be no visible enlargement of the part for some weeks or months, and no fluctuation. Gentle movement, as a rule, excites spasm of muscles about the joint, and interarticular pressure always increases it, and causes pain. Increased heat also exists about the parts, and is of an intermittent character.

When disease can be arrested in these first stages a complete recovery of the patient may ensue, for joint disease has not yet been established, and the cartilages are probably sound, and no irreparable organic change has taken place in any of the tissues. The first series of cases I propose to publish will illustrate this.

Should, however, diseased action originate in a joint as a result of accident, in a hip joint as the result of a strain upon the teres ligament, or in the knee upon the crucial; should local disease be set up from any cause upon the articular extremity of a bone, either at the root of attachment of ligaments or at other parts; should articular ostitis of a portion of a bone take place as the result of accident, the changes which a joint may undergo as a secondary consequence will probably be more rapid, and consequently more serious: for it is through the bone that these changes occur—through those that take place in the articular cartilages, which are so intimately connected with the articular lamella of bone; and in cases of local disease of the articular extremity of the bone, these changes are very rapid. When a bone is inflamed, and this inflammation attacks the articular lamella of bone, wholly or in part, the articular cartilage sooner or later becomes involved. As long as the vascular supply of the bone is good,

and the nutrition of the cartilage which rests upon it is not interfered with, all goes on well; but as soon as the nutrition of the bone is impaired, the cartilage on its surface which rests against it undergoes granular degeneration, loses its connexion with the bone, and is either cast off or shed as a foreign body, wholly or in part, or degenerates more slowly, and assumes a perforated worm-eaten aspect. It will always, when thus diseased from bone affection, be readily stripped off the bone.

When these changes have taken place in the cartilage to any extent, disorganisation of the joint exists, or is not far off; suppuration, however, may not show itself.(a) A complete recovery of the articulation is probably impossible, and certainly improbable—that is, a recovery with movement. Anchylosis, more or less complete, must, under such circumstances, be regarded as a natural cure.

These remarks have been made in this place to illustrate the necessity of recognising the disease of a joint in an early stage, and, if possible, its original seat, for when the disease has set up changes such as I have just indicated a very different series of questions have to be considered, and practical points decided. These points will, however, come under our consideration as we proceed. I propose at present to apply these general remarks to diseases of the hip-joint, and to illustrate, as far as I can, their truth by the quotation of cases. I shall commence by giving some few examples of early hip disease in which the bone alone appeared to be involved, and in which recovery took place, following these up by some examples of early synovial disease in which the same good result ensued, and making some remarks upon both classes of cases at the end of each section.

(To be continued.)

(a) The second series of cases I propose to publish will illustrate the cure by anchylosis without suppuration.

ORIGINAL COMMUNICATIONS.

LOCAL PERITONITIS AND DEATH RESULTING FROM A KICK IN THE EPIGASTRIUM.

By J. FAYRER, M.D., C.S.I., F.R.S.E.
Professor of Surgery, Calcutta.

E. W., aged 21, a slight delicate-looking East Indian sailor was admitted on April 12, 1869, suffering from the effects of a severe kick in the epigastric region, inflicted by a comrade in a drunken quarrel twelve days before admission. The pain and exhaustion had at length made him seek relief in the Hospital.

On admission there was a marked fulness occupying the left hypochondriac and epigastric regions, which was painful on pressure and dull on percussion. He looked low and depressed, with an anxious countenance and a quick and feeble pulse. His stomach was irritable, rejecting quantities of bilious frothy fluid; the thirst was great, and he drank quantities of iced water, for which he had an incessant craving. There was no blood in the vomited matters. He never made any material improvement, and died on April 22.

The vomiting and pain continued unabated throughout, but it was not until the 19th that a marked change in the temperature and pulse took place. The pain at this time began to decrease. The thermometer rose from 94° to 102° in the axilla, though the body and extremities felt cold and clammy to the touch. The pulse rose from 108 to 130, and in this state he remained, excessively restless, until the 22nd, when he died with hurried gasping breathing, in a state of complete exhaustion.

The treatment consisted of opiate enemata and local warm applications. Very small quantities of fluid food were given; nourishment was attempted by the exhibition of beef-tea enemata. The opium was also, on account of the irritability of the stomach, given by enema. Ice and milk were frequently given. Soda-water was very grateful, but everything was rejected, and each act of vomiting ejected with the fluid a quantity of dark-green bile.

My impression was that rupture of the left lobe of the liver or perhaps of the gall-bladder had taken place, the effused matter being circumscribed by a local peritonitis. Such was the diagnosis that I made by the bedside; the post-mortem proved that I was wrong.

Autopsy.—On laying open the abdomen, it was found that there was great congestion and some thickening of the great omentum, with loose recent adhesions involving all the left half of the greater peritoneal sac. The adhesions were firmest posteriorly, where there were dense, firm fibrinous bands matting the gastric, hepatic, and pancreatic peritoneal coverings together, and a large and thick-walled cyst was formed by adhesions between the transverse mesocolon and the stomach, so closely adherent that at first it looked like an abnormal dilatation of the stomach itself. This had been the focus of the inflammatory action, and the sac contained a quantity of serous fluid with granular matter and inflammatory lymph. The cyst itself was dense and lined throughout with thick layers of fibrine. The quantity of fluid it contained could not have been less than two quarts. It lay immediately below the stomach, and partly behind it; hence the pressure which caused the incessant vomiting. There was no rupture of any abdominal organ, but in the right lower and anterior aspect of the pericardium there was a well-defined patch of ecchymosis about an inch and a half square. On opening the heart, the immediate cause of death was seen in a firm white ante-mortem clot in the right ventricle, which not only obstructed the tricuspids, but extended far into the branches of the pulmonary artery. The remaining thoracic and abdominal viscera were quite healthy.

The chief points of interest in this case are the occurrence of deep-seated peritonitis after an injury inflicted on the surface. The symptoms are easily explained by the pathological condition. The constant pressure of the rapidly increasing peritoneal cyst accounts for the constant vomiting, and that for the incessant regurgitation of bile into the stomach. The poisoned condition of the blood resulting from or accompanying the peritonitis explains the depressed pulse and nervous system, and accounts for the condition of the blood, which rendered it liable to form fibrinous coagula in the right side of the heart, so causing death.

ON THE EARLY PROGRESS OF ARMY SANITATION IN INDIA.

By C. A. GORDON, M.D., C.B.,
Deputy Inspector-General of Hospitals.

(Continued from page 330.)

Hill Stations.

The question how best to utilise hill climates for the benefit of our troops in India appears to have been discussed for the first time in 1824,(a) and since then various places have at intervals been occupied, either as convalescent depôts or as ordinary stations for regiments—namely, Landour in 1828, Kussowlie in 1842, Dugshai in 1849, Darjeeling in 1849-50, Murree in 1851, Nynee Tal in 1858, and Senchal in 1860-1.

The very year in which Landour was first occupied, Dr. Cathcart urged the necessity of only sending to that place carefully selected cases of men suffering from disease;(b) in 1829 similar views were urged by Mr. Sandham,(c) and in 1832 by Dr. Burke, who expressed his opinion that "hill stations ought to be regarded for the prevention of relapses and the total breaking-up of already debilitated constitutions, rather than for the cure of acute or chronic disease."(d) Four years later he recurs to the subject, and, as the result of experience gained in the interim, observes that "the climate has been productive of good in all the cases selected with care and sent at the proper time."(e) During four years more—namely, from 1836 to 1840—observations made by Medical officers at different points of the Himalayas induced them to believe that exaggerated views had already begun to be entertained regarding the advantages of hill stations in general. Thus, Mr. J. Murray expressed his opinion that "there is nothing more likely to bring the Indian hill stations into disrepute, and to deprive them of the reputation they now deservedly enjoy, than an over-estimate of the merits of their climates;" and Dr. Allan Webb reported "that the Simla group of hills do not afford immunity from the fevers of the plains; that intermittent, remittent, and continued fevers originate in Simla in those who never had fever before in India."(f)

Soobathoo and Kussowlie seem to have been first occupied

(a) Memorandum of Sanitary Improvements in India up to 1867, p. 27.
(b) Inspector-General's Report for 1828.
(c) Report for 1829, p. 224.
(d) Report for 1832, p. 55.
(e) Report for 1836.
(f) Chevers, "Means of preserving Health," etc., pp. 206-208.

as stations for troops about the same time. In 1845 the 1st Bengal Europeans were located at the former place, they having been sent to it from Kurnal, where they suffered dreadfully from epidemic sickness. Cholera seized the regiment at this hill station; the men suffered severely from other diseases. The entire mortality among them during the year was in the ratio of 130 per 1000, of which a proportion of 42 was by that epidemic alone.(g) In 1847-8 the 29th Regiment was at Kussowlie, to which it had been sent in a weakly condition, after undergoing a period of great sickness in the plains. Dr. Taylor, C.B., at the time Surgeon of the corps, reported, regarding the effects exerted by the climate upon the condition of the soldiers, that "the healthy acquired bodily vigour, but to the unhealthy, particularly those suffering from dysenteric disease, the winter season was fatal." It is true that the sanitary conditions of the place were very unsatisfactory. Dr. Taylor made due allowances for the pernicious influence exerted by them, but adds, "It is difficult to believe that an elevation which makes a difference of eleven degrees in the boiling point of water can have no obvious effect upon the system."(h) The same very able Medical officer prepared a table, the purpose of which was to show that although the mortality by diseases of the stomach and bowels was considerably greater than it had been during any of the preceding five years that the regiment had served in the plains, the general influence exerted upon the health of the men was beneficial. Dr. Chevers gives us the table in question,(i) but unfortunately it does not record the number invalided from the regiment, so that we are in a measure left without knowledge of the actual cost in men at which the benefit to the health of the corps was obtained. The value of the information thus omitted will become more apparent when we come to the report of the 42nd Highlanders.

Dr. Chevers next gives an illustration(k) of the effects of hill climates upon the health of a regiment under more favourable circumstances than those just related of the 29th. The 60th Rifles had in 1846-7 suffered severely from cholera at Kurrachee; the regiment, however, continued at that station till 1848, when it moved to the Punjab, and in 1849 proceeded to Peshawur. After that epidemic the corps continued in a satisfactory state of health, and in that condition was sent to Kussowlie and Soobathoo in 1850. It remained at those places two years, in the first of which fourteen men died, of whom thirteen by diseases of the bowels, and in the second thirty-six, of whom twenty-seven from the same class of affections. These results were at the time considered satisfactory; but, as in the case of the 29th, we are uninformed regarding the number invalided. We learn, however, that, taking the years subsequent to the occurrence of the cholera epidemic in the regiment, and in which the deaths amounted to 121, the mortality was as follows—namely, in 1847-8, at Kurrachee, 23; in 1848-9, at Kurrachee and in Punjab, 32; and in 1849-50, at Peshawur, 55, so that the mortality during the second year of residence in the hills was greater than it had been in either of the two immediately succeeding the cholera epidemic, although during both of them the regiment remained in a very trying part of the plains.

Following the chronological order which, for the sake of convenience, I have adopted in the arrangement of these notes, I observe that in 1850-51 Dr. Currie, then of the 22nd Regiment, reported(l) of Dugshai that "in the cold weather, and especially when the snow fell, the intensity of the cold was acutely felt by the weakly men and those who had previously suffered from fever complicated with organic disease;" and also that in 1852-53 the 61st Regiment was stationed at Kussowlie and Soobathoo, to which places it had been sent direct from Peshawur, where the men had suffered severely from dysentery.(m) The Surgeon reported that, "although for hepatic complaints generally the climate of the hills was much better than that of the plains, yet the cases of those affections sent there were not cured, and that those of the men who had been affected with dysentery at Peshawur suffered most from diarrhœa in the hills."

Early in 1854 the 32nd Regiment arrived at Kussowlie, much broken in health, from Peshawur.(n) During the remaining part of that year 62 cases of dysentery occurred among the men, although only 4 proved fatal. In the same period, however, there were 339 cases of diarrhœa treated, of whom 12 died, the older soldiers being those among whom these diseases chiefly prevailed. In the succeeding year, at the same place, there occurred 97 admissions for hill diarrhœa and 16 deaths. We are unfortunately without information now in regard to the extent of prevalence of and mortality by other diseases in the regiment, as well as of the numbers invalided. Dr. Scott, however, alludes to the liability of the men to attacks of rheumatism, and he expressly states that he "doubted the salubrity of Kussowlie, more especially for troops whose health had suffered much from fever and ague, as all those coming from Peshawur had done." He moreover goes on to record his opinion "that the climate of hill stations is not well adapted for troops the first year after leaving Peshawur;" that in the interval stations with a more equable climate would suit them better, in both of which views he was, to my personal knowledge, fully supported by Dr. Dawson, the Inspector-General.

In the Annual Report of the 98th Foot at Dugshai for 1852, the Surgeon stated that most of the men of that corps who laboured under chronic diseases when they arrived at the station became worse during the rainy season, that several were invalided to England, and that a good many more must now be so, although the regiment had then been two years in the hills, to which it had been sent direct after suffering from fever at Peshawur. With regard to the effects of a hill climate on the men of the 53rd Regiment, the Surgeon of that corps, in his report for 1855, and with reference also to Dugshai, expresses it as his opinion that "the sudden change to such a climate from Peshawur does not appear a judicious arrangement," and, in illustration, records the fact that "on the setting in of the rains towards the end of June a great number of both men and officers became affected with what is called 'hill diarrhœa,' and it was then remarked that the worst cases occurred in those men who suffered from the fever of Peshawur, complicated, as that fever invariably was, with affections of the liver and spleen." The Surgeon of the 92nd Regiment, in his report for 1860, observes, with reference to the climate of Dugshai, that "many cases are of course unsuited to it, such, for instance, as rheumatic affections with a syphilitic taint," and, further, that it is unsuited to cases of dysentery of a scorbutic nature or in strumous constitutions. In his report for 1861 he recurs to the same subject, and adds that "it is highly desirable that men suffering from organic disease of the lungs or heart should be kept in the plains." It will be remembered that in 1861 the 42nd Highlanders suffered severely from fever at Agra. The Surgeon, in his report for that year, states that the corps was sent from that station to Dugshai, only halting at Umballah for a period of about three months. On arriving in the hills the fever almost completely disappeared, but "reappeared with increased violence when the regiment had been settled in quarters, and the novelty of the scene and of arrival in the hills was over." In the report for 1864, after much and extended observation of the effects of residence at Dugshai on the health of the men who had arrived there in a debilitated condition, he wrote thus:—The regiment "left Dugshai in November, 1864, in perfect and robust health, with only twelve sick; and this continued till the end of the year. But (he asks) at what cost did it become thus healthy? Forty-six men died at Dugshai, and seventy-seven were invalided to Netley." That is, 123 of 850 who had come up from the plains, or about 14 per cent., were lost by death and invaliding. It would almost seem, therefore, that Dr. Forlong was justified in making the comments that he did. "If," so he wrote, "Dugshai be the bracing and health-restoring climate it is said to be, it ought to effect it at a less expense of life and loss of service. It made the 42nd a healthy corps by killing off and invaliding all those who came up with weakened stamina and organic disease, and restoring and keeping in health all those who came up well and but slightly or functionally diseased." This Medical officer thus winds up his remarks on the station:—"From what has been stated, I think it may be said that Dugshai is a healthy station, and well fitted to preserve our regiments in the most robust state of health if sent direct from England, or after short periods of residence in the plains. Those who are beginning to suffer, or whose constitutions have already been lowered by residence in the plains, will generally be benefited by a change to the hills; but to those organically diseased, or with constitutions greatly debilitated, a change to Dugshai will not be beneficial."

Dr. Hanbury, writing of Mount Aboo in 1859,(o) observes that "in a few years, when it comes to be seen that the hill

(g) Chevers, *op. cit.* p. 265.
(h) See Annual Report of the corps. Also "Gordon's Army Hygiene," p. 330.
(i) "Means of preserving Health," etc., p. 225.
(k) *Ibid.* p. 226.
(l) *Op. cit.* p. 229.
(m) Medical report of that regiment.
(n) Regimental report; also Chevers, p. 227.

(o) Dep. Blue Book, vol. i. p. 203.

stations are the natural and proper residence, when practicable, of Europeans in this country, it may well be imagined that motives both of humanity and of financial economy may induce the Government to form an extensive depôt or depôt brigade of troops, and especially of young or recently arrived soldiers at Aboo." He further remarks that, "from experiment and observation, it appears that considerable judgment is necessary in adapting and timing the benefits of hill sanatoria to European soldiers and invalids;" and adds, "Certainly, as far as experience yet extends, the effect of removing an old service-worn regiment to the hills is by no means desirable, as visceral congestions are almost sure to occur in a proportion of the men. Suffice it to remark," he says, "that hill stations seem admirably adapted for the acclimatisation of European troops, for the quartering of newly arrived drafts and regiments, for the strengthening and training of recruits and young soldiers under the age of 22, for the recovery of convalescents and soldiers weakened by certain forms of disease, and, in a striking degree, for the rearing of European children." He also mentions that the following forms of disease did not appear to derive advantage from the climate of Aboo—namely, rheumatism, secondary syphilitic complaints, acute or chronic, pulmonary affections, and disease of the heart.

A summary of reports by various Medical officers on hill stations is also given in the Departmental Blue Book for 1862, and from them we extract the following remarks—namely, that, taking it for granted "that the residence in the hills may either produce actual benefit to health or afford the invalid a better chance of passing through the hot season" (p. 324), "in other cases often little or no expectation can be held of improvement," "and to some they are positively inimical, under which conditions removal there is opposed to the intention of their establishment." It is also argued (p. 325) that the room at those places "would be most likely required for men who would probably derive great benefit from the change." "Numbers of men of every regiment" in the plains "are pale and anæmic." These men are in a state of health that any epidemics visiting the station are prone to attack, and to such men removal to the hills "is usually of material advantage." It is further stated (p. 328) "that the character attached to the Simla group as a residence for soldiers is less decidedly favourable than had been anticipated," although the writer qualifies his statement by saying that "this has received explanation upon grounds recognised and conceived in a great measure remediable in future arrangements." But the fact, as first stated, is not thereby controverted.

Reverting for a little to the opinions expressed by Indian Medical authorities on the subject of hill stations, I would observe that, in the Bengal Medical Regulations for 1851, a code of instructions was laid down for the proper selection of suitable cases of men to be sent to such places. According to the opinion expressed at the time by the Medical Board,(p) hill climates are beneficial in every point of view to men who have sustained in the unhealthy months one or more attacks of disease not sufficiently severe and debilitating in their effects to have unfitted them for an average performance of duty during the healthy season; to men who are known, as many are, to be liable to suffer from particular diseases during the hot season; and also to young men, some of whom are to be met with in every corps, whose constitutions are not yet confirmed, or were not originally robust, and who, although not suffering from actual disease, are obnoxious to its access, especially during the enervating heat of the hot winds and rainy season in the plains.

In 1853, Dr. John Macpherson, of the Indian service, turned his attention to the subject of hill stations. "It has been argued," so he wrote,(q) "that a regiment, after being stationed in the hills for some years, requires, on descending to the plains, to be again acclimated, and must pass through the same process as a regiment just arrived from Europe, and that, if required to act in the plains in the hot season, it would suffer more than a regiment already cantoned in the plains." "This view," he observed, "was taken by many men of experience, and in particular by that very able and energetic officer, the late Inspector-General Murray;" and he adds, "We believe that we were expressing the general feeling on the subject when we said that hitherto the hill stations for European soldiers had been found somewhat disappointing."

In 1859, Dr. Chevers,(r) in adverting to the choice of proper sanatoria in the hills, observes that "under this head it becomes the duty of the sanitarian to seek for and recommend (1st) elevated positions to which convalescents and regiments, so much reduced by sickness and fatigue as to be unfit for duty in the plains, should be sent for recovery; and (2nd) stations in the hills in all respects so favourably situated, both in a military and sanitary point of view, that the troops stationed there may retain their health, and may be readily available for service. There cannot be a doubt," he observes, "that our higher mountain sanatoria afford to those who have never been the subjects of malarious fever considerable immunity from its attacks, and that those who have suffered from fever in the plains obtain here the best hope of recovery that India affords." He observes, however, that such benefit occurs in subjects of intermittent fever, and that, according to Mr. Murray, "the hill climates of India generally are hurtful in continued and remittent fevers." He observes, regarding the plain of the Bhabur, near Nynee Tal, that it had proved very healthy to troops, and that from this place Dr. Wilson suggests they could be sent to the plains for exercise in the cold weather.(s) He expressed his opinion(t) that hill stations of less elevation than 6000 feet cannot be healthy if bounded by a terai; and quotes from M. Von Mühry that regions below 3000 feet of altitude present exactly the class of tropical diseases that prevail in the plains, with a diathesis the reverse of plethoric, and with the blood poor in quality and diminished in quantity.

He expressed his own opinion(u) that "the hills afford at best a prospect of temporary relief in the cases of old, worn-out, and intemperate men who have been frequently and long diseased and the subjects of organic lesions." He quotes the views of Dr. Baikie, to the effect that upon the subjects of the atrophy of advanced years, consequent upon long residence in this country and Indianised habits, the cold of the hills acts as a complete extinguisher, and quotes those of Mr. Murray, that hill climates are of doubtful efficacy in any form of rheumatism, and are generally injurious when the disease is attended by irregular febrile symptoms, as well as in cases of morbid irritability of the bowels, neuralgia, and affections resulting from syphilis and mercury, in inflammatory diseases, in fevers of the continued and remittent types, and in organic diseases, as also that they are "in the last degree unsuited to cases of dysentery, diarrhœa, and cerebral affections."

Among his remarks on individual hill stations, he tells us, with reference to Soobathoo, that during the ten years from 1846-47 to 1855-56 the annual mortality has fluctuated from 17·85 up to 62·45 and 76·58 per 1000, and adds that "there cannot be a doubt that hitherto a lengthened trial has proved Soobathoo to be the least healthy of the hill stations."(x) Adverting to Kussowlie, he observes that "the generally weak and broken regiments sent there have, upon a general average, suffered a rate of mortality much higher than that which has prevailed during the same term in many of the larger stations of the plains, as Jullundhur, Agra, and Meerut"(y)—a statement the correctness of which he had already(z) given us the means of verifying in an elaborate table, from which I extract the average annual mortality per 1000 during ten years at the following stations—namely, Kussowlie, 40·37; Dugshai, 42·89; Soobathoo, 45·17; Meerut, 37·88; Rawul Pindee, 29·12; Jullundhur, 29·13; Agra, 35·80; Wuzzeerabad, 34·79.

Finally, having summarised the opinions of Medical officers, he thus expresses himself:(a) "Most authorities concur in believing that European troops who have suffered much from disease in the Peshawur valley should be sent to Rawul Pindee, a change which they maintain would be more beneficial than that to Murree, Dugshai, or Kussowlie, where regiments moved direct from Peshawur have by no means gained so much advantage as was anticipated by the change."

That hill stations are by no means, as a rule, exempt from outbreaks of epidemics which devastate those in the plains, is now matter of notoriety, as is also the fact that some at least are visited by diseases peculiar to themselves. A few illustrations in point must serve our present purpose. Chevers tells us(b) that "spots between seven and eight thousand feet above sea level are not by any means secure from visitations of malarious fever, and occasionally suffer most severely from invasions of epidemic cholera;" "small-pox rages with great virulence and destructiveness among the natives of all the hill regions of India;" "measles is of rare occurrence in the hills, but when it does appear it seems to be violent;" "epidemics of croup and malignant sore throat (diphtheria) are liable to appear in the highest inhabited ranges;" "fatal typhoid

(p) Chevers, "Means of preserving Health," page 218.
(q) See *East India Army Magazine and Military Review.*
(r) *Op. citat.* page 208.

(s) Page 241.
(t) Page 261.
(u) Page 218.
(x) Page 265.
(y) Page 227.
(z) Page 133.
(a) Page 263.
(b) Pages 207 *et seq.*

remittent fever was not uncommon among Europeans at Darjeeling some years ago."(c) In 1849 Mr. A. Grant witnessed two cases of malignant typhoid fever in officers at Simla. According to Dr. Webb, hepatitis is equally met there among Europeans and natives, as are scrofula, caries, and phthisis. In 1845 cholera attacked 138 men and carried off 38 in the 9th Foot at Kussowlie, and in 1858 an epidemic of the same disease raged fatally at Murree. On the Madras side it has also prevailed at Coonoor and Jackatallah. In the Neilgherrie generally dysentery occurs in an obstinate form; hill diarrhœa prevails, although not nearly so generally and with such obstinacy as in the Simla range. At Landour "hooping-cough, croup, and measles are not unfrequent."(d)

The Royal Commission which, from 1859 to 1863, sat to inquire into the sanitary condition of the army in India collected much valuable information regarding the value of hill stations and the best means of utilising them. It will not be necessary on this occasion to refer to the views of all the able officers, Medical, military, and civil, who expressed themselves on these important points; they may be seen at length in the *précis* of evidence attached to the report of the Commission, but it is desirable that some of the more distinct of them be here alluded to, in order to indicate how strong is the evidence furnished as to the class of persons most likely to derive benefit, and those least so, or, in fact, who may experience injury from residence at those places. Sir Ranald Martin believes that the present hill stations are often too high as well as too wet, that injury has often been occasioned by sudden removal from a dry heat to cold and damp, and that if troops on arrival in this country were sent to the hills, they would be maintained in health and vigour. Dr. Pinkerton, with special reference to Nynee Tal, considers that invalids sent there should be selected with reference to their diseases. Dr. Colvin thinks that although the troops from Simla were, in 1857, remarkably healthy before Delhi, with the exception of cholera, yet men previously living in the plains are more capable of bearing heat than those fresh from the hills. According to other authorities, however, the extent to which, on that occasion, the regiments were sent down from hill stations suffered was very great. Dr. Chevers tells us (e) that on May 13, 1857, the 1st Fusiliers marched from Dugshai. A few days after the regiment had reached Umballah it was seized with cholera in an epidemic form. On May 14, the 2nd Fusiliers marched from Dugshai, and shortly after reaching the plains the men were also seized with cholera. So also with the 75th Regiment, which marched towards Delhi from Kussowlie, circumstances which, although not stated before the Royal Commission, deserve to be mentioned in this place. It is right to add, however, that Dr. Moore(f) is not prepared to admit that every regiment removing from the hills to the plains would suffer in like manner. In the work to which reference has already been made, the author quotes from Dr. Morehead somewhat largely, and we, in turn, may summarise the views expressed. "Doubtless," says Dr. Morehead, "Europeans permanently residing in a hill climate would retain much of their native vigour, but they would not be efficient for the contingencies of military service in India. If suddenly called to the plains for service in the hot season, there would be a heavy sick-list from seasoning fevers and biliary derangements, and a rapid loss of stamina would result." These results did, in fact, occur in the case of the three regiments just named; but Dr. Morehead thinks the evils would not stop here. "But it is argued," he says, "that on the conclusion of the service" in the plains, "on the regiment being moved back to the hills, exhausted by heat, fatigue, and sickness, the result would be much mortality and invaliding from congestive inflammation and organic visceral disease," as did actually take place between the years 1840 and 1850 on the transference to the Himalayan hill stations of several European regiments weakened by service, climate, and disease."

Dr. Maclean expresses his belief that the hills will not restore health. Dr. McCosh considers them more valuable for prevention of disease than for cure, and that consumptive, dysenteric, liver, and rheumatic patients should not be sent thither. Sir John Lawrence was of opinion that the weakly and delicate should be sent to the hills every year, and the robust kept below. Thus, out of every 1000 men 300 should be in the hills as a reserve; or, in regard to our army in India generally, that with 70,000 men 10,000 might be in the hills; were the forces 80,000, there might be 20,000 so located. Dr. Bird, alluding to Mahabaleshwur, found the climate of that place less beneficial than had been expected, especially in affections of the lungs and bowels. Colonel Campbell would say that a regiment should go to the hills first rather than afterwards, that they are better for preserving than for restoring health, and that it is beneficial to send invalids there. Mr. Elliott is of opinion that they should be used both for recruits on arrival and for sick in a majority of cases; and, according to Mr. A. Grant, every regiment should have a convalescent depôt on the hills to which the weakly men and officers may be sent, who would soon be set up and ready as a reserve—a plan which Colonel Durand considered would be exceedingly useful. Dr. Dempster agrees with Sir Ranald Martin that newly arrived troops should be stationed in the hills, say for three years, descending only occasionally into the plains during the cold season; and he adds, as the result of his experience, that "sound adults and children retain their health there, and the young reduced by illness rapidly recover, but the old and worn usually find their complaints aggravated in the hills."

(To be continued.)

(c) Page 208. (d) Page 218.
(e) See Moore's "Health in the Tropics," p. 88; also Chevers, p. 232.
(f) Ditto, p. 87.

HUMAN HAIR IN STOMACH.

By T. INMAN, M.D.

A SIMILAR case to that recorded in this journal (June 26) occurred in the practice of the late Dr. Dickinson, of Liverpool. The patient was a lady about 34, and died with very obscure symptoms. The stomach was found full of human hair matted into one mass, of the shape and size of the viscus when distended by a full meal. The preparation exists, I believe, in the museum in the Royal Infirmary Medical School. The lady was in the habit of cleaning her comb, after using it to her hair night and morning, with her fingers, and then swallowing the hair. Both cases are remarkable as illustrating the powerlessness of the gastric juice to dissolve hair.

12, Rodney-street, Liverpool.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

KING'S COLLEGE HOSPITAL.

TWO CASES OF HERNIA, WITH OPERATIONS FOR THEIR RADICAL CURE.

(Under the care of Mr. JOHN WOOD, F.R.C.S.)
[Reported by J. BESWICK PERRIN.]

Case 1.—F. H., aged 25, pilot at Calcutta, admitted into King's College Hospital on January 15, under the care of Mr. Wood, with left scrotal hernia of the size of the closed fist. In 1862, then in India, he ruptured himself. In 1864 he was operated upon in Calcutta by Wutzer's method for radical cure. The plug was kept in for ten days. The rupture returned a fortnight after the operation in India to a larger size, and less controllable by a truss than it was before the operation. On admission the rupture was found to be of a large size, the opening into the abdomen very large, lax, and direct, with scarcely any obliquity of the canal. On January 16 Mr. Wood performed his usual operation, by the use of copper wire silvered, for the radical cure. After the operation a considerable amount of action occurred in the sac of the hernia; an abscess subsequently formed and discharged pus freely through the scrotal aperture. This continued for a fortnight, and resulted in the complete obliteration of the sac below the external ring. The general symptoms throughout were slight. The patient soon lost the febrile disturbance which set in with the suppuration. The wires were removed on February 9, and by the 15th the wound had completely healed. On the 17th he was discharged, wearing a horseshoe truss. On May 15 he showed himself at the Hospital. He was carefully examined in the theatre. The external ring seemed to be obliterated; the contracted remains of the sac were felt in the scrotum, which was somewhat tucked up, so that the testicle was higher instead of lower than its fellow. On coughing, a small bulge could be seen opposite the internal ring, where it was firmly arrested. On the other side also a weakness was apparent to a greater extent rather than on the side operated on. He was advised to continue wearing for some time longer the double horseshoe pad truss.

Case 2.—W. B., aged 28, a mulatto, native of Jamaica,

ship's steward, was admitted on January 15, 1869, also under Mr. Wood's care, suffering from right inguinal hernia, with extensive sinuses in the scrotum and groin, the result of abscesses. The history of the case was briefly as follows:—In 1867 he was operated upon at Calcutta by Dr. Fayrer for the radical cure of scrotal hernia of a month's date, wires being passed subcutaneously through the pillars of the ring, twisted and cut off short, and left in the tissues. Seven weeks after the operation, being anxious to go to sea, he left the Hospital contrary to the wishes of his Surgeon. He was supplied with a truss, which he wore for ten weeks. The truss breaking, he was obliged to go without one. Thirteen weeks from the date of the operation the site of the operation became inflamed; suppuration, with abscess formation, ensued. This was opened by a Surgeon in London. A second abscess followed, and the patient removed a piece of twisted wire three-eighths of an inch long from the part. He afterwards suffered from a series of successive abscesses until a short time before his admission into the Hospital. He consulted an eminent Surgeon in London on account of the sinuses which resulted from the abscesses, which caused him considerable annoyance and inconvenience. He was advised to consult Mr. Wood. On admission, he was found to be suffering from extensive ulceration of the soft parts in the right groin, and near the external ring the subcutaneous structures were riddled in various directions with sinuses, extending down into the scrotum and along the descending branch of the pubis as far as the root of the penis. There were also cicatrices of old openings over the saphenous aperture. Mr. Wood opened up every sinus, and removed from the side of the scrotum a considerable portion of the thickened and cribriform unhealthy skin. A thick flap of skin was then laid over the abdominal ring, the margins of which were laid bare with the hernial sac by the dissection. The skin was then held in place by sutures, and a thick pad and firm spica bandage applied, and the patient removed. Mr. Wood stated that there was much room to hope that the firm attachment of the flap of skin to the pillars of the abdominal ring would restrain the rupture from again appearing. The scrotal incisions were stuffed with oiled lint, so that granulation might take place from the bottom of the wound, and injected daily with sulpho-carbolate of zinc lotion to check the somewhat immoderate suppuration. The patient continued in the Hospital until April 3, when all, with the exception of one small sinus, had healed. When discharged, a small projection was still seen in the site of the inguinal canal; but no protrusion whatever occurred through the external ring or passed into the scrotum, which was firmly braced up and consolidated.

Remarks.—These two cases were operated upon in King's College Hospital the same day, and both had previously undergone an operation at Calcutta—the one by the wooden-plug method, the other by passing wires into the tendinous structures of the external ring, and allowing them to remain with the hope that they would become encysted and not afterwards troublesome. These cases are illustrative of the lesser value of the one operation, and the greater inconvenience of the other. Wutzer's operation has been abandoned in this country. The modification adopted and practised by Dr. Fayrer seems to have few of the advantages, but all the disadvantages, of that method. Of the two cases here given, the first failed in a fortnight. In the second, the operation was followed by extensive suppuration and the formation of abscesses, which might naturally be expected from the presence of wires in the site of the truss pressure, under which the contained wires would necessarily give rise to severe irritation, and, as the results showed, without curing the rupture, the formation of abscesses considerably impaired the patient's health, if it did not seriously endanger his life. Dr. Fayrer justly remarks that his usual method of procedure (which seems to be identical with that of Professor Syme) is of a somewhat uncertain character, and that it requires some care and confidence for its effective completion. It is somewhat remarkable that he has tried various operations —*e.g.*, Wutzer's, and his own modification of Mr. Syme's—all of which are admittedly inferior to that of Mr. Wood; and yet he seems, from his paper published in your journal of March 8, 1869, to have even never heard of the operation which goes by Mr. Wood's name. According to the statistics furnished by Dr. Fayrer in that paper, of 67 cases operated upon, 11 failed altogether, 9 were relieved, 1 died. Of the 46 reported successful, it would be interesting to know their condition six months afterwards. It is of course, in the nature of things, impossible to trace these cases for years afterwards, but many of Mr. Wood's cases have been exhibited in the theatre of King's College Hospital five, six, and seven years after the operation, and after leaving off the wearing of trusses. In many of these the side operated on was better than the opposite. Mr. Wood's operation is admitted to be the best as yet devised for the radical cure of hernia, not only in this country, but also on the Continent and in America. The practice of plugging with a piece of wood the inguinal canal has never been looked upon with favour by the Profession in this country. It has the bad effect of opening wider the already dilated canal, and makes the case, when it returns, worse than it was before. It is a very painful and clumsy method, the unscientific character and fallacious results of which should long ago have removed it from the category of justifiable operations, and which has done more than any other to bring distrust upon operations for the radical cure of this most troublesome infirmity.

THE LONDON HOSPITAL.

INTERESTING CASES.

(Under the care of Mr. MAUNDER.)

Case 1.—A patch of ecchymosis. A male adult, while lying on his right side, was struck on the left hip by a heavy bale of wool falling upon him. When seen a week after the accident, the only objective symptom was a patch of ecchymosis, situated at the upper and inner part of Scarpa's triangle. The patient appeared to be unable to lift the left heel off the bed, but he could slowly and with pain flex the left thigh upon the pelvis. Turning in bed gave pain, as did also pressure upon the left hip when the man was on his right side, or compression of the two hips. Pain was always referred to the inside of the right groin. Mr. Maunder pointed out the importance of noting even an apparently trifling symptom, such as a small patch of ecchymosis. The existence of this led him to make a careful examination, and his opinion was that the pubis had sustained fracture.

Case 2.—A lad who some fourteen days before admission had been seized with pain, and swelling, and redness about one ankle-joint, and with no history of accident. Was the case one of rheumatic inflammation of the joint or of acute periostitis of the lower end of the tibia? The symptoms, for some days severe, varied from time to time. At no time was the swelling markedly annular immediately opposite the ankle-joint, although three-quarters of the line of the joint were obscured by swelling on one or two occasions. At one time the lower end of the tibia appeared swollen, and was exquisitely tender on pressure; at another time the pain and swelling and redness were over the lower end of the fibula. At all times the lad could raise the limb from the bed and allow the foot to hang without support, and more or less passive movements at the ankle could be made with less pain than would result had the joint been the chief seat of inflammation. In favour of acute periostitis was the fact that the femur had been similarly affected some time since, and an open sinus exists in the thigh now. But the chief swelling and pain varied its position so much, being one day over the lower end of the tibia, another day more nearly corresponding to the line of the joint, and then again referred to the fibula, that the case must probably be rheumatic. The acute symptoms have subsided, and no swelling exists over the line of the articulation, but rather above it, about the tibia and fibula, but there is no evidence of suppuration under the periosteum.

Case 3.—Fluctuation in the stomach. A female adult, greatly emaciated, with a tumour occupying the mid region of the abdomen and reaching up under the left hypochondrium. Fluctuation has repeatedly been easily detected in the tumour, and Mr. Maunder believes it to be the stomach greatly distended.

June 28.—At a post-mortem to-day, the lesser curvature of the stomach and the pylorus were found to be infiltrated by a cancerous deposit, causing obstruction, and thus verifying the diagnosis.

BEAUJON HOSPITAL, FRANCE.

TWO CASES OF SATURNINE EPILEPSY TREATED BY BROMIDE OF POTASSIUM.(a)

Case 1.—A man, aged 30, tinner by profession, entered Professor Gubler's service at the Beaujon Hospital on January 27, 1869, for a species of shaking palsy of the thoracic members.

(a) We are indebted for these observations to M. Landrieux, the interne of the service.

These troubles have only manifested themselves since the last four days. Nothing hereditary; no excesses of alcohol. The patient is anæmic; presents a soft systolic souffle at the base of heart, and the blue line along the teeth and gums characteristic of lead poisoning. In fact, the man has worked at his profession for fifteen years, and makes use of an alloy containing from 40 to 50 per cent. of lead. He has had a first attack of lead colic two years ago; and a second one, quite severe, lasting eight days, in the month of December last. The incoordinate movements of the superior extremities are not those of shaking palsy; they resemble more those of chorea. They consist in an indefinite and irregular series of contractions, which have their seat alternatively in the extensor and flexor muscles. These oscillations continue in spite of the patient's efforts to the contrary. They are much lessened, however, by a continued current of electricity of moderate intensity. The power of extending the arms upon the posterior portion of the trunk is much lessened; there exists a slight analgesia of the affected members, but not the least paralysis of the extensor muscles of the fingers. He complains of severe myosalgic pains, which seem to be most intense about the point where the radial nerve leaves the spiral groove of the humerus. No other abnormal symptoms; no constipation; urine free from albumen.

Jan. 29.—Lead colic. Ol. ric 20. gram., ol. tigl. 2 gt. produce no effect.

On the morning of the 30th we find the patient's physiognomy much changed; he has passed a sleepless night, complains of obscure vision and a strange uncomfortable feeling. While relating this, his face turns deadly pale, and without a cry he is seized with an epileptic fit which lasted four minutes. The clonic convulsions were of so violent a nature, existing in the diaphragm and the muscles of the larynx as well, that for a moment death from asphyxia seemed inevitable. Six grammes of bromide of potassium are administered during the day. Towards evening the patient had an attack of vertigo of short duration. Cephalalgia. Pulse 100, slightly intermittent and of great tension under the sphygmograph. The colicky pains lasted up to February 3, although several alvine evacuations had been procured. Bromide of potassium is continued. The muscular pains of the superior extremities are not lessened. The dose of bromide of potassium is gradually reduced to three and two grammes per day until March 4, when its use is discontinued altogether.

The choreiform contractions are now very slight, and the paralysis of the extensors exists no longer. In order to correct the muscular disorder and the paresis of the extensor muscles yet remaining, M. Gubler orders the syrup of strychnia, and which in the course of twelve days produced most brilliant results. The patient left the Hospital March 22, 1869, seven weeks and a half after his entry, cured.

This case certainly speaks strongly in favour of the use of bromide of potassium in saturnine epilepsy. The intensity of the attack and the profound poisoning of the system permitted no other than a very doubtful prognosis. The medicament seemed to have acted as a sedative to the circulation, accelerating at the same time the denutrition of the tissues.

Case 2.—A man, aged 36, carriage painter, entered Professor Gubler's service January 16, 1869, with a complete paralysis of the extensor muscles of the right hand, the first symptoms of which began to manifest themselves about eighteen months ago. The supinator radii longus is not affected. The patient complains of headache and inappetency. No analgesia; no constipation; no muscular pains. He has had a first attack of lead colic some six years ago, and a second some six weeks ago. The blue line upon the gums is not much marked.

January 17.—Colic during the night; urine contains albumen. Pulse and temperature normal.

18th.—Two stools. The patient has had three violent attacks of epilepsy between five and six o'clock in the morning, and at the visit we find him in a state of coma. No trace of paralysis. Pulse 130. Thirty grammes of compound tincture of jalap; six grammes of bromide of potassium during the day. Two more attacks of epilepsy in the evening. No headache.

19th.—Three more attacks during the night, but less severe, and of short duration. Coma in the morning. Pulse 120. Brom. of pot. has been continued as above. Two more attacks during the day; great prostration.

20th.—Complete paralysis of superior extremities. Pulse 114.

21st.—Intelligence clear; urine still albuminous. Pulse 112.

22nd.—A little delirium during the night. There exists a certain degree of hemiplegia of the left side, and the affected members are in an almost complete state of anæsthesia. The dose of bromide of potassium is reduced to 4 grammes per day.

24th to 30th.—Great amelioration of all symptoms; pulse 80. Brom. of pot. is discontinued.

February 2.—The patient is greatly exhausted; a veritable typhoid state has set in. Tonics are of no avail, the prostration continues, and death takes place February 13.

At the autopsy we find nothing of interest except a granular degeneration of the right radial nerve and a destruction of its cylinder axis upon several points.

This case, although ending fatally, may be recorded as one where the administration of bromide of potassium has been of efficacy in allaying eclamptic convulsions: these had been completely checked for a period of twenty-two days, and the pulse from 130 reduced to 80 during the treatment. But the system of our patient is in a state of profound ænemia; nutrition takes place no longer, and he dies, we might say, without any lesion other than exhaustion and inanition to explain the cause of death.

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Medical Times and Gazette.

SATURDAY, JULY 3, 1869.

DEMONIACAL POSSESSION AND MIRACLES IN THE NINETEENTH CENTURY.

At the present moment one of the most popular books with the religious world is the life of Monsieur Vianney, the curé or parish priest of Ars, a petty village near Lyons. The events of the Curé's life were simple enough. The son of a petty peasant proprietor, of a family noted in their humble way for devotion and charity, he attracted the attention of the parish priest, who took him from the plough and sheepfold, educated him, and sent him to an ecclesiastical seminary, where, after much difficulty, he succeeded in passing his examinations, and was ordained. It is impossible to conceive of anything more charming than the piety, the humility, the perfect charity, and heavenly-mindedness of this man. These are qualities which are entitled to the respectful admiration of persons of every nation or creed. Our present purpose is to point out certain physiological errors committed by this excellent man, and some of the consequences to which they led.

Error the first consisted in the idea that sanctity is promoted by everything that starves, mortifies, punishes, and abases man's mortal body. There is no conceivable kind of self-chastisement which this excellent man did not inflict on himself with this idea. As to his food, he tried as hard as possible to go without it. Bread and potatoes, with a little milk, formed his common fare; but as for his bread, he gave away all that was new and nice to beggars in exchange for the foul and mouldy crusts in their wallets; he cooked potatoes once a week, and used to eat them quite mouldy. Once he attempted to live on grass and roots. It is asserted that

throughout one Lent he ate only two pounds of bread; he often went without food for a whole day, and even for two, and during one week only took three meals. As for delicacies, which were sometimes pressed upon him by his friends, he invariably gave them away. His clothing was old, threadbare, and tattered; once his clerical friends subscribed to buy him a pair of velvet gaiters, but he gave them to the first beggar he met. His house was dusty and disfurnished; his "rusty grate unconscious of a fire;" he began by discarding a comfortable mattress, and slept almost on the bare boards, and, as if this were too good, he left his bedroom to sleep on the floor in the garret. Of his instruments for self-discipline—that is to say, self-scourging with knotted and wired ropes—the account makes one's blood run cold.

We need not comment gravely on the violation of physical law involved in well-meaning proceedings such as these. Man has work to do in this world both of mind and body; work cannot be done without food; the work of the world would come to a standstill if all men were to imitate the Curé d'Ars, and there is little use in setting that up as a standard of sanctity which the world cannot follow. The Curé at times was almost too feeble to crawl, or to speak with an audible voice. He might have done better work had he treated what he called his *cadavre* as becomes so exquisite a piece of Heaven's workmanship. How he contrived to live till his seventy-fourth year (he died in 1859) is wonderful.

But starvation brings worse consequences than mere feebleness; the brain suffers as well as the muscles; hallucination follows, and the Curé d'Ars was no exception to the rule. He began to believe himself the object of persecution by evil spirits. The way in which these malicious beings showed their spite was various, but consisted chiefly in noises at night, loud knockings, shakings of the curtains, vociferations in the courtyard, sometimes as if knocking in nails, chopping wood, or sawing planks; sometimes beating the devil's tattoo on the table or *le pot à eau*. Sometimes the devil seemed as if he were driving a flock of sheep through the room, sometimes as if a troop of horses were galloping upstairs, *or as if rats were jumping on the bed and were racing over the Curé's face;* sometimes the poor man heard himself reviled and insulted by name; once he felt himself lifted off the bed and rising in the air; many times was he tumbled out of bed on to the floor; many times he found a favourite picture of the Annunciation bespotted with filth and ordure; and once his bed was set on fire—all, as he believed, by the Arch Enemy, who, finding he had no chance of burning the Curé himself, revenged himself on his bed. Now, if we express our conviction that this diabolical tumult was partly caused by the rats which inhabited the neglected old house, partly by the throbbing of empty arteries, by vertigo, and by the dreams of a starved brain, we are but expressing the opinion which was formed by his bishop and his clerical brethren (and the French clergy are inferior to none in shrewdness and judgment, nor yet in piety). "If," said they, "the Curé d'Ars would live like other people, and take food and sleep, this infernal phantasmagoria would soon vanish."(a)

With a brain so starved and so troubled, there is no room for wonder that further prodigies manifested themselves to him, of which we may say, without any disrespect, that we hold neither the chief personage nor those about him to have been in a condition to judge clearly. We pass over other miracles, however, to speak of miraculous cures, which we claim the right to take cognisance of.

So great was the curé's reputation for sanctity, that during the last twenty years of his life the sick flocked to him from all quarters that he might pray for their cure, and at last was believed to have the miraculous gift of healing. Many pages of his biography are filled with details of these cases and with *pièces justificatives* and testimony sufficient to satisfy any one who has a predisposition to believe in them. We find, on what is called "excellent testimony," cases of disease, acute and chronic, removed at the bidding or intercession of the holy man. A poor woman whose son had wounded his head put on the child one of the Curé's old caps; the wound was healed that night. A poor woman suffering under a chronic affection of the larynx, reduced to a skeleton, and given up by the Doctors, was cured in a few days. A phthisical priest, a woman who had lost her wits for three years, the rheumatic mother-in-law of a penitent, a child with dislocated hip from scrofulous disease, a woman with acute hepatitis and dropsy, a child the bones of whose legs were so soft that one could wring them like linen, a man with congestion of the eyes, a man of quality attacked with a malady "que les médecins ne savaient définer"—these and scores of others are recorded as having been miraculously cured by the Curé. Of some of them it is said that they had tried homœopathie as well as legitimate medicine; most of them are alleged to have been given up by the Doctors, or to have derived no benefit from their skill. Yet although the excellent Curé rebuked one patient (an hysteric woman) for seeking Medical aid, which he said retarded her recovery, he advised another (a young man with a cancer) to go to Lyons to be operated on. The operation succeeded well, and the success was credited to the Curé, who certainly showed considerable shrewdness in the choice of his cases.

Out of these circumstances we may extract food for reflection. In the first place, human nature does not change. There are crowds in every country who readily believe these or even greater wonders. Next we would notice the fact that a great many persons in these, as in other narrations of extraordinary cures, are said to have been "given over by the Doctors." The phrase has two meanings. If it means, as is sometimes clear from the context, that "the Doctors declare that a patient has not an hour to live," it shows that such declarations are sometimes made incautiously and on insufficient data; if the patient gets well, the Doctors are laughed at. But if it means that, in a long illness, the Doctor says drugs are of no service, but diet and care and change of scene may do much for you in time, we call that Doctor an honest man. Only such are the patients who furnish the best subjects of wonderful cures of all sorts.

As for the reality of the cases, we can only say that evidence equally respectable is always forthcoming for any set of cures worked by means respectable, or the reverse. Concerning the chief actor, we know in what state his nervous system was. As to the witnesses, they were on the look-out for marvels, and cannot be supposed to have scrutinised facts too closely. The Curé's biographer believes in table-turning and spiritualism, and that both are manifestations of the Evil One; and, like most enthusiasts, believes too much to be a good witness. In most chronic cases, such as those narrated, Medical men now hesitate to say that the recovery of the patient was due to their remedies.

Lastly, as regards the moral bearing of the whole subject. The history of the Curé d'Ars furnishes one instance the more of the readiness of people to believe in any unusual means of cure, and to cast a slur at poor slow Physic and the Doctors. But we would plead that Physic is a religious science and art, inasmuch as she humbly strives to find out the laws which the Creator has impressed upon Nature, and teaches people to observe them. Physic is a moral science, and believes that a sound mind depends upon a sound body, and the converse. She teaches the futility of expecting to be able to sin without suffering. Whether this be not better for mankind than a system which leads people who disobey Natural Law to look out for a miraculous short cut to recovery, we leave for men of sense to decide.

(a) Le Curé d'Ars, Vie de M. Jean-Baptiste-Marie Vianney. Par l'Abbé Alfred Monnin. 4e éd. Paris: Douniol. 1861. Pp. 398.

Dr. Thompson Dickson, Medical Superintendent of St. Luke's, is giving a course of lectures on mental diseases to the students of Guy's Hospital.

CORONERS AND THEIR DUTIES.

A CASE has occurred at Richmond, Australia, and reported fully in the *Australian Medical Gazette*, which is of great importance with respect to the powers and conduct of coroners. A woman had died in childbed in consequence of rupture of the uterus. A midwife had been in attendance for some hours, and repeatedly stated that all was going on well. When the husband insisted upon going for a Doctor, the midwife decamped. Dr. Stillman, who came, made an examination, and discovered that the uterus was ruptured, and the child high up. On a consultation with Dr. Wilson, it was determined to deliver by turning. This was effected by Dr. Wilson, who "passed his hand, he believed, through the rupture gradually up towards the feet of the child, brought it down gradually, and delivered it." Under the circumstances of the case, Mr. Stillman and Dr. Wilson declined to give a certificate of the cause of death without a post-mortem examination. The coroner decided that the post-mortem should be made by some other Medical man than those engaged in the case, and requested Mr. Stillman and Dr. Wilson "to nominate three or four Medical men in Melbourne, the employment of any one of whom in this matter would not be distasteful to either of them." This suggestion was declined, and Drs. Reeves and Stewart, of Richmond, made a post-mortem examination without the authority of the coroner, and found that "death was caused by rupture of the uterus." Dr. Wilson and Mr. Stillman hereupon gave a certificate to this effect; but the coroner was not satisfied, and ordered a second post-mortem to be made by Mr. Beaney, of Melbourne. This fully corroborated the examination first made. We now come to the extraordinary charge of the coroner, who at some length charged the jury and reviewed the facts of the case and the evidence before the jury.

"In reference to the first post-mortem examination, he thought it had been undertaken through a misunderstanding on the part of Messrs. Wilson and Stillman regarding his reasons for proposing other Medical men to make it. He made it a practice never to allow the Medical men who were in attendance on a deceased person before death to take part in any subsequent post-mortem examination of the body. This was done for obvious reasons, and he thought the rule would commend itself to 'all men of delicacy and proper feeling.' The precedent which Messrs. Wilson and Stillman would wish to set up would be a most dangerous one, and he should be sorry to see the principle it contained adopted.

"The jury deliberated for about an hour, and returned the following verdict:—'We find that on April 3, 1869, at Richmond, Margaret Bardon died through rupture of the womb. We find that Anne Patten was "guilty of culpable neglect" in not sending for Medical aid when first requested to do so by the deceased.'

"The Coroner: Am I to understand that her negligence is short of manslaughter?

"The Foreman: Yes; short of manslaughter.

"The Coroner, addressing Anne Patten, said: The jury do not intend by the terms 'culpable neglect' to mean manslaughter, and therefore you will not be committed to take your trial."

Is it possible that the coroner is a Medical Practitioner? The *Australian Medical Gazette* says:—

"We are unaware whether the district coroner is the Mr. Curtis Candler who, in the old palmy days of official favouritism, assumed the style and title of Dr. Candler, but the absence of whose name from the new Medical Register we remark."

Whatever be the profession of the coroner, his summing-up is scandalously offensive to the Medical gentlemen of his district. It is, moreover, directly in contravention of the law as it prevails in England, in which the Medical Witnesses Act directs in ordinary cases that the post-mortem should be made by the Practitioner who saw or attended the deceased before death. Mr. Candler sets at defiance the common rules of politeness when he sneers "by implication" at the Medical gentlemen of Richmond—where there are several—when he summons a Surgeon from Melbourne to perform a duty which every qualified Practitioner is presumed to be capable of carrying out. In England, such conduct as that of Mr. Candler would not be tolerated. When the Medical Witnesses Act first became law, some coroners, acting under a discretionary clause, ordered post-mortem examinations to be made by some personal friend, or the parish surgeon; but this practice raised such a storm of opposition and indignation that it is almost altogether dispensed with at the present day. In the few instances in which it is now carried out, it is regarded as exceptional and improper, reflecting credit neither on the coroner nor his selected Medical witness. The case at Richmond has attracted much public attention, and we hope that it may lead to the practice of the Coroner's Court being assimilated to that of England. We hail with much satisfaction the appearance of our young contemporary the *Australian Medical Gazette*, which has treated the subject of the inquest in all its bearings with consummate ability and unflinching courage.

WHAT IS THE USE OF SANITARY MEASURES?

THERE exist—and we suppose there always will exist—among the educated and intelligent classes certain gloomy individuals who, whatever proposition comes before them for ameliorating the physical, social, or spiritual condition of their neighbours, invariably have some argument to prove that it can by no possibility succeed in its object or come to any good in the end. So long as epidemic floods do not reach their own homesteads, they see in them only the natural counterbalance of an overcrowded population. They dread the arrival of the time when the means of subsistence will be in defect for the mouths that are to be fed, and deprecate everything likely to promote the multiplication of the people, or directed towards lessening the death-rate of infants. It is from such as these that we hear the remark that if infants should not be carried off by scarlet fever, small-pox, or measles, they will most assuredly die of something else; that these diseases clear off the weakly, who, if spared, would only live to be a burden and a curse, and probably perpetuate a race as weakly and helpless as themselves. Now, even assuming that a check upon epidemic devastation would thus prolong the lives of the infirm, we are by no means prepared to admit without a good deal of proof that the weakly in body are necessarily burdensome and useless in the community of which they are members. It would without question be better that all children should grow up strong and fit for bodily as well as mental labour; but incapacity for the former by no means implies disqualification for the latter. The shrewd and calculating intellect of the invalid of the family has often been known to do good service in the domestic circle; and the genius which has drawn forth the admiration of the world has not rarely been a guest in a frail tenement.

It is a great mistake, however, to suppose that the primary object of sanitary science and art is to keep people alive. The diminution of the death-rate of the population is but an accident of improved public health, and, from its being an accident of pretty constant occurrence, it is used by statisticians, in lack of a better, as an index of improvements effected in public health.

The efforts of the sanitary reformer have for their object the production and maintenance of a population strong to labour, slow to decay, strong to resist the invasion of physical enemies without, and strong in moral force to combat with spiritual foes within. As a philosopher he has no fear of population increased beyond the means of its subsistence, for experience has taught him that this, in the working of affairs in the world, is a chimera. "Give the people of this nation health," says Dr. Farr, in his letter to the Registrar-General, "and if the increased numbers cannot be sustained on subsistence by their industry within the shores of these islands, the births will naturally decline; but the natural remedies are increased industry to command produce from abroad, and emi-

gration to seek after subsistence on the vast trans-oceanic territories." Work demands health, if it is to be good and effectual work, and hence, to enable workers "to command produce from abroad" for their subsistence, we must make them vigorous and keep them so. Again, the operation of emigration is to take out of the country those who are healthy and strong. None but such would undertake the task of subduing uncultivated continents to the service of man. Hence the fact of emigration going on, as our natural remedy for an overflowing population, lays upon us the greater cause to provide for the efficiency of the workers who remain at home. Sickness, and particularly epidemic sickness, does something else than kill a certain number; for one killed, how many are wounded and maimed for life! "The very conditions," says Dr. Farr, "which diminish the numbers killed in the battle of life diminish the numbers wounded; and as every single death by violence implies the injury or mutilation of survivors, so nearly all the zymotic diseases leave irreparable traces in the blind, the deaf, the weak in body or brain. By removing the discovered causes of death you at the same time remove conditions which prevent the progress towards perfection of the English race. We have, therefore, everything to hope, and nothing to dread, from measures of public health and of public safety."

ROYAL COLLEGE OF SURGEONS.

The annual election of Fellows into the Council of this institution took place on Thursday last, and excited considerable attention, as it was well known that a provincial Fellow intended to break a lance with the President touching the presumed rights of the constituents to question the candidates as to "their intentions" on taking office as Councillors. We say *presumed* rights, for had Dr. Morris studied the charters, by-laws, and standing rules with a tithe of the attention he bestowed on his Professional studies before he so successfully passed the Fellowship Examination, he would have discovered that neither the President nor Council had the power to sanction the discussion so much desired by himself and a section of the Fellows. The hour of meeting was, as usual, fixed at 2 o'clock, long before which time the Fellows began to assemble—some in small knots to discuss the merits of the candidates, but more to examine the large and valuable additions about to be made to the Museum, which were on view in the theatre of the College, and an account of which appears in another column of the *Medical Times and Gazette*. Punctually at the time appointed, the President, Mr. Quain, accompanied by the Senior Vice-President, Mr. Cock (the Junior Vice-President, Mr. Solly, having to stand a re-election, was seen amongst the general body of Fellows, being no longer in office), and other officials, entered the library, and at once, having explained the objects of the meeting, called on the Secretary to read the advertisement convening the meeting, and those portions of the by-laws and ordinances relating to the election of Fellows into the Council. This having been done, Dr. Morris, of Spalding, said:—

"Sir,—With a desire to show every respect for the chair, I approach you with the greatest confidence, for the purpose of asking you a question relative to the particular business of this day. Sir, I hold in my hand a notice from your secretary, informing me that we were to meet to-day for the purpose of electing three members of Council. Now, the question I wish to ask is this—Has ever a proposition been made to the Council to the effect that reporters should be admitted, and did Messrs. Solly and Adams support it? Those gentlemen who are retiring in rotation refuse publicly to give any account of their stewardship, and your reply will much affect their position as candidates. In asking for this information I infringe upon no rules, break no laws, but simply do it to obtain information that shall guide me in the choice of candidates who will best represent my views within the Council Chamber."

The President explained, in a plain, firm, and dignified manner, that the proposed discussion could not legally be allowed, and stated moreover that counsel's opinion had been taken on the subject. The general body of the Fellows supported the chair with acclamations. The election then proceeded uninterruptedly until six o'clock, when, the last Fellow having duly recorded his vote, the scrutiny commenced, and at its close the President declared that Mr. Solly was re-elected, and Messrs. Erichsen and Gay elected.

The following were the numbers polled:—

	Votes.	Plumpers.
Samuel Solly, Savile-row . . .	222	20
John Eric Erichsen, Cavendish-place .	199	19
John Gay, Finsbury-place . . .	161	14
Henry Lee, Savile-row. . . .	138	7
William James Erasmus Wilson, Henrietta-street	125	3
John Adams, Finsbury-circus . .	87	2

OPENING OF THE GENERAL MEDICAL COUNCIL.

The main point in Dr. Burrows's address at the opening of the Medical Council was undoubtedly the decided opinion he expressed, and in which he said he was supported by the Committee of Education, as to the necessity of instituting a conjoint examination for each of the three kingdoms. This position, which, in truth, has been held by all the most enlightened Medical reformers, and now enunciated by the President of the Medical Council, is, we believe, the only tenable one. Of course it will be opposed by the upholders of vested interests, and by those who object to all change for the sake of objecting. But we believe that the speech of the President has rung the knell of separate examinations, and of those unnecessary divisions into which the healing art has been split up. The hope which is held out of a Medical Amendment Bill next year is truly a deferred one; but whenever it be realised, the amalgamation of examinations must be one of the chief provisions of the Act. We must reserve our comments on the further events of the first day until next week.

THE WEEK.

TOPICS OF THE DAY.

The Council of the Royal College of Physicians have decided that the first Baly Medal should be given to Professor Owen. We believe that this award will take the Medical world by surprise, and that it will surprise no one more than those who were principally instrumental in founding the medal. We believe that the medal was founded in Baly's memory, to be given to the physiologist who has most distinguished himself in "the two years particularly" preceding the award, which is to be made every second year. Now, with all deference to the Council of the Royal College of Physicians, we do not think that this description of the person thus to be honoured applies to Professor Owen. We yield to none in respect for Professor Owen's fame and name, and in reverence for the grand biological work which he has done. We hold him *facile princeps* amongst European anatomists and palæontologists. But he is not distinguished as a physiologist in the sense that Haller, William Hunter, Hewson, Muller, ay, or Baly himself, were physiologists. Professor Owen's knowledge of the dead structure of animals, living and extinct, has equalled, if it has not surpassed, that of Cuvier. His demonstrations of the plan pervading the vertebrate sub-kingdom, and his grand vision of the archetypal skeleton, have thrown into the shade all previous attempts to grasp the unity which underlies diversity. His fame as a philosophical anatomist is destined, we believe, to outlive many of the species he has described, but it cannot be increased by this award. That fame is far too secure to be damaged, but if anything could damage it, it would be this mistaken award. The incongruity is as great as that of bestowing the civil decoration of the Bath on the hero of a hundred fields. The Fellows of the College have approved the recommendation

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of the Council, but only, we are informed, by a very narrow majority. There was a general feeling that if the medal was to be given to a distinguished naturalist or anatomist no claims could be put into competition with those of Professor Owen; but if, as previously announced, the medal was to encourage physiology and physiological researches, the award was altogether in a wrong direction. We should be sorry to think that the Council of the Royal College of Physicians was incompetent to decide or indifferent as to the grounds of its decision. But we cannot but think that they have erred gravely in discharging their trust.

As Medical journalists we have nothing to do with the moral aspects of the Hosier-lane tragedy. But in the interests of the public we would ask how and where the man Duggan obtained the two bottles of Scheele's prussic acid with which he murdered his wife, his six children, and himself. We would ask of what use is the Pharmacy Act if such things are possible? Do all chemists, like Mr. William Vorley, believe that prussic acid is used in tin and silver plating, and sell it to any workman in those trades who signs his name in a book? If so, we can understand that the Pharmacy Act confers a comfortable monopoly on the Pharmaceutical Society and its members, but we do not see that in any appreciable degree it protects society or throws obstacles in the way of would-be criminals. The wretched man Duggan's condition probably justified the jury in finding him of unsound mind. Dr. Powell, of Newington-causeway, testified to his habitual despondency and his morbid anxiety for the future. He was in the first stage of pulmonary tuberculosis.

The debate in the Dublin Statistical Society on Dr. Mapother's paper on the purchase system in the Dublin Hospitals has come to an end without any definite result. It seems pretty clear, however, that the prevalent feeling was against the custom of paying for Medical and Surgical appointments. To Englishmen it only seems surprising that such a system should find defenders. That no man should be elected on the staff of a Hospital, whatever his ability or fitness for the post, unless he can pay so many hundreds to the funds of the charity and so many more to the retiring Medical officer, seems to us simply incredible. It is no argument in favour of such an abuse to say that under it, or in spite of it, the Dublin Hospitals have been officered by men like Stokes and Corrigan; neither is it to the purpose to show that other modes of election are not unattended by evil; and we demur—at least, in great part—to the doctrine enunciated by Sir Dominic Corrigan, "That celebrity in the Medical Profession is the result of appointments, whereas in the law and the church appointments are the result of celebrity." Many men at the top of the tree in London practice won their spurs before they obtained Hospital appointments, and at least one of the foremost Medical schools in London has owed far more to its Professors in College and Hospital than its Professors have ever owed to it. Where would the reputation of University College have been had it not been for its brilliant professorial staff, beginning with such names as Sir Charles Bell, and Liston, and Turner, and Elliotson? Look again at the history of the Edinburgh School, and see how entirely it has been moulded and raised by the genius of a few Professors from the days of Monro *primus* onwards. It is no more true that in the Medical Profession the celebrity of a man depends upon his appointments than it is of the lawyers and clergy. Are bishops and puisne judges always selected as the most brilliant ornaments of their professions, or are they not sometimes illuminated by their seats instead of illuminating them? Any one who reads Sir Dominic Corrigan's speech as published in the Dublin papers, in which he defends with much skill of fence the purchase system, cannot fail, however, to be amused. Sir Dominic Corrigan's great point was the picture he gave of other modes of election—a picture not less amusing from being drawn by the Liberal candidate for the City of Dublin. We cannot refrain from extracting a few lines:—

"Sir Dominic then examined at length the different electing bodies. First, there was the popular election by 400 or 500 votes. When seeking election by such a body, he (Sir Dominic) had to enter the shop of a shopkeeper, who, though very rich, could not write his name. 'Pardon me,' said the shopkeeper, 'I must attend the lady first.' When he (Sir Dominic) turned round whom did he find the lady to be? Why, his mother's cook. (Laughter and applause.) His next experience was at Jervis-street Hospital, where the electing body consisted of about 200. Suddenly there was that development of latent philanthropy and Christian charity which usually takes place at contested elections, and several of his friends rushed in to become governors. (Laughter and applause.) He next had to go before a board of fifteen. A single vote became of the greatest consequence, and this vote he obtained by bringing to bear on a gentleman, who intended to oppose, some pressure from that gentleman's bill discounter. (Loud laughter.) The fourth mode of election—that of a Medical Board—was the worst of all—(hear)—because in this despotism must prevail. The next mode of election was that in which the Medical Board recommended, and the ladies chose the candidate.

"Dr. Mapother: They adopt the candidate.

"Sir Dominic Corrigan went on to ask what chance would he or a dozen 'old fellows' like him have against Dr. Mapother before such a tribunal as that? (Loud laughter and applause.) Sir Dominic then created much amusement by addressing Dr. Mapother in the words of *Hamlet*—'The front of Jove himself—an eye like Mars,' etc. He protested against a Medical Board, but he protested a thousand times over against a tribunal of ladies. (Laughter and applause.) He at one time was in favour of the selection of candidates by *concursus;* but this, he found, gave the very worst Doctors to the Hospitals that ever they had."

The whole picture has a rich Milesian tint which is delightful.

Mr. Knatchbull Hugessen, acting, we presume, on the part of the Government, has given notice of a Bill on Criminal Lunacy.

The report of the Royal Commission on the water supply of the metropolis will soon be in circulation. The moral of the report seems to be mainly that we are to be thankful for the goods—if not the good—the water companies give us. At all events, we are not encouraged to look farther off than the Thames for our supply, and Mr. Bateman's plan of bringing water from Wales is simply shelved. The Commissioners, however, say that measures must be adopted "for excluding the sewage and other pollutions from the Thames and the Lea and their tributaries, and for insuring perfect filtration." The Commissioners allow that the companies fail in filtration, and that a large amount of sewage finds its way into the Thames above Teddington. The most damning thing about the Thames that has come out lately is a plate in the last edition of Professor Parkes's "Hygiene," in which are shown not merely *paramœcia* and other living evidences of impurity, but fibres of clothing, scales of epithelium, and other *débris* of animal bodies.

HEALTH OF THE QUEEN.

The public will have seen with satisfaction that her Majesty has been able of late to take a greater share in public ceremonial than has been her wont since the lamented Prince Consort's decease. We are not revealing Medical secrets, but simply stating what is well known to all her Majesty's inner circle, that the presence of a crowd or the succession of persons who are presented at Court produces on her nervous system the giddiness and other symptoms common to landsmen at sea. Considering her Majesty's habits of punctuality, and the hard labour and anxiety she has undergone during her happily protracted reign, it cannot be matter of surprise that the nervous system should become fatigued.

THE VACCINATION ACT.

It is to be regretted that resistance to the provisions of the Vaccination Act has become common. Three cases are recorded

in the journals of last week, in which parents have been fined for refusing to allow their children to be vaccinated, on the ground that the operation was injurious to health. We can make allowance for the prejudices of the ignorant and uneducated in relation to this matter, and we doubt the policy of fines and imprisonment, but there can be no excuse for a Medical Practitioner for such recalcitrant conduct. The *Echo* of Tuesday last states that—"At Derby, yesterday, a Surgeon who said he had been thirty-five years in practice was fined for having refused to have his child vaccinated. He stated that he had seen the evil effects of the system, and did not wish to have his child 'poisoned.'".

THE OPHTHALMIC DEPARTMENT AT ST. MARY'S HOSPITAL.

It is understood that Mr. Haynes Walton permanently undertakes the duties of the Ophthalmic department of St. Mary's, in addition to those which he fulfils as Surgeon to the Hospital. On the sudden retirement of Mr. Ernest Hart he volunteered to perform the functions of the Ophthalmic Surgeon during the vacancy, and his offer was unanimously accepted by his Medical colleagues, and confirmed by the Medical Committee and Board of Governors. It cannot be doubted that the arrangement is the best possible, as it secures an experienced clinical teacher whose whole energies will now be devoted to the pupils of the St. Mary's School. It is understood that he resigns the Central London Ophthalmic Hospital, where he has laboured for many years.

A VILLAGE MUSEUM.

The village of Thornhill, in Dumfriesshire, has been enriched by the addition of a museum of natural history, art, antiquities, and science. The museum is the work of one industrious collector, Dr. Grierson, who, during twenty-eight years, has laboured with equal assiduity in the arduous duties of Professional life and the more pleasing though scarcely less arduous task of seeking, preparing, and garnering the natural curiosities of his native land. The foundation-stone of the Grierson Museum was laid at Thornhill on June 22, on land given for the purpose by the Duke of Buccleuch. Within the stone is deposited a document, quaint and simple, written by Dr. Grierson, wherein the object for which the building was founded is described. The ceremonial of laying the stone was an event in village history perhaps without a parallel.

A FATAL CASE OF HERPES ZOSTER.

In the *Transactions of the American Ophthalmological Society*, recently published, will be found an interesting article on herpes zoster ophthalmicus, by Dr. Joy Jeffries, of Boston. The patient was a healthy old lady, nearly eighty years of age, and in December, 1867, she was seized with a violent pain, supposed to be neuralgic, in and about the left eye, extending on to the forehead and one side of the nose. The temporal artery became enlarged, and the conjunctiva greatly inflamed. Five days after the occurrence of pain an eruption made its appearance: thick crusts formed on the forehead and side of the nose, none, however, extending beyond the median line; one large crust was seated over the exit of the frontal nerve. Crusts and scabs were also expelled from the left nostril. The conjunctiva was greatly reddened, and discharged a muco-purulent material. The pulse was tolerably good, but above 100; in fact, the most prominent characteristic of the disease was the intense pain experienced by the sufferer. She seems to have been a remarkably self-willed and intractable patient, every form of treatment being distasteful to her. The disease ran its course in six weeks; the pain ceased about four weeks after its first occurrence, but the patient did not rally. She was feeble and emaciated; her appetite broke down, and during the last ten days she would take hardly any food. She died on the forty-fourth day from the beginning of the disease. Before death the eyelid had recovered its normal appearance, as had the side of the nose, but crusts remained on the forehead and scalp. Unfortunately, there was no autopsy.

THE POPE AND THE ROMAN DOCTORS.

We are glad to find that a statement which has recently appeared in many English journals is probably a misrepresentation of the facts of the case. We allude to the monition said to be issued by the Pope to the Physicians of Rome, enjoining them in no case to continue their attendance upon patients who are dangerously ill unless they have made their confession within three days after the doctor's first visit. In one of the church papers a correspondent from Stuttgart last week enclosed the following translation of an article in the *Deutsches Volksblatt*, a Wurtemburg Catholic newspaper:—

"Our correspondent in Rome writes to us under date of May 24:—'The Cardinal Vicar has issued a circular by which the Physicians and Apothecaries are reminded of the old law, which imposes upon them the duty of urging sick persons, where life may appear in danger, to confer with their confessors; it has frequently happened lately in Rome that people have died without the sacraments, who it was by no means to be supposed would have neglected confession had they been informed of their situation.'"

TEMPERATURE AT GREAT DEPTHS.

On Saturday last, Mr. G. J. Symons, who has been for some months engaged in experiments in the deep (1302 ft.) boring of the late Hampstead Waterworks, in the Highgate-road, invited a number of scientific gentlemen to see what had been done and to hear a few particulars of the results obtained. The old well is a quarter of a mile deep, and the bore passes through 236 ft. of London clay, 88 ft. of other tertiary strata, 586 ft. of chalk, 72 ft. of upper greensand, and 130 ft. of gault, and, lastly, about 37 different strata of sandstones, clays, etc., amounting in depth to 188 ft. 6 in., in all 1302 ft. It will be observed that the lower greensand was wanting, and that although the upper greensand was bored through it did not prove a water-bearing stratum; the result was not only no water, but ruin to the company. For thirteen years this well has been untouched by human hands, and affords an excellent opportunity for taking the rate of increase of temperature at low depths, as many sources of fallacy, which are necessarily present in mines, etc., are absent in this boring. So far as the experiments go at present, Mr. Symons has shown that there is a steady rate of increase of temperature of 1° Fahr. for every 52 ft. of vertical depth the thermometer at 1100 ft. being nearly 70° Fahr., or, should the temperature continue to rise at the same rate, it would amount to 100° Fahr. for every mile of vertical depth. The water that rushed up from the depth of 1800 ft. at Grenelle, under the superintendence of Arago, had a temperature of 82°, which is at the rate of increase of 1° Fahr. for every 60 ft. of descent. The thermometers used are Casella's, and their delicacy is equal to that of Aikin's clinical thermometers, one-tenth of a degree being equal to one-fifth of a lineal inch. Everything connected with the investigation at Highgate is highly interesting—the history of the well, its geological character, depth, water, and, lastly, the ingenious contrivances which Mr. Symons has extemporised in his hut to insure accuracy. The well is in the Highgate-road, on the left-hand side, just after passing the old inn called the "Bull and Last."

THE "CHICAGO MEDICAL TIMES" AND THE BENNETT MEDICAL COLLEGE.

We have now received three numbers of the *Chicago Medical Times*, which is further described as "a monthly journal devoted to the interests of Eclectic Medicine and Surgery." The names of John Forman, M.D., and of R. A. Gunn, M.D., appear on its title-page as editors. It would further seem that in the same city there exists an institution called the Bennett

Medical College, in which John Forman is described as Professor of Clinical Medicine and Pathology as well as Dean of the Faculty, R. A. Gunn being Professor of General and Clinical Surgery. Now, it may be fresh in the minds of our readers that at the last meeting of the General Medical Council an individual called Forman, and who had for some time practised in a Scotch village called Fettercairn, had his name expunged from the official register under circumstances sufficiently disgraceful. We have reason to believe that this individual and the Professor of Clinical Medicine and the Dean of the Faculty of Bennett Medical College, Chicago, are one and the same. He would seem to have lost no time, for the Bennett Medical College has already turned out one set of graduates, who, it seems, had been in training over the protracted period of *four months*. This precious college is further provided with a Professor of Obstetrics, who would seem to be at the same time the head of a drug firm. This, indeed, we suspect to be his normal occupation. We know nothing as to the other professors (so called), but certain of their productions in this journal would lead us to suppose them ignorant almost beyond conception. The following notice, which appears in No. 3, speaks for itself:—

"The Bennett College Medical and Surgical Clinics will be continued during the summer at the office of the editors of the *Medical Times*, 163, South Clark-street. Wednesday and Saturday forenoons have been set apart for clinic days, and we trust that all students in the city will endeavour to attend, and thus become familiar with that most important department of Medical teaching."

Here we have a clue to the whole affair. One or two unprincipled and ignorant men may meet together in some little back room, constitute themselves a college (we wonder it was not a university), and forthwith proceed to assume their proper function of selling degrees. No wonder that some of the best men in America despair of Medical education, and that they are driven to their wits' end to obtain a cure for these unseemly exhibitions—no wonder, still further, we may say, if our General Medical Council are jealous of whom they admit to the English register. But on a subject so distasteful we have said more than enough.

FROM ABROAD.—THE AMERICAN MEDICAL ASSOCIATION — THE OPTHALMOSCOPE IN DISEASES OF THE SPINE.

It is pleasant to have to record that the what seemed a somewhat bold experiment of holding the twentieth meeting of the American Medical Association in a Southern city has been attended with marked success. In the first week of May more than 300 of its members met at New Orleans with a hospitable and gratifying reception; and the four days seem to have been very usefully employed in considering Professional questions of general interest. Certainly, if a complimentary appreciation on the part of the press indicated the general feeling as to the remarkable character of the meeting, this must have reached a very high pitch, as may be judged from the following "omnibus eulogium."

"The assemblage of the Association on their twentieth session presents an appearance which comprehends vast intelligence and worth in the Profession. The general physiognomy is suggestive of native talent and extensive culture, and almost every individual has marked features that attract more than ordinary attention. The evident student appearance of the mass indicates that each individual is a man of prominence of either a general or local character. The temptation to individualise is very great, but where there are so many notable names of gentlemen who are prominent in the Profession it would be invidious to attempt the task and leave out any one of the members. It seldom occurs in the sessions of deliberative bodies which sit in our city that such profound attention or such warm eulogy is elicited as is exhibited on the part of this intelligent assembly of Medical gentlemen."

The subject of Medical education occupied much of the time of the Association. Some of the State Medical Societies had sent up memorials, and the entire subject was referred to a special committee. The practice of underselling each other on the part of the various colleges was stigmatised as mischievous and derogatory, and it was resolved that no Medical school charging less than 140 dollars for a single course of lectures should be allowed to send representatives to the Association. It was stated that the schools of New England, New York, Pennsylvania, Maryland, Virginia, South Carolina, Georgia, Alabama, Texas, Tennessee, and Columbia now charge "comparatively remunerative fees," and that the low system is chiefly confined to the "Middle States." The President, Dr. Baldwin, in an address which is characterised as very able, but which has not yet been published, suggests the mature digesting of a plan to be laid before Congress for the establishment of one or more National Medical Schools or Universities, having the very ablest professors that can be procured in the widest field of selection, and whose ample salaries shall not be dependent on the number of the students. Evidently the subject is exciting the most lively interest, and we do not doubt that, with the tranquillity likely to follow the blessing of peace, means will be found to meet the evils which were so forcibly depicted by various speakers.

Another subject that engaged the attention of the Association was the "Nomenclature of Diseases" recently issued by our College of Physicians. A committee was appointed to take it into consideration, and reported that it was desirable that a special committee of fifteen should be appointed to deliberate as to what alterations may be required to adapt it for general use in the United States, and to secure the co-operation of the Surgeon-General of the Army, Superintendent of the Census, and other official persons. In the meantime, the committee recommends "that the committee of publication be authorised to publish for general distribution 1000 copies of the English and Latin portions of the Nomenclature, under the designation of the 'Proposed Nomenclature,' prefacing the same with such remarks as may be deemed necessary to secure the criticism and co-operation of as large a number of American Medical men as possible."

This is a judicious course, for it is quite certain that the "Nomenclature" will need considerable emendation before it can be recommended for final adoption. A reviewer of it in the number of the *Boston Journal* (May 27), whence we have derived the foregoing account, referring to the deputation which went to the Government to secure the gratuitous distribution of the "Nomenclature," quotes the plea urged by its spokesman, Sir Thomas Watson, "that many members of the Profession, especially in the provinces, could not, from their needy circumstances, be expected to buy the book, though called upon by the law to give gratuitous certificates of death," and naturally adds that this exhibits "a picture of the pitiable condition of the Profession hardly to have been expected even in England." In fact, it ought neither to be expected nor to have been expressed; for it was, to say the least, a very great exaggeration to state that many, if any, of the Profession could not, if it were desirable, afford to pay the few shillings the book was sold for. The true and indeed the sole ground for the application was not the poverty of the applicants, but the justice of their demand. Called upon to perform a public, and often an unpleasant, duty without any remuneration whatever, they surely had the full right to be put in the possession of any instrument enabling them to execute it effectually.

M. Bouchut, as a candidate for the next prize in Medicine and Surgery at the Académie des Sciences, has presented an additional memoir founded on his prolonged researches with the ophthalmoscope in diseases of the nervous system. He comes to the following conclusions:—

"1. Diseases of the spinal cord, as acute myelitis, spinal sclerosis, locomotor ataxy, etc., frequently induce a congestive lesion of the papilla of the optic nerve, which at a later period becomes atrophic. 2. The lesions of the optic nerve produced by diseases of the cord are the result of a reflex ascending congestive action, the great sympathetic nerve acting as the inter-

medium. 3. The presence of hyperæmia of the optic nerve, of reddish suffusion (*diffusion*) of the papilla, and of a total or partial atrophy of this part, coinciding with weakness and numbness of the lower extremities, indicates the existence of an acute or chronic disease of the spinal cord."

PARLIAMENTARY.—THE PURIFICATION OF THE SERPENTINE.

In the House of Commons on Monday June 28, the House went into Committee of Supply. On the vote to complete the sum of £128,877 for Royal parks, a long debate on the condition of the parks took place. In the course of it several speakers, amongst whom was Mr. Sclater Booth, objected to the sum of money to be spent on the purification of the Serpentine.

Mr. Layard remarked that the purification of the Serpentine had been under consideration for a very long time, and it had been postponed so often that it now became a matter of necessity. The hon. gentleman opposite was probably unaware that for a very long time all the drainage of that part of London emptied itself into the Serpentine, and that the depth of the mud and filth was almost incredible. The bottom was, besides, full of holes, which were the source of frequent accidents to bathers and others. In point of fact it was absolutely necessary that the Serpentine should be cleansed and the bottom reduced to one uniform depth, although he by no means insisted that that depth should be four feet.

GENERAL MEDICAL COUNCIL
OF
EDUCATION AND REGISTRATION.

TWELFTH ANNUAL SESSION,
HELD AT THE ROYAL COLLEGE OF PHYSICIANS.

FIRST DAY.—THURSDAY, JULY 1.

The Council assembled punctually at 2 o'clock in full numbers, Dr. Acland being the only absent member. This was in consequence of his attendance at the Royal Sanitary Commission; latterly, however, he was enabled to be present. The Registrar, Dr. Hawkins, read the appointment of Dr. Macrobin as representative of the Universities of Aberdeen and Edinburgh; whereupon Dr. Macrobin was introduced to the President by Dr. Alexander Wood, and the business of the session began. There were present—

Dr. Burrows, in the chair.

Dr. Bennett,
Dr. Christison,
Dr. Sharpey,
Dr. Storrar,
Sir Dominic Corrigan,
Dr. Aquilla Smith,
Dr. Apjohn,
Dr. Lect,
Dr. Macrobin,
Dr. Thompson,
Mr. Fleming,
Dr. Parkes,
Dr. Andrew Wood,
Dr. Alexander Wood,
Dr. Embleton,
Mr. Hargrave,
Dr. Rumsey,
Dr. Quain,
Mr. Cooper,
Mr. Cæsar Hawkins,
Dr. Paget,
Dr. Acland,
Dr. Stokes.

THE PRESIDENT'S ADDRESS.

The PRESIDENT said: Gentlemen,—I shall venture to trespass upon you, for a few minutes, before we proceed to the public business of the session. The interval between our two sessions has been somewhat longer than usual, because no pressing public business has compelled me to summon you hither at a season when, I know, it would have been very inconvenient for many of you to leave the scenes of your public and private duties. If the recess has thereby been made longer than usual, it has certainly by no means been a period of inactivity to the majority of the members of the Council. It is in the remembrance of you all that, at our last meeting, we appointed two very important and largely constituted committees—the Committee upon Medical Education and the Committee on State Medicine—and those committees have continued their labours throughout the interval. They comprise no fewer than fourteen members of our body; and of the great labours of those committees I can speak officially—not that I have joined in them; not that I wish to take any credit to myself for any part of what they have done—but that I have been officially cognisant of their labours. Those labours have been incessant, and have been continued, throughout the recess, up to the very hour of our assembly in this hall to-day. They have collected a vast amount of information to elucidate the subjects which they were appointed to inquire into. The materials collected from various sources are no doubt of very unequal value. They are heterogeneous, you will say, and perhaps in some points they are actually discordant; so that it must unquestionably require great discrimination and great labour to winnow the produce, to separate the grain and the chaff, and to draw up a report which will form the basis of future action. Let us hope that the gain which is to be realised from the reports of those committees may be, in some degree, commensurate with the great—and I ought to add gratuitous—labours of their members; and likewise let me say of the probable heavy expenses which will be entailed upon this Council in collecting the materials, and in embodying the information obtained in printed reports.

Gentlemen, among the duties deputed last year to the Executive Committee was the very responsible one of communicating with the Government upon the Medical Amendments Act. When this question was brought before the Executive Committee, I thought it right to press upon their attention the views which I had expressed to this Council at the opening of the last session. I am not going to detain you with a vain repetition of those views; but the gist of them was to this effect—that it was more within the province of the President of the Privy Council than of the Home Secretary to undertake the required legislation for the amendment of the Medical acts, inasmuch as the Privy Council and the Medical Council had been associated with the Legislature in the work of the Act of 1858; and, moreover, it appeared to me that there was a greater probability of successfully initiating Medical legislation in the House of Lords than in the House of Commons. The Executive Committee adopted my suggestion, and appointed a deputation of their members to wait upon the Privy Council. That deputation consisted of your Treasurer Dr. Sharpey, Mr. Cæsar Hawkins, the Registrar, and myself. Our deputation was received by Lord De Grey, Mr. Foster, and the President and Vice-President of the Education Department of the Privy Council, whilst those Ministers were attended by the Clerk of the Council Mr. Arthur Helps, and by their Medical Officer, Mr. Simon. As your President, I had then an opportunity of putting before the Government the reasons why we applied to the President of the Privy Council for his assistance in Parliament, and of pointing out the increasing and urgent necessity which there was for some amendment of the Medical Acts. My report on the result of that deputation unfortunately is very similar to that which I have had to make on former occasions. In fact, the account of that interview might also be stereotyped—a courteous reception, an attentive, and apparently a willing, listening to a rather long statement and to many arguments, ending with an expression of profound regret that the pressure of business would not allow of Medical legislation in the present session. After some further pressure from my part upon the President of the Council, I subsequently received a letter—a very important one—from the Medical Officer of the Privy Council, written by the direction of the Lord President, and announcing the intention of the Government to go, during the next session of Parliament, more deeply into the question of Medical legislation than was implied by the mere amendment of the Medical Act of 1850, as had been suggested by this Council. This letter, gentlemen, will very speedily—almost immediately—be laid before you, and you will find it contains suggestions which will require careful, and I fear very prolonged, consideration on your part.

On Monday you will be called upon to exercise one of the most delicate and responsible functions which have been intrusted to you by the Legislature; you will have to decide whether an individual, whose name is upon the Medical Register, has been guilty of infamous conduct in any Professional respect, so as to deserve the erasure of his name from the Register. This function, gentlemen, must always be exercised with the greatest prudence, and only under the guidance of sound legal advice. The Legislature has not thought proper to give us the power of so arresting the progress of notorious quacks and impostors, but it behoves the Council to use its powers of

purging the Medical Register of this country of persons whose proceedings are more in accordance with the habits of quacks and vendors of nostrums, than with the etiquette of the Medical Profession. Should the facts which will be laid before you not require the extreme sentence of expunging this Practitioner's name from the Register, I feel sure the discussion of the merits of the case will have a beneficial influence in a moral point of view, and will assure the members of the Profession at large that this Council does not timidly shrink from the performance of a painful and sometimes invidious duty.

No public body in this country is, or ought to be, exempt from criticism either by the press or the other recognised modes of expressing opinion, and the Medical Council cannot expect to be an exception to the general rule. Those who have only an imperfect knowledge of the state of Medical education, and of the examinations carried on by the boards of the numerous licensing bodies, when this Council commenced its labours, can form no just estimate of the beneficial influence which has been exercised upon Medical education, both preliminary and Professional, and upon examinations throughout the United Kingdom. (Hear, hear.) It would be invidious and unbecoming on my part to advert to the improvements which have taken place in any particular institution, but there must be few, I think, who would not candidly admit the value of the suggestions made to them by visitors from this Council upon the mode of conducting examinations. The fruit springing from the good seed sown can hardly yet be appreciated, and cannot arrive at maturity until a new generation of Practitioners has succeeded those who are gradually fading away. Because young men are still found to be very imperfectly educated, when put to the test of a searching examination, and especially those examinations which are instituted for admission to the public service, it has been inferred that this Council has not done its duty, and has not brought the standard of education up to the point which we all should desire to see attained. Those who arrive at such a hasty conclusion can know but very little of the practical working of the Medical Schools and other places of education. A system of education may be good; the teachers may be zealous and efficient and highly informed; but regard must always be had to the material they have to work upon. Young men are now what they always have been, and probably ever will be. It matters not whether it be at a public school, a University, or a Medical College—a large number of those who are entered as pupils will not be students in the proper sense of the term. Some, no doubt, are below the average standard of intellect; some are indolent, some are devoted to athletic sports, although not wanting in ability. Of these classes many must necessarily fail in examination, and those of such classes who are fortunate enough to pass have probably gone through the ordeal of what is called "cramming" in one place, and "coaching" in another. No doubt these evils are great. Can they be overcome? Possibly they may be lessened. The Medical Council, or any other public body authorised to issue regulations for examination in education, has no power to make the young men industrious and zealous in the acquisition of knowledge; and, in my opinion, all regulations and plans of education, and defined modes of teaching, will, unaccompanied by other measures, always fail with young men who are unfitted for their Profession. The most successful method for accomplishing the object which we have in view will, in my opinion, be the establishment of a good examining board—of a joint examining board for each division of the United Kingdom—(applause)—and the institution of examinations of such a character as to require the amount of knowledge which every candidate for a licence to practise Medicine ought to possess. Although rules and regulations and curricula of study may be properly laid down, for the information and guidance of those who propose to offer themselves for examination, it will be, in my opinion, examination, and that alone, which will establish the standard of knowledge among the candidates. According to the well-established law in free, civilised, and commercial countries, supply will always bear direct ratio to demand, and this law will be found, I believe, to apply to the conditions of Medical education. If the examinations are complete, efficient, and well conducted, those, who are desirous of passing them successfully, will resort to those sources where they can most certainly obtain the thing they are in need of. On the other hand, those, who are anxious to collect around them a body of students, must necessarily make such arrangements, and afford such instruction, as will enable industrious students to obtain the wished-for knowledge which is to enable them to pass successfully the examinations required of them. I feel sure, then, it will not be by fixed, precise, and defined methods of teaching particular branches of science, that the standard of knowledge of Medical students will be improved. Much liberty may and ought to be allowed in methods of teaching, and still more in methods of learning. (Applause.) There must be a certain liberty also allowed in the details of the curriculum of study. (Hear.) But let us have one good established and uniform examination in each division of the United Kingdom for all Medical students, and the standard of knowledge amongst them will soon correspond to the requirements of the Examining Board. (Applause.) After an experience, gentlemen, of ten years as a member of this Council, and acknowledging, as I have frequently and publicly, the great improvements effected by our regulations and suggestions, I have, nevertheless, arrived at the conviction that, even if this Council were armed with more extensive and arbitrary powers, it would be impossible to accomplish all those improvements in preliminary and Professional education, and examinations at the various licensing boards, which are required to insure the qualifications of those who are to be admitted to practise the Medical Profession. The most simple and the most certain method, I think, of effecting this great object would be the establishment of one joint public examining board in each division of the kingdom. Gentlemen, I may say I had determined upon giving expression to these sentiments before I had the opportunity of perusing a draft report of the Committee on Medical Education; but, having now had an opportunity of seeing that report, I am rejoiced to find that I had arrived independently at a conclusion similar to that contained in the document I have referred to. The observations in that draft report are very much to this effect: that the time has now arrived when, leaving universities and corporations full liberty to deal as they please with honorary distinctions and degrees, the Medical Council should insist upon a joint examining board for each division of the kingdom, before which each person should appear, and by which he should be examined upon all subjects of Professional education. I certainly do think—and thinking I feel bound to express my thoughts—that by this method a licence or diploma would be granted which would guarantee to the public (and we have to think of that, gentlemen) that every registered Practitioner was properly qualified upon every branch of Medical knowledge.

Gentlemen, if you refer to the printed programme which is before you of the business to be transacted during this session of the Council, you will find the list of agenda a very long one, embracing many large and comprehensive subjects, which will require much deliberation, and will no doubt give rise to much discussion. That seems to be inevitable; but I would suggest, in the interest of the whole Council, both of the members individually and also of our body—I may say financially—that we should have a tacit, but well-understood, agreement that each member, in addressing the Council, should endeavour—honourably endeavour, I would say—to condense his observations and arguments as far as possible. I am afraid that those digressions and illustrations which sometimes take place, however amusing (and, I admit, adding much to rhetorical effect) they may be, have very little influence on the judgment and the decision of the grave and reverend seigniors who sit around this table. (Hear, hear.) Gentlemen, I hope that these observations or remarks will not be regarded in any sense as personal. I offer them to you as a friend. They are made solely as *amicus curiæ*, and with a desire to facilitate the transaction of our business, and also with the desire, if possible, of enhancing the reputation and authority of this Council with the Profession and with the public out of doors. (Loud applause.)

Sir Dominic Corrigan hereupon said that he believed Dr. Burrows was not now legally their President. At the end of the last session Dr. Burrows had resigned his office, which would not have terminated otherwise till the end of February. If he had not resigned then, considerable inconvenience would have been entailed on the Council by their having to come up specially to vote for the office of President. His impression was that Dr. Burrows had resigned then, and been only re-elected till the first meeting of the present session. Their first duty, therefore, was to elect a President. He had been canvassed for Professor Syme, and he believed that he would be elected.

The President said that he considered himself to be properly their President, and called upon those who had informed him of the wishes of the Council to state their opinion.

Mr. Cæsar Hawkins, Dr. Christison, and Dr. Andrew Wood concurred in saying that Dr. Burrows had wished to resign office, but that, to suit the convenience of members of

the Council, he had consented to be re-elected till they should have fixed upon a new President. Yet no limitation was expressed as to the length of his time of office, and he was, therefore, legally re-elected for five years if he (the President) chose to retain his office.

Dr. Aquilla Smith agreed.

The President said that he would not have accepted office with an expressed limitation. He had accepted it to accommodate the Council.

The following committees were appointed:—

Business Committee.

Dr. Andrew Wood.	Mr. Cæsar Hawkins.
Dr. Embleton.	Dr. Leet.
Dr. Aquilla Smith.	

Finance Committee.

Dr. Sharpey.	Dr. Fleming.
Dr. Quain.	Mr. Cooper.
Dr. A. Smith.	

Education Committee.

Dr. Embleton.	Dr. Fleming.
Mr. Cæsar Hawkins.	Dr. Thompson.
Dr. Aquilla Smith.	Dr. Sharpey.

It was next moved by Dr. Quain, and seconded by Dr. Storrar—"That the communication from the Privy Council (which had just been read to the Council) be entered on the minutes."

Dr. Andrew Wood thought it quite evident that the communication was not enough. The subject of a new Medical Act was one of the largest questions they had to treat, and it should be entered on as early as possible—say to-morrow, the very first thing. He would then propose the formation of a committee to consider the amendment of the Medical Act.

Dr. Alexander Wood explained why he opposed the former draft. It was too cut-and-dry; and he was glad that there was a prospect of a much more liberal measure.

A communication from the Garioch and Northern Medical Association of Scotland was then read. It urged an enlarged representation of the general body of the Profession in the Council. The system of indirect representation was advocated.

Mr. Cæsar Hawkins suggested that only a portion of this be inserted in the minutes.

Dr. Paget thought that the recommendations alone should be put in the minutes, not the reasons, as some of these were unsound, and others far from complimentary to the Council.

Dr. Aquilla Smith moved, and Sir D. Corrigan seconded, that it should be wholly inserted.

The motion was withdrawn, and the amendment carried.

Another communication from Dr. Prosser James to the same end, long and tedious, was then read.

Dr. A. Smith thought it would be a most mischievous practice to encourage such representations from solitary individuals. He moved that its receipt be acknowledged merely.

A third from Dr. Bell Fletcher, asking when it would be convenient to receive the Birmingham memorial on the same subject, was then read.

Dr. Paget moved that the deputation be received on Wednesday July 7, at 3 o'clock. Dr. Storrar seconded.

Sir D. Corrigan gave notice of motion as to the propriety of having a commission of inquiry previous to doing anything with regard to the Medical Act, but postponed or withdrew it, as the Government had imposed on them the duty of making up their minds as to what was required in the new Medical Act.

The Executive Committee made certain recommendations respecting the expenses of the Councils, main and branch, in printing, which would materially lessen these.

The Registrar then read the list of examining bodies whose examinations in preliminary education had satisfied the Executive Committee, and which was accordingly ordered to be printed for the use of the Council prior to voting on it.

Dr. Christison asked if the local examinations of the University of Edinburgh had been considered. He intended to make inquiries on the subject.

Dr. Risdon Bennett wished to make a motion at the proper time, that nowadays, seeing that these public examining bodies had so much increased, it was desirable to separate them from Medical institutions altogether.

Reports were then read from Branch Councils and various other bodies on the subject of preliminary education.

Dr. Fleming proposed to refer the subject back to a committee.

Dr. Alexander Wood thought that this was one of the most important questions they had to encounter. The Bill introduced by Sir James Graham contained provisions for central boards of examination. He strongly urged its adoption as the basis of any new Bill.

Dr. Andrew Wood was most anxious to see the boards give up their separate examinations in Arts, but not till something better than the recognition of the long list of examinations now recognised could be adopted.

Mr. Hargrave thought students were worse trained in preliminary education now than they were years ago.

Dr. Storrar opposed the motion of sending the question back to committee.

Dr. Risdon Bennett held that a special examining board for Medical students, as far as preliminary education was concerned, was now a days useless. There were quite enough examining boards already in existence; those in connexion with the English Universities were good examples. Besides this, under the new system the young men were not required to leave their homes.

Sir Dominic Corrigan thought it would have to come to a commission at last—at least the views of certain members were totally antagonistic to each other. They themselves had not the slightest control over a number of the examining bodies, and for this reason they ought not to accept their certificates. There was no example of a body of professional men not exercising a control over the preliminary education of those who intended to join them. (This was vehemently denied.) He referred to a body of examiners who were appointed by Government who had published a series of absurd questions and directions, to which he referred as samples of uncontrolled education and examinations, and of what they ought to avoid. They ought to keep the education of the young men in their own hands.

Mr. Cæsar Hawkins, Mr. Cooper, Dr. Stokes, Dr. Embleton, Dr. Storrar, Dr. Christison, and Dr. Aquilla Smith, also took part in the debate on this subject. In the end Dr. Fleming's motion was carried, and the following committee was appointed:—Dr. Alexander Wood (chairman), Dr. Fleming, Dr. Risdon Bennett, Dr. Leet, Sir Dominic Corrigan, Dr. Paget, and Dr. Storrar; whereupon the Council adjourned till Friday at 2 o'clock.

REVIEWS.

On Varicose Disease of the Lower Extremities and its Allied Disorders, Skin Discoloration, Induration, and Ulcer. By John Gay, F.R.C.S., Surgeon to the Great Northern Hospital, Consulting Surgeon to the Earlswood Idiot Asylum, etc., etc. London: John Churchill and Sons. 1868. Pp. 171.

A Manual of the Pathology and Treatment of Ulcers and Cutaneous Diseases of the Lower Limbs. By John Kent Spender, M.B. London, Surgeon to the Mineral Water Hospital and to the Eastern Dispensary, Bath. London: John Churchill and Sons. 1868. Pp. 89.

(*Concluded from page* 689.)

Mr. Spender's work on "Ulcers and Cutaneous Diseases of the Lower Limbs" is intended to prove that ulceration of the leg proceeds from weakness and disease of the vascular structures, and that a thick chalk ointment is the best general remedy for the various forms of this frequent affection. Appended to the body of this book is a sketch of diseases of the skin affecting the lower limbs, which the author is induced to give as, in his opinion, "the therapeutics of the matter appear to need improvement," and he has "some suggestions to offer which may merit a little attention." The improvements suggested by the author consist in bandaging, and the application of the modified chalk ointment, which appears to be, in Mr. Spender's practice, an unfailing remedial agent in all forms of cutaneous eruption.

In his chapter on "the causes of ulcer of the leg," Mr. Spender advocates the view that the affection is generally due to degeneration of the cutaneous tissue, arising, in a large number of cases, from the existence and progress of varicose veins. Ulcers are of four kinds—the varicose ulcer, and the syphilitic, the scrofulous, and traumatic ulcers. Of these, the author holds, the varicose ulcer is the most common. On this point Mr. Spender is at direct issue with the author of the preceding work, and, it must be allowed, has much to bring forward in its favour, both from his own observations on this subject, and from the recorded views of Mr. Critchett and Mr. Chapman.

With regard to treatment, Mr. Spender seems to look with

no favour upon two important and, as many Surgeons believe, valuable methods for the cure of the affections with which he deals. We allude to the application of blisters recommended by Mr. Syme, and the curved incisions about the ulcer so warmly advocated by Mr. Gay. By the first method Mr. Spender has changed small ulcers into large ones. Mr. Gay's operation he has never yet performed, "simply because he has never yet had a patient who has allowed him to do so." We think patients are reasonable sometimes.

Although the pathology of Mr. Spender is a little old-fashioned, and the special treatment he so repeatedly advocates as a panacea for all kinds of ulcer cannot be better described than in his own words, in reference to a common form of dressing, as "downright nasty," we can recommend this little work very cordially to the notice of aetive Practitioners. The descriptions of the different forms of ulcer are clear and concise, and the chapter on the propriety of healing an old ulcer of the leg contains some valuable remarks upon an important point in Surgical practice. It is impossible to recommend too earnestly the perusal of Chapter VII., on general principles, in which he justly condemns certain applications to wounds, and among these the highly injurious plan of washing granulating surfaces with cold water. Speaking of another much-abused remedy, the poultice, Mr. Spender writes as follows, with much force:—

"This may be truly called the refuge of ignorance and of neglect. Often it is prescribed without discrimination, and continued for the very bad reason that we know nothing better to do. Consider what an ordinary poultice is. It is a vehicle of heat and moisture—a combination of physical agencies calculated to dilate and to weaken the structures to which it is applied. Its effects are at utter variance with those principles which I have tried to prove to be the foundation of the rational treatment of varicose ulcers of the lower limbs. Incomplete sloughing is the only case in which an apology can be offered for the use of poultices, and even then I believe that a quicker result would be always attained by the bold and early use of compression. Under all other circumstances a poultice can do scarcely anything but harm, and must be condemned in emphatic terms. The character of an ulcer is deteriorated, healthy granulations become soft and bloodless, and the edges of the ulcer are rendered pale and unorganisable. Further, the protective layer of purulent secretion is absorbed and taken away, and hence the reparative process is proportionately retarded. In few and decisive words, the application of a poultice is nothing less than a mischievous interference with the natural healing operations."

FOREIGN CORRESPONDENCE.

AUSTRIA.

VIENNA.

THE Midwifery School of Vienna enjoys such a wide-spread fame, the statistics which are furnished by it yearly are so well known, and the opinions of its eminent professors are so eagerly looked for, and meet with so much respect at the hands of the whole Medical Profession in England, that it seems almost superfluous to make any remarks on an institution which most of your readers know, by reputation at least, so well. Lying-in Hospitals are so few and far between in London, and high death-rates and internal squabbles have and are doing, so much to bring into disrepute what few there are, that the London Practitioner has very little acquaintance with such institutions. I have therefore determined (even at the risk of telling your readers what they may possibly already know better than the writer of this letter) to give a few facts concerning the Lying-in Hospital of Vienna, in which between 8000 and 9000 women are delivered annually. There are three departments—(1) a klinik for Medical students and Physicians, at the head of which is Professor Karl Braun; (2) a klinik for midwives, presided over by Professor Späth; and (3) a department into which women of a superior class are admitted, and who pay for their attendance according to a regular fixed tariff.

The yearly Medical report of the Lying-in department for the year 1867 has just been published. By this it appears that 8615 pregnant women were admitted in that year. These were thus divided: 4306 were admitted into the klinik for students and Physicians, 3638 into the midwives' klinik, and 671 into the private department. The average number of births per diem is rather more than 23. For the ten years ending December 31, 1867, the number of patients amounted to 90,633, the greatest number in one year being 9694, and the minimum 8301. These numbers cannot fail to astonish those who have not perused the "Vienna Reports," and the question of death-rate naturally suggests itself. In the year 1867 the death-rate was, with one exception, lower than it had been in any year during the previous decade, reaching only to the marvellously small amount of 1·13 per cent. The exception alluded to was in 1864, for which year the death-rate is reported as reaching only to 0·95 per cent. These figures are wonderfully low, and redound immensely to the credit of the Medical officers. I shall give a short outline of the general management of this institution, that your readers may be able to see, in some degree, how these results are obtained.

My observations have been made chiefly in Professor Späth's department, and to the courteousness of the Professor and of his assistant, Dr. Riedel, most of my information is owing. There is, however, no essential difference between the management of this and of the other kliniks, and remarks made on any one of them apply equally to the others. *In primis*, the ventilation is perfect; it is effected by means of Meissner's apparatus, which, I regret to say, is of rather too complicated a nature to describe adequately without diagrams. The chief points about it are—that the air is warmed during the winter months by passing through a heating apparatus placed in each ward; that the amount of air admitted can be regulated by means of valves placed in the flues; that these valves are furnished with indicators, which are let into glazed recesses in the walls of the ward, and which show at a glance the state of the valve and the amount of air passing by it; and, finally, the whole apparatus is under lock and key, and, once having been regulated by the Professor or his assistant, it is put beyond the reach of any meddlesome interference on the part of patients or nurses. Professor Späth has six wards, and they are so arranged that one of them is always empty and undergoing a complete cleansing, and no fresh set of patients is admitted into a ward which has been previously occupied unless it has been thoroughly aired, scrubbed from top to bottom, and, if need be, whitewashed. The result of this is that the wards always smell perfectly fresh, and even in a big room containing upwards of thirty recently delivered women I have never noticed any unpleasant odour. The personal cleanliness of the patients, one need hardly say, is most carefully attended to. Each patient is placed upon four or five layers of draw-sheets, and as soon as one becomes soiled it is withdrawn, and gives place to the clean one underneath it. In this way, too, all unnecessary disturbance of the patients is obviated. The Professor and all placed under him are alike exceedingly careful to thoroughly cleanse the hands after examining a patient and before proceeding to the next. This is done not by merely dipping the fingers into cold water and giving them a couple of rubs with a towel, but by means of fine sand and water and a nail-brush. Sand can be rather more quickly used than soap, and is very effectual in cleansing every furrow of the skin. It is one attendant's duty to be always at the Professor's side with the sand and water, and it is almost an automatic act with him to turn round and go through with the hand-washing process.

All these trifling details are no doubt the essentials which keep the rate of mortality so low; but there is one thing in particular which one must not forget to mention—viz., the manner in which these details are carried out. If they were performed in a careless and slovenly manner, if they were left to the discretion of nurses and underlings to do or not to do just as they thought fit, they might probably be as well left undone altogether. This, however, is not the case; Professor Späth makes a lengthy visit every morning and thoroughly inspects each patient, and the slightest breach of discipline on the part of the nurses, and especially any want of cleanliness on their parts, or any neglect of the prescribed sanitary precautions, however slight, does not go unrebuked, and, having once occurred (unless the offender were a senseless block), would thus be very unlikely to recur a second time. It is this "perpetual keeping people up to their work," and the continual presence of the master's eye, in which the whole secret of the success lies. New schemes of ventilation and fresh sanitary reforms of all kinds are often taken up vigorously at first to be quickly cast aside again as useless, just as a child casts away its new toy when the charm of novelty is gone. This, however, has not been the case at Vienna. There is a general belief abroad that very strict rules are in force here as to the non-admission to the lying-in wards of those engaged in anatomical or pathological studies. These rules are not so strict as is supposed; the Professor and his assistants regularly attend the post-mortems of their own cases, and I know several men who attend

lectures on pathological anatomy in the dead-house during one part of the day and regularly visit the lying-in wards at another. It will be seen above that about eleven patients die in every thousand. Of these eleven seven die from "puerperal process," and four from other causes. Isolated cases of puerperal fever are not uncommon, but it is very uncommon for it to spread, and a reference to the reports will show that the number of deaths arising from this cause is extended nearly equally over the whole year. Before leaving this subject one may mention that in Professor Späth's wards out of 368 women delivered during the month of March only three died, and I find a remark in my note-book that on April 12 the Professor mentioned to us that he had not had a death in his wards since March 17. Most of the children who are brought into this world in the lying-in department of the Krankenhaus are, I regret to state it, illegitimate. It seems natural, therefore, to accompany these unfortunate infants a short way on life's journey, and, before taking leave of them, to give a short account of the institution to which the greater part are transferred from the Krankenhaus—the Foundling Hospital, or, as it is called here, "Findelhaus." The "Findelhaus" is a Hospital for infants, and not an institution like our Foundling, where illegitimate children are taken care of. I have said that nearly all the children who are born in the Krankenhaus are transferred to the Findelhaus. They go in batches from one institution to the other. They are then examined medically, and if found healthy, are sent into the country to persons who are willing to nurse them and bring them up for sixty florins a year (about £5). They are, in fact, "farmed" until they are ten years old, when the payment of the sixty florins ceases, and what becomes of them after that I know not. I made many inquiries as to the number of these children who reach five years of age, but no information on this point was forthcoming. An insurance office would, one would fancy, ask a very high premium on the life of a farmed foundling. I have somewhere read that the number of illegitimate children born in Vienna is equal to 51 per cent. of the total births; and although these figures are enormous, yet, from what I have seen and heard since I have been here, I should fancy they were correct. The female population of Vienna is very fair to look upon, and it has the reputation of being as frail as it is fair. All the sick infants are retained in the Findelhaus to be nursed until they are considered well enough to be sent to one of the "farms," or until death terminates their brief existence. The Findelhaus has 280 beds, which are usually filled. Every alternate mother is retained in the house, and has to nurse two children—her own and another—and I have heard it stated that a practised eye will easily detect which of the two children is the offspring of the nurse, since it is usually plumper and better favoured than its rival. The most common ailments among these little patients are subcutaneous abscesses, pneumonia, bronchitis, syphilis, and diarrhœa. "Thrush" is very rare, since great attention is paid to cleanliness, but simple stomatitis is by no means uncommon. The children are not allowed to sleep in the same beds with their mothers or nurses, but a separate crib is provided for each child. It is Professor Späth's opinion that much of the purulent ophthalmia of children is due to their sleeping with their nurses. They lie generally with their faces towards their nurses, and with their cheeks and eyes rubbing against the nurse's breast, so that the irritating secretions of the latter (perspiration, sour milk, etc.,) readily pass through the eyelids and thus give rise to the ophthalmia. The syphilitic children are alone brought up by hand, and any child the offspring of a syphilitic mother, even though it have no signs of syphilis at the time of its admission, is retained in the Findelhaus for three months, or longer if the disease becomes manifest during that time, and is nursed artificially. One strong healthy child is always retained in the house for the purpose of vaccination.

There are two lunatic asylums in Vienna, an old and a modern one, and they serve well to illustrate the revolution which has taken place in the treatment of lunatics in the last half-century. The old establishment is called the Irren Thurm, and is one of the gloomiest and most dismal-looking buildings imaginable. It is built of stone in the form of a short circular tower, with loop-holes for windows. It has a look of great strength, and more resembles a fortification than a Hospital. The interior is as curious as the exterior. Each patient is kept by himself in a separate cell, or, at the most, two in a cell; the doors of these cells are provided with strong locks and bolts, and in each is a small trap-door through which the attendant may watch the inmate of the cell. On the stone floors of some of the cells are strange relics of the past—viz., ring-bolts, to which in former times it was customary to lash the unfortunate maniac when he became more than ordinarily troublesome. This institution is still used for the purposes of a lunatic asylum, and everything is done for the comfort of the patients which it is possible to do in a place so ill contrived; but, in spite of every effort, it has far more the appearance of a prison than an asylum, and would be far more useful for the former than for the latter purpose. The new asylum presents us with an entirely different picture. It is a fine, spacious building, standing in a beautiful park in one of the most delightful quarters of the city. It contains 500 beds, equally divided among the male and female patients. It is light, cheerful, and airy, and everything is done for the welfare of the patients that science can suggest or money procure. Billiard-tables, pianos, games of all kinds, gardens, a small swimming-bath, and workshops in which those who are able may pursue their various trades and occupations, are all provided for the use of the patients. There are three classes of lunatics admitted here. The first class pay sixty gulden a month, and for this each patient is provided with a separate bed-room and sitting-room, and a most liberal diet. The second class pay forty gulden, and are provided for rather less liberally, and the third class, by far the largest—the pauper lunatics, in fact—pay sixty kreuzers a day (one shilling), or rather, I should say, that sum is paid for them either by their friends or their parish. Besides these two public asylums there are several private ones in the neighbourhood of Vienna. Both public and private are under the surveillance of Government inspectors.

GENERAL CORRESPONDENCE.

SCARCITY OF SUBJECTS FOR DISSECTION.

[To the Editor of the Medical Times and Gazette.]

Sir,—I am glad you have taken up this topic in your columns. When I was suffering from this scarcity I received the following information from a gentleman whose position enabled him to collect the facts for himself.

There is no doubt that an ample supply of unclaimed bodies might be had for dissection if it were not for the railway authorities and the public. The former make such exorbitant charges for conveying corpses that they have virtually established a prohibitory tariff. In explanation they say they are obliged to adopt this course, as the public would not tolerate "traffic in human flesh," but how this opinion was elicited does not appear.

When the Anatomy Act was passed, our present system of railways and telegraphs was of course not dreamed of, but it has always seemed to me a pity that we cannot make use of the facilities they offer in some such manner as this:—Let a short Act be passed to amend the Anatomy Act, ordaining that whenever a body is unclaimed notice shall be given to the coroner of the district, who shall telegraph to the Inspector of Anatomy.

Not merely certain workhouses and gaols, but all the unclaimed dead in the kingdom, should be liable to the operation of the Act, so that the Inspector could easily by telegraph supply every Medical school in the realm on the shortest notice, if the railways were compelled by the Act to convey dead men at the same rate as dead sheep or cattle.

Bodies acquired in vacations might be injected and kept in spirits at the several Medical schools, so that dissection might begin at the beginning of the session instead of towards the middle as at present. There would thus be bodies enough to teach anatomy and Surgery thoroughly after the following manner:—

1. Let a man dissect a part, say the lower extremity, at first roughly, doing only muscles, fasciæ, and the biggest vessels and nerves, cutting away all the smaller.

2. Let him dissect another lower extremity carefully, getting out everything, immediately after No. 1.

3. Immediately afterwards, while the anatomy is fresh in his memory, let him have another lower extremity on which to perform all the usual operations.

4. Let him go through the whole body in this way, and I am sure both anatomy and Surgery would be learned more easily, more thoroughly, and with far greater interest.

June 27, 1869. I am, &c. F.R.C.S. Eng.

Dr. Grainger Stewart is a candidate for the office of Professor of Pathology in the University of Edinburgh.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

TUESDAY, MAY 18, 1869.

RICHARD QUAIN, M.D., President, in the Chair.

REPORTS from the Committee on Morbid Growths were read as to Dr. Payne's specimen of ulceration of the trachea, on Dr. Salter's specimen of diseased liver, and on Mr. William Adams's specimen of mammary tumour.

Mr. PICK showed for Dr. Fuller a specimen of Abdominal Tumour which occurred in a man. He had noticed it six months before he came under treatment. It grew very rapidly, and he sank and died ten months after its appearance. The body was emaciated, and the abdomen contained an enormous mass extending from the fourth rib to the symphysis of the pubis. It was rather more to the right than to the left. The colon and peritoneum were both in front of the swelling, which was solid and fatty, weighing more than 28 lbs.

Mr. HULKE asked what kind of a tumour this was, whether lipomatous, or a changed condition of some other growth. Lipoma did not grow so fast as this.

Mr. PICK could find nothing except fat. All the other organs were healthy.

Mr. MYERS showed for Mr. Trotter a Horny Protuberance of long growth which had been removed from the arm of a soldier. After its removal, an epithelial growth followed in the spot.

Mr. CURLING showed a Urinary Calculus, having as a nucleus a mass of human hair. It was removed from a man aged 30 who had suffered from symptoms of stone for eighteen months. The stone was elongated, flat, and phosphatic, with a nucleus of short dark hair. In 1861 he had suffered from retention of urine, and had a swelling in the rectum. The fluid removed from it was fatty, and contained hair. After this he was well till recently. There was now induration in the site of the cyst. The passage of the hair into the bladder was difficult to explain.

Mr. T. SMITH said that Mr. Paget, of Leicester, had exhibited a stone formed round a pubic hair.

Mr. CURLING also exhibited a Diseased Testicle with fibroid deposit in its substance and covering. It had been supposed to be tubercular, and had been removed. Jarjavy had described a form of disease like this where there was distinct projection of the mass. He had not seen it before.

The same gentleman also brought forward a specimen of Chronic Arthritis of the Knee-joint occurring in a male aged 18. Five years ago he had suffered from acute rheumatism, which was cured; but four months after he injured his knee, and he relapsed. Gradually it got worse till resection was had recourse to. The patient recovered well. The age was early (23) for such a disease. The cartilage was quite gone in some parts. In reply to Mr. Adams, he stated that there was no osseous formation.

Mr. BIRKETT exhibited the Knee-joint of a girl, aged 23, which had been removed by amputation. The disease had lasted twelve years, and she had been very ill. The articular surfaces were a good deal destroyed, and new articular surfaces formed. The patella seemed to consist of three portions, the bone being laid down parallel with the fibres enclosing the bone.

Mr. HULKE asked what the new bony outgrowths in the joint were covered by. It was answered, by a tissue resembling cartilage.

Dr. DICKINSON showed some portions of Malignant Growth passed by the urethra during life. He had often examined the vaginal discharge in malignant disease, and also that of the kidney and bladder, but had found that cells were rarely thrown off. In the case referred to small pieces of tissue the size of peas were passed by a healthy gentleman aged 50. In these were found a large quantity of encephaloid cells with masses of nuclei. He passed a considerable number of these, but at first there were no other symptoms. Latterly there was much pain and frequent micturition.

Mr. GAY had recently seen a similar case.

Mr. MOSELY exhibited two specimens of Myeloid Disease of the lower extremity. The larger was from the head of the tibia. The patient complained of pain in walking in 1865, when Sir W. Fergusson amputated his limb. Four inches of the tibia were absorbed in the disease, but the joint was not affected. The mass was encapsuled in periosteum. The other occurred in a man aged 20, who sprained his ankle. A swelling followed, which was punctured. Fibro-plastic and myeloid cells were found, and the limb was amputated.

Dr. JOHN MURRAY showed two Parotid Glands in a state of diffuse Suppuration from a woman aged 28, who was admitted into the Middlesex Hospital with amyloid degeneration of the liver, spleen, lungs, and intestines, and who ultimately succumbed to a severe attack of cynanche parotidea. The rarity of death from mumps induced him to bring the specimens.

Dr. JOHN MURRAY also exhibited a specimen of Dissecting Aneurism of the right side of the Heart taken from a man who had enjoyed apparently excellent health up to the day of his admission into the Hospital. The patient was found in a state of syncope in the street, and brought to the Hospital. He was then faint, but quite conscious and intelligent. He then stated he had risen that morning in good health. After the administration of some stimulants, he was sent to Dr. Goodfellow's male ward. He appeared to revive a little for the time, his pulse became quite distinct, and his heart's action was strong, but irritable. He suddenly became worse, and died about an hour after admission. After death the pericardium was found generally and firmly adherent. Immediately above the aortic valves, and in the anterior aspect of the aorta, was an aneurismal sac the size of a small orange. This was bound down by the adherent pericardium. The aneurism had burst under the visceral pericardium, and very gradually formed a large sac, at the expense of the wall and cavities of the right side of the heart, which were pressed upon and almost obliterated by fibrinous and loose black coagula. The walls of the sac were dense, and probably of at least some months' standing. The patient had apparently died of a sudden increased effusion of blood into this sac on the day of admission, which had obstructed the flow of the blood by pressure on the right side of the heart. The case was of great interest pathologically, and also clinically, as showing to what extent serious cardiac mischief may take place without any marked symptoms of discomfort to the patient.

Dr. CRISP exhibited two specimens of Incipient Aneurism, one in the innominata, the other in the ascending aorta. In both the progress of the aneurism appeared to be arrested by the presence of ossific plates, which Dr. Crisp believed were formed after the disintegration of a portion of the arterial wall, for he did not believe in the existence of the so-called "true aneurism." He believed that these ossific plates often served to strengthen the parietes of the sac. As was well known, aneurism was a very rare disease in the lower animals. In horses he had seen aneurism of the aorta from violence, and in these specimens the sac was generally covered with ossific deposit which had been formed after the fracture of the artery, and so, he believed, in many examples in the human subject. Aneurism might occur from violence in an artery perfectly healthy. The well-known fact that the occurrence of aneurism in old age (when atheromatous and ossific deposits were so abundant) was comparatively rare, served to strengthen the opinion that in a great number of examples these ossific deposits in the sac took place after the occurrence of the aneurismal dilatation.

Dr. RISDON BENNETT asked why he assumed that the ossific matter was formed after the aneurism.

Dr. CRISP had made most careful inquiry. He thought it could not be disputed in the horse.

Mr. MYERS had brought specimens of aneurism where there was apparently no atheroma. This was common enough among soldiers. According to the statistics of St. George's, they were mostly attributable to violence.

Mr. BIRKETT asked if popliteal aneurism was as common now as it used to be said to be in post-boys.

Mr. MYERS had studied thoracic aneurism only.

Dr. CRISP said the notion as to the prevalence of popliteal aneurism in post-boys was quite a mistake. In 182 British cases that he had tabulated only one had occurred in a postilion.

Dr. ROBINSON thought that statistics were yet wanting to show that Mr. Myers's views were right. There was no doubt a great deal of heart disease in the army.

Dr. CHURCH thought it excessively difficult to say whether atheroma was found before or after the aneurism in some cases. The most frequent case of aneurism, in the pulmonary, was obstruction.

Dr. BASTIAN said it was apparently assumed that the disease causing aneurism is atheroma; not so, it was rather fibroid change. He had seen this in aortic aneurism, and the notion was further borne out by the small aneurisms in the brain.

Dr. GREEN pointed out that atheroma was essentially fibroid in its first stage. This fibroid material might become fatty or calcareous, or it might soften, but it was always fibroid first.

Mr. Hulke thought we should clearly understand the sense in which we use the term atheroma. If Dr. Crisp meant merely the earthy plate, then every one would concede this to the later stages, but tissue changes may and do precede this. He had yet to show that this took place subsequently to the formation of the aneurism.

Dr. Bastian proceeded to show some specimens illustrative of the formation of bacteria in blood. He alluded to the notions of Salisbury and Hallier, and said he had lately examined the blood in many morbid states. He had never found anything which could be called a spore, but he had found small moving particles in certain diseases, as typhus and chlorosis. In a case of chlorosis he found that these particles were apparently produced by protrusions from the red blood-corpuscles. In typhus they were probably formed in the blood plasma. In one case many were found in the pia mater. If a decaying vegetable tissue be examined, bacteria will probably be found in the cells of it. Rounded protein masses were also often seen where bacteria were being formed.

Dr. Dyce Duckworth showed a Single Kidney with Compensatory Enlargement. The woman died of phthisis. The kidney was the right one, and weighed 9 oz. It was the sixth which had been shown.

Mr. Gay showed a Recurrent Cystic Tumour from the Mammary Region, from a young woman aged 27. Four years ago he removed a portion of her breast, when the growth was shown to be cystic. It returned in a year and a half, when the whole breast was removed. The other day, eighteen months after, two others were removed from the site of the former masses. He also exhibited the Half of the Under Jaw of an elderly woman. The tumour had grown speedily, and there had been much pain. It was removed, and death followed. The bone was almost entirely absorbed.

Mr. De Morgan exhibited a Tumour of the Femur, removed from a girl. A swelling formed above the knee, and the bone was fractured by a fall. The tumour increased, and the limb was removed high up. The mass consisted of uniform-sized cells, with a delicate intervening tissue. He also produced a Testicle affected with Malignant Disease of twelve years' standing. The tumour had been three years growing, and was painful. A mass formed in the abdomen. He removed the testicle for the pain, but the man was sinking from the mass in the abdomen. It was much like the other in texture. Both referred to Committee.

Mr. De Morgan also showed a Colloid Tumour from the Breast. It was adherent to the skin, and the glands were enlarged. It resembled cancer. This kind of growth was not common in the breast.

Mr. Arnott showed a specimen of Enchondroma from the Parotid region. It occurred in a young man, and was of six years' growth. There was a glutinous matter like myxoma between the cartilage cells.

Dr. Green exhibited a Tumour from the Cerebellum of a boy aged 9. He believed the mass to be a glioma. Its probable duration was one year. It was of the size of a small orange, and was softened.

Dr. Tuckwell, of Oxford, showed the teeth of a choreic patient, which had been forced out after being ground down. Also, a specimen of Ulcerative Endocarditis, where one cusp of the aortic valves was gone. There was an embolus in the kidney.

Dr. Semple showed an Aneurism of the Basilar Artery. The patient was seen with symptoms of extravasation on the brain, but lived three weeks in a comatose condition.

Sir Duncan Gibb showed a Tumour growing from the back of the Tongue. It had lasted five years, and had grown faster during the last two. The larynx and epiglottis were free. The patient died of suffocation.

Mr. W. Adams showed the Heart and Ankle-joint of a child 8 years of age, which had died at what was said to be the eighth day of rheumatic fever. There was a little thick grumous fluid in the joint, which externally seemed much swollen; the effusion was consequently outside the joint.

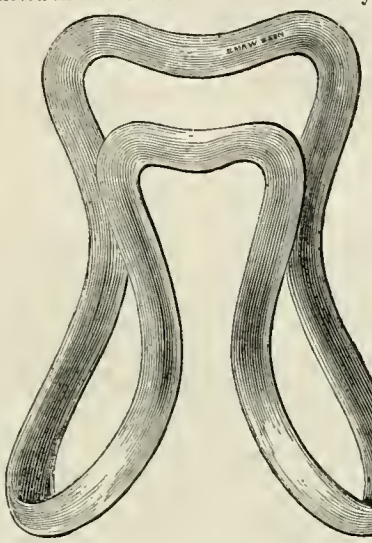
Hypodermic Injection of Morphia in Strangulated Hernia.—Dr. Ravoth relates some cases with the view of calling the attention of Practitioners to the great assistance to the taxis which may be derived from a subcutaneous injection of morphia, which facilitates the reduction of the hernia surprisingly.—*Berliner klin. Woch.*, June 7.

NEW INVENTIONS.

R. F. BLACKBEE'S PATENT SELF-ADJUSTING SPRING PESSARY.

(*Made by S. Maw and Son.*)

Blackbee's patent self-adjusting spring pessary professes to be constructed in direct reference to the anatomy of the pelvis.



It possesses, from its peculiar construction, a double self-acting spring—that is to say, laterally and transversely—and thereby presents the following practical advantages:—Upon being introduced per vaginam, it immediately adjusts itself to the lower ends of the two lateral branches, arriving at a foundation or resting-place on the inferior margin of the foramina ovalia, whilst the upper extremities act as crutches, one before, the other behind the cervix uteri. Thus they give entire support to the uterus without undue pressure on any part, and, at the same time, the pessary is in such a state of freedom, and is so light, and so yielding to the movements of the body, as to render its presence almost unknown to the wearer.

PULVERMACHER'S GALVANIC CHAINS AND THE ADVERTISING QUACKS.

We must confess that we had heard of Pulvermacher's galvanic chains and belts for some years, but had never examined them, regarding them as so many semi-scientific baubles of apocryphal merits. We have, however, had submitted to us the evidence taken in certain proceedings in Chancery by Mr. Pulvermacher against certain advertising quacks of the obscene order, and this has led us to examine into the matter, and to form a very different opinion of at least one of Mr. Pulvermacher's apparatus. The galvanic chain is really an instrument of most ingenious and beautiful construction, and is one of the handiest and most effective which the Medical Practitioner can employ. It is in the form of a flat, flexible chain, and comprises 120 separate pairs of galvanic elements. These consist each of a small zinc tube for the electro-positive portion, surrounded with copper rings, which form the electro-negative. The copper of one pair of elements is hooked into the inner side of the zinc tube preceding, whilst it is isolated from the zinc of its own pair by a simple but most ingenious set of stitches of thread. This petty flexible battery of 120 pairs is excited by simply dipping it into vinegar, and the links are near enough to retain sufficient fluid by capillary attraction to keep up the action for some time. There is thus constituted a battery yielding a very small *quantity* of galvanism owing to the small size of the individual elements, but high *intensity* owing to their number. It easily decomposes water, and of course saline solutions, and may be used to demonstrate the process of electrolysis. For Medical purposes it yields a *direct* current, which is the desideratum for neuralgic affections, very decidedly but not violently. By attaching a little vibrating spring in the course of the conductor it gives a succession of interrupted shocks, such as are useful for muscular and paralytic affections. Most

of the cheap and handy electro-magnetic machines, as is well known, give only the interrupted, but not the continuous. The obstetric Practitioner will find it not too cumbersome for his bag, if he desires to have means at hand of resuscitating stillborn children, or contracting a lax and bleeding uterus. This chain is an instrument of power, and precision, and convenience, and as such we recommend it to our Medical brethren for the cases in which galvanism is known to be of use. There is another apparatus, called a *belt*, also flexible, and containing about forty elements of zinc and copper wire ingeniously interlaced and isolated, and this is the thing that the quacks pirated. No doubt a feeble galvanic current is given off from the poles of this belt, but as to the virtues thereof we have no evidence. The evidence given in Vice-Chancellor Malins's Court of the tricks of the quackish fraternity elicited the strongest possible expression of disgust on the part of the learned judge.

VALS WATER.

The waters of Vals are at once a delicious article of diet and an effective medicine, and seem to be vastly popular at present. Their taste is briskly alkaline, certainly not so soft as Seltzer, but much more exhilarating, and more alkaline than Vichy, and yet not so heavy on the stomach. Supposing a patient with scanty and loaded urine, the difficulties of drinking a glass of Thames water an hour after breakfast would be great; it might lie heavy on the stomach, and produce a feeling of nausea for an hour. Not so the Vals; it is as light as a feather and exhilarating, and we speak from personal experience. Although tonic, it does not affect the head, and, if taken in liberal doses, is usually found to cause slight and comfortable purgation. There is fashion in most things; certainly the fickle goddess has some sway in Physic. Not crinoline nor chignons can be more evanescent in popularity than the reputation of some remedies; but *certes*, Vals water is in the height of the mode at present, and the Practitioner who prescribes it will be marked by the patient as combining some of the *dulce* with the *utile*. Obstinate dyspepsia, red urinary sediment, nettle rash, and chronic rheumatism are the cases to try it on, and the most generally useful *source* is the *Précieuse*.

OBITUARY.

THE REV. JAMES HENTHORN TODD, D.D.,

Senior Fellow and Regius Professor of Hebrew in Trinity College, and Precentor of St. Patrick's Cathedral, Dublin.

Under ordinary circumstances, the possessor of the above distinctions would not be entitled to a place in the obituary of a Medical journal, but we may surely claim a share in one who was in many directions closely and honourably connected with our Profession. The nephew and name-child of the venerable James Henthorn, one of the founders and original Members, and, if we mistake not, the original and, for upwards of half a century, the active Secretary of the Royal College of Surgeons in Ireland; the eldest son of a distinguished Surgeon, Charles Hawkes Todd, Surgeon to the Richmond Hospital, and Professor of Anatomy and Surgery in the Irish College of Surgeons; and, above all, the elder brother of our late lamented and distinguished *confrère* and fellow-citizen, Dr. Robert Bentley Todd, of King's College, London—the learned divine, whose death we now deplore, had a still more personal claim to a place in the grateful memory of every lover of the Profession of Medicine. This claim is derived from the heartiness and goodwill, and from the earnest zeal, with which Dr. Todd, in the influential position of a member of the governing Board of Trinity College, Dublin, advocated and supported every measure brought before that learned body for the improvement of Medical and Surgical education, and for the elevation of the status of the Profession, for nearly twenty years. His death, though sudden, was not unexpected—in fact, his Medical advisers were surprised that he was so long enabled to struggle against a complication of maladies under which he had for many years laboured. The subject of hepatic disease of the same nature as that which proved fatal to Dr. Robert Todd, the mode of death in the two brothers was marked by a sad and striking coincidence. On Sunday, the 27th ult., Dr. Todd was well enough to walk out in his garden, but in the course of the day he was seized with violent hematemesis, which proved fatal soon after midnight. He had long laboured under dropsy, and for many years had suffered from diabetes, but this was the first occasion on which his disease manifested a hæmorrhagic tendency. This is not the place to enter into an examination of the extensive labours by which Dr. Todd has so largely and usefully added to the stores of antiquarian and theological learning. We shall therefore conclude this brief notice by quoting the eloquent words of Sir William Wilde, when seconding the motion of Dr. Apjohn for the adjournment, in consequence of Dr. Todd's decease, of the ordinary meeting of the Royal Irish Academy from Monday June 28, to that day fortnight, in which he truly described his lamented friend as "a loving son, a good brother, a faithful friend, valued and admired by all in social life who knew him well. A gentleman and a scholar, a distinguished theologian and divine, a learned antiquary, and a true-hearted Irishman, Dr. Todd sustained the well-deserved reputation of Trinity College, and shed a lustre upon the Royal Irish Academy by his untiring labours in the elucidation of our national history and monuments. He joined that learned body in 1833, after he had gained his Fellowship, and was elected upon the Council in 1837. He filled the office of Vice-President from 1840 to 1844, and at many subsequent periods. To him we chiefly owe the revival of the Committee of Antiquities and the resuscitation of our museum. In 1847 he was appointed Secretary to the Academy, and he subsequently filled with effect the high office of President of the Academy. The *Transactions* and the *Proceedings* of this learned society contain about fifty of his communications on antiquarian, literary, and scientific subjects, and he ever lent a willing hand to the purchase of Irish manuscripts and antiquities. From Rome to Upsala, throughout the libraries and museums of Europe, his name was known and revered, and his great erudition appreciated. He was a patriot in the fullest sense of the word, whose life and labours were above all things devoted to whatever could advance the spiritual and mental progress of his fatherland."

NEW BOOKS, WITH SHORT CRITIQUES.

An Introduction to the Elements of Pharmacy and the Minor and Major Examinations. By F. Harwood Lescher, Pereira Medallist. London: John Churchill and Sons. Pp. 188.

*** This work is arranged in a tabular form, and is drawn up in six sections. The first deals with Materia Medica, the second with botany, the third with chemistry, the fourth with pharmacy, the fifth with prescriptions, and the sixth with dispensing. It will probably be found most useful as a kind of remembrancer after the student has made himself tolerably familiar with these topics.

Half-yearly Abstract of the Medical Sciences. Vol. XLIX. January-June, 1869. London: John Churchill and Sons.

Braithwaite's Half-yearly Retrospect of Medicine. Vol. LIX. January-June, 1869. London: Simpkins.

*** Our regular onward progress in Medical knowledge is tolerably well represented, especially as regards English works and periodicals, in these volumes. It cannot, however, be concealed that, as far as foreign literature is concerned, the "Abstract" is much superior to the "Retrospect."

The Pathology and Treatment of Stricture of the Urethra and Urinary Fistulæ. By Sir Henry Thompson, F.R.C.S., Surgeon-Extraordinary to H.M. the King of the Belgians, Professor of Clinical Surgery, and Surgeon to University College Hospital. Third Edition. London: John Churchill and Sons. Pp. 336.

*** The present issue of Sir Henry Thompson's well-known work is notable in more than one respect, in none more than that its bulk is less than on former occasions. This diminution Sir Henry has been able to effect by the withdrawal of certain controversial portions now useless, and of illustrative cases which Sir Henry has thought good to suppress in favour of a more didactic form of teaching. The labour of bringing out a new edition of such a work is considerable, and must have severely taxed one whose time is so fully engaged.

The Baths of Nassau, Wiesbaden, Schwalbach, etc. By Edwin Lee, M.D., etc. Fifth Edition. London: John Churchill and Sons. Pp. 165.

*** The present edition differs from its predecessors in containing an appendix on Hombourg and Nauheim.

The Wholesale and Retail Druggists' Price Book. Compiled and revised by D. Elliott according to the New Pharmacopœia. Third edition. H. Silverlock, 17, Earl-street, London. 1869.

*** An alphabetical list of articles, with blanks for wholesale and retail prices.

New Type Composing Machine. By C. E. Reeves, B.A., M.D. Melbourne: Charles Troedel, printer, 100, Swanston-street.

*** A short description of a machine for abridging the work of setting type.

Medical Benevolent Society established in Birmingham.—At a quarterly meeting of the directors holden at Mr. V. W. Blake's residence, No. 6, Old-square, on Wednesday evening, June 30, grants amounting to £60 were made—three to widows of Medical gentlemen and one to a single lady, the daughter of a deceased member, each left without adequate means of support.

MEDICAL NEWS.

UNIVERSITY OF DUBLIN.—At the examinations for Medical and Surgical degrees held last week in Trinity College, the following gentlemen, whose names are arranged in the order of merit, were successful :—

For the Degree of Bachelor in Medicine.

1. Battersby, Wm. Edward.
2. O'Farrell, George P.
3. Gregg, Wm. Henry.
4. Parsons, George.
5. Tomkins, Arthur W.
6. Fawcett, Wm. James.
7. Robinson, Thomas.
8. Alexander, James.
9. Traill, Anthony, LL.D.
10. Gray, Charles Edward.
11. Joynt, Henry W.
12. Jevers, Eyre.
13. Davoren, J. Lucius.
14. Townsend, Richard H.
15. Rainsford, Richard.
16. Fawcett, Edward.
17. Purefoy, Richard D.
18. Bird, John D.
19. Wall, Robert M.
20. Lloyd, William.
21. Stokes, Henry.
22. Ferguson, William C.
23. Mayne, Charles C.
24. Archer, Edward J.
25. Smith, Gilbart.
26. Minchin, Richard.
27. Boyd, John C.

For the Degree of Master in Surgery.

1. Gregg, Wm. Henry.
2. Robinson, Thomas.
3. Collins, Edward Wolfenden.
4. Wall, Robert M.
5. Gray, Charles Edward.
6. Sherrard, David J.
7. Mayne, Charles C.
8. Alexander, James.
9. Minnitt, Joshua R.
10. M'Nalty, Francis C.
11. Osburne, Thomas.
12. Hoeter, Robert B.
13. Traill, Anthony, LL.D.
14. Biddulph, Robert W.
15. Bradshaw, William H.

The following were recommended for the Travelling Prizes recently founded by the Board. In the course of the examination for the Medical prize, the candidates were summoned to the Royal Military Infirmary, Phœnix-park, where five cases, to which they could not possibly have had previous access, were submitted to their investigation for diagnosis, prognosis, and a statement of the treatment they would consider advisable. It is intended that henceforward a similar plan shall be adopted in the adjudication of the Surgical Prize.

Medical Travelling Prize.

G. P. O'Farrell, senior moderator in Experimental Physics at the examination for the degree of B.A. in 1866.

Surgical Travelling Prize.

W. H. Gregg, Medical scholar, 1867.

On Monday and Tuesday, June 28 and 29, the candidates recommended from among fifty-four gentlemen who presented themselves at the recent "Previous Medical Examination" were re-examined for the vacant Medical scholarships. The following were successful :—

Medical Scholars.

Messrs. Drapes and Moriarty.

Junior Medical Exhibition.

Mr. Dobson.

At the Summer Commencements, held in the examination hall of Trinity College on Wednesday, June 30, the following degrees in Medicine and Surgery were conferred :—

Baccalaurei in Medicind.

Jacobus Alexander.
Edvardus Johannes Archer.
Nicholas Gulielmus Barrington.
Gulielmus Edvardus Battersby.
Chichester Alexander Bell.
Johannes Craig Boyd.
Johannes Lucius Davoren.
Gulielmus Claudius Ferguson.
Carolus Edvardus Gray.
Gulielmus Henricus Gregg.
Robertus Barry Hoeter.
Carolus Johnson.
Gulielmus Lloyd.
Carolus Crawford Mayne.
Georgius Plunkett O'Farrell.
Thomas Osburne.
Thomas Robinson.
Henricus Haldane Stokes.
Arthurus Wellesley Tomkins.
Ricardus Hungerford Townsend.
Antonius Traill, F.T.C.D.
Robertus Morton Wall.

Magistri in Chirurgid.

Jacobus Alexander.
Robertus Waller Biddulph.
Gulielmus Hanna de la Main Bradshaw.
Carolus Edvardus Gray.
Gulielmus Henricus Gregg.
Robertus Barry Hoeter.
Carolus Crawford Mayne.
Josua R. Minnitt.
Thomas Osburne.
Thomas Robinson.
David Johannes Sherrard.
Antonius Traill, F.T.C.D.
Robertus Morton Wall.

Doctores in Medicind.

Nicholas Gulielmus Barrington.
Arthurus Edvardus Leeson (*dipl.* 1863).
Alexander Haldane Stokes (*stip. con.*).

The fees for the degree of Doctor in Medicine were remitted in Mr. Stokes's case in consequence of his having got double first place at the examinations in Medicine and Surgery in Hilary Term, 1868.

APOTHECARIES' HALL.—The following gentleman passed his Examination in the Science and Practice of Medicine, and received a Certificate to practise, on Thursday, June 24, 1869 :—

Hubbard, Thomas Wells, St. Lawrence, Isle of Thanet.

As an Assistant in compounding and dispensing medicines :—

Davies, Samuel Richard, Newcastle Emlyn.

The following gentlemen also, on the same day, passed their First Examination :—

Hazel, William Francis, King's College.
Jones, Theodore Johnston, St. Mary's Hospital.
Paramore, Richard, Guy's Hospital.
Roose, Edward C. R., Guy's Hospital.

APPOINTMENT.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

KITCHENER, THOMAS, M.D., M.R.C.S.E.—Medical Officer to the Jersey Female Orphan's Home.

MILITARY APPOINTMENTS.

WAR OFFICE.—The following appointments have been made :—95th Foot : Staff Surgeon William Langford Farmer, to be Surgeon, *vice* Patrick Andrew M'Dermott, appointed to the Staff.

MEDICAL DEPARTMENT.—Surgeon Patrick Andrew M'Dermott, from the 95th Foot, to be Staff Surgeon, *vice* William Langford Farmer, appointed to the 95th Foot.

The undermentioned officers who have retired upon full pay to have a step of honorary rank as follows :—To be Deputy Inspectors-General of Hospitals : Surgeons-Major Christopher Preadnell Craske, Madras Establishment, and Matthew Kane, M.D., Madras Establishment.

BIRTHS.

GOODWIN.—On June 28, at Ashbourne, Derbyshire, the wife of Robert Docksey Goodwin, F.R.C.S., of a son.

SABBEN.—On June 23, at Northumberland House, Stoke Newington, the wife of J. F. Sabben, M.D., of a daughter.

SEQUEIRA.—On June 24, at 34, Leman-street, Goodman's-fields, E., the wife of Mr. James Scott Sequeira, M.R.C.S.E., etc., of a son.

WIGMORE.—On June 24, at 21, Inverness-road, Bayswater, W., the wife of William Wigmore, M.R.C.S.E., of a son.

YARROW.—On June 25, at 87, Old-street, E.C., the wife of G. E. Yarrow, M.D., of a daughter.

MARRIAGES.

DOVE—BUTTON.—On June 23, at St. George's, Tuffnel-park, by the Rev. J. V. Button, M.A., uncle of the bride, assisted by the Rev. W. McCaul, M.A., J. R. Bathurst Dove, M.B., to Agnes, daughter of W. Button, Esq., late of Cliff House, Lewes.

LANO—DUDGEON.—On June 10, at Littleham, Devon, William J. Land, M.R.C.S.E., of Exmouth, to Annie, younger daughter of D. Dudgeon, Esq., of Claremont, Exmouth.

RENSHAW—KNOWLES.—On June 22, at the Cathedral, Manchester, Charles J. Renshaw, M.D., of Beech Hurst, Ashton-upon-Mersey, to Susan Fanny, daughter of John Knowles, Esq., of Manchester. No cards.

DEATHS.

MACLACHLAN, ANN, the beloved wife of D. Maclachlan, M.D., F.R.C.P., late Physician to the Royal Hospital, Chelsea, at Claremont, Ventnor, Isle of Wight, on June 22, in the 58th year of her age.

REGAN, FRANCES, the beloved wife of William Regan, M.D., at Dublin, on June 10.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

BIRMINGHAM AND MIDLAND EYE HOSPITAL.—House-Surgeon; must be a Member of one of the Colleges of Surgeons of England or Ireland. Applications and testimonials to the Chairman of the Medical Committee on or before July 3. Election on July 13.

BROADMOOR CRIMINAL LUNATIC ASYLUM, WOKINGHAM, BERKS.—Assistant Medical Officer; must be a single man, and be legally qualified. Applications and testimonials to the Superintendent on or before July 10.

DENTAL HOSPITAL OF LONDON, 32, SOHO-SQUARE, W.—Dental House-Surgeon and Assistant-Secretary. Applications and testimonials to the Honorary Secretary, on or before July 10.

DENTAL HOSPITAL OF LONDON, 32, SOHO-SQUARE, W.—Assistant-Dental Surgeon; must be a Licentiate in Dental Surgery of Royal College of Surgeons of England. Applications and testimonials to the Honorary Secretary, on or before July 10.

HAY UNION.—Medical Officer; must be legally qualified. The gentleman appointed will be required to reside in Hay. Applications and testimonials to Mr. C. Griffiths, Clerk to the Guardians, on or before August 4, election on August 5.

KING'S COLLEGE, LONDON.—Demonstrator in Natural Philosophy and Lecturer in Science. Further particulars on application to Mr. J. W. Cunningham, Secretary at the Hospital.

LINCOLN COUNTY HOSPITAL.—Physician; must be F. or M.R.C.P. Lond. or Edin., or be F.K.Q.C.P., not practising pharmacy. Applications and testimonials to the Secretary on or before July 5. Election on July 8.

MIDDLESEX COUNTY LUNATIC ASYLUM, COLNEY-HATCH.—Assistant Medical Officer for the female department. Applications to be made on a printed form which may be obtained of Mr. J. S. Scaife, Clerk to the Visitors, on or before July 10. Election on July 13.

ROYAL GENERAL DISPENSARY, 25, BARTHOLOMEW-CLOSE.—Honorary Physician. Candidates will be required to attend at a meeting of the Medical Sub-committee on the 15th inst. Particulars of the duties can be obtained of Mr. Rowsell, offices of the Malta and Mediterranean Gas Company, 60, Gracechurch-street, E.C.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL, ST. GEORGE'S-CIRCUS, S.E.—Honorary Surgeon; must be F.R.C.S. Applications and testimonials to the Secretary, on or before July 5.

ST. MARY'S HOSPITAL AND DISPENSARY FOR WOMEN AND CHILDREN, MANCHESTER.—Honorary Physician; must be a graduate of one of the universities of Great Britain or Ireland, and a Fellow or Member of one of the Royal Colleges of Great Britain. Applications and testimonials to the Board of Management, at the Hospital, Quay-street, Manchester, on or before July 9.

SHEFFIELD GENERAL INFIRMARY.—Assistant House-Surgeon; must be a Member of one of the Royal Colleges of Surgeons of the United Kingdom, and L.S.A. or L.R.C.P.L. Applications and testimonials to the Medical Staff of the Infirmary, care of the Secretary, on or before July 10.

SHEPTON MALLET UNION.—Medical Officer for the Third District of the Union. Candidates must be qualified according to the rules and regulations of the Poor-law Board. Applications and testimonials to G. M. Mackay, Clerk to the Guardians, Shepton Mallet, on or before July 12.

SUNDERLAND INFIRMARY.—House-Surgeon; must be legally qualified. Applications to the House-Surgeon, C. D. Hildbury, Esq., M.B.

UNIVERSITY COLLEGE HOSPITAL.—Resident Medical Officer. Applications and testimonials to John Robson, Esq., Secretary to the Council of University College, on or before July 17.

UNIVERSITY COLLEGE.—The Professorship of Medical Jurisprudence will be vacant at the end of the present session. Further information may be obtained of the Secretary.

YORK DISPENSARY.—Resident Medical Officer; must possess both Medical and Surgical qualifications. Applications and testimonials to the Secretary, Dispensary, York.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Guisborough Union.—Mr. John Wilson has resigned the Danby District; area 25,240; population 2046; salary £25 per annum.

Merthyr Tydfil Union.—Mr. Watkin Rhys has resigned the Rhigos District; area 5420; population 822; salary £5 per annum.

APPOINTMENTS.

Bellingham Union.—William Rogers, M.B. Glas., M.C. Glas., to the Third District.

East Ashford Union.—Edward W. Thurston, L.R.C.P., M.R.C.S.E., to the Second District.

Spalding Union.—Thomas H. Tidswell, M.R.C.S.E., L.S.A., to the Moulton District.

Woodbridge Union.—Robert Hughes, M.R.C.S.E., L.S.A., to the Seventh District.

THE address of Mr. Matthew Coates, R.N., whose name was included in the list of those who had passed the examination for the Fellowship of the Royal College of Surgeons, should have been H.M.'s Dockyard, not St. John's Wood, as inserted.

DR. J. BRAXTON HICKS has been appointed full Physician-Accoucheur at Guy's Hospital, *vice* Dr. Oldham, resigned. Dr. J. J. Phillips succeeds Dr. Hicks as Assistant Physician-Accoucheur. Dr. Oldham retains connexion with Guy's as Consulting Physician-Accoucheur.

PROFESSOR VON GRAEFE.—We regret to hear that the health of this distinguished ophthalmologist, which had so improved during his residence last year in Italy, has again become bad, and that he will be necessitated to shortly make another prolonged stay in a southern climate.

SMALL-POX is raging at Dewsbury, Yorkshire.

MR. F. ST. QUINTIN BOND.—The following resolution was passed at a special meeting of the governors of the West Sussex, East Hants, and Chichester Infirmary, held for the purpose of appointing a successor to Mr. Bond, who had held the offices of House-Surgeon and Secretary for eleven years:—"That, in the opinion of this meeting, Mr. Bond merits the best thanks of the governors, and the highest testimony to his many able services during the time he has occupied the position of House-Surgeon and Secretary of this institution, and especially for his great attention and kindness to the patients under his care; and that the best wishes of the governors be recorded for his future success in his Profession."

ST. BARTHOLOMEW'S HOSPITAL. — EXAMINATIONS, 1868-69.—Senior Scholarship in Medicine, Surgery, and Therapeutics: H. E. Haynes and C. P. Skrimshire (equal). Senior Scholarship in Anatomy, Physiology, and Botany: 1, W. J. Walsham; 2, A. H. G. Doran. Jeaffreson Exhibition: A. Wall. Bentley Prize: J. T. Hartill. Kirkes Medal: T. H. Hendley. Practical Anatomy, Senior—Foster Prize: W. J. Walsham; 2, A. H. G. Doran; 3, C. Hutson; 4, H. Hind; C. J. Newton and J. Willcocks (equal); 7, O. T. Jones; S. T. Huggins, A. A. Gillithe, and C. P. S. Wayman (equal). Wix Prize: J. T. Hartill. Hichens Prize: J. Shaw. Practical Anatomy, Junior—Treasurer's Prize: W. Furner; 2, G. W. Burn (Examiner's Prize); 3, F. Skaife; 4, M. Groves; 5, W. Fairbank; A. Godfray and A. C. Horner (equal); 8, P. W. G. Nunn; 9, W. Odell.

THE Board of Guardians of the Rathdrum Union, at their last meeting, increased the salary of Dr. Hatch, Medical officer of the Anamoe Dispensary District, from £90 to £100 per annum; and passed the following resolution with reference to the late Dr. Manning, Medical officer to the Workhouse:—"That the guardians desire to express their deep sorrow on account of the death of their Medical officer, the late Dr. Manning, who for a period of twenty-seven years discharged the duties of his office under the board with a zeal, efficiency, and success rarely equalled; and it is hereby resolved that the deep sympathy and condolence of the guardians be conveyed to his bereaved widow and family."

A DEPUTATION from the Medical Club waited upon the Chancellor of the Exchequer, in Downing-street, on Thursday, July 1, by appointment, to impress upon him the necessity of considering the important sanitary questions involved in the erection of the proposed new Law Courts. The deputation was introduced by Dr. Brady, M.P., accompanied by Sir John Gray, M.P., and Dr. Lush, M.P., and consisted of the following gentlemen:—Dr. Lory Marsh, Mr. Nunneley, F.R.C.S., Dr. Richardson, F.R.S., Dr. Stannus Hughes, Mr. Booth, Dr. Sabben, Dr. Allen, Dr. Rogers, of Rainhill, Mr. C. J. Burgess, Mr. Field, Dr. Prosser James, and others. The deputation was courteously received by Mr. Lowe, and on retiring he promised to support the views of the deputation, and invited the Club to send a representative to appear before the Select Committee appointed by the House of Commons to consider the general subject.

KING'S COLLEGE HOSPITAL.—On the 25th ult. more than fifty of the old students of this Hospital met at an excellently served dinner at the Freemasons' Tavern, under the presidency of Professor W. A. Miller, F.R.S. Several of the Medical professors supported the distinguished chairman, amongst whom we observed Professors Sir William Fergusson, Bart., Partridge, Cartwright, and Soelberg Wells. A large number of gentlemen holding positions of distinction both in the provinces and the metropolis attended this agreeable *réunion*. The country men "mustered strong," amongst whom were Drs. Allfrey (of St. Mary Cray), Brace (of Bath), Bradley (of Greenwich), Bridgwater (of Harrow), Playne (of Maidenhead), Rhodes (of Huddersfield), Walters (of Reigate); Messrs. Thomas Jackson (of Mottingham), Alfred Mathias (of Bridgnorth), W. P. Swain (of Devonport), etc. Amongst the London men were—Professor Bentley, Drs. Anstie, Druitt, Duffin, Easton, Hood, Kelly, Sansom, Symes Thompson, Way, Messrs. Bell, Byas, Fairlie Clarke, Frederick Mason, H. Smith, Watson, etc., etc. A cordial vote of thanks was accorded to Dr. Buzzard and Mr. Francis Mason for the admirable manner in which the arrangements were carried out. The speeches were few, short, and to the point, and at intervals during the evening some of those present volunteered a song. These were really well sung, and were accompanied on a magnificent grand pianoforte kindly lent for the occasion by the well-known firm of Collard and Collard.

QUEEN'S UNIVERSITY IN IRELAND.—At a meeting of this University held in Dublin Castle on Friday, June 25, the following degrees, etc., in Medicine and Surgery were conferred:—*Degree of Doctor in Medicine:* Isaac Henry Anderson, Queen's College, Belfast; Michael Cullinan, Cork; George William Daly, Belfast; John William Davis, Cork; Peter J. Dwyer, Galway; John F. Enright, Cork; William J. Hastings, Cork; John R. Hayes, Cork; Francis Healy, Cork; Michael Kearney, Cork; James J. MacNamara, Cork; William M'Conaghey, Galway; Daniel N. Martin, B.A., Cork; John Harrisson Nason, Cork; Francis Nunan, B.A., Cork; Augustine D. O'Connor, Cork; Thomas O'Sullivan, Cork; Joseph Smyth, Belfast; Wm. F. Sweetman, Cork; Jas. L. Sweetman, Cork; Alexander B. Trousdell, Cork. *Degree of Master in Surgery:* Dr. Michael O'Malley, Cork; Dr. MacMahon Browne, Cork; Dr. Humphrey J. Donovan, Cork; Dr. William J. Hastings, Cork; Dr. John R. Hayes, Cork; Dr. Francis Healy, Cork; Dr. Daniel N. Martin, Cork; Dr. Thomas O'Sullivan, Cork; Dr. A. D. O'Connor, Cork; Dr. Joseph Smyth, Belfast; Dr. William F. Sweetman, Cork; Dr. James L. Sweetman, Cork; Dr. Alex. B. Trousdell. The following gentlemen received certificates of having passed the *first University Exhibition in Medicine:* H. J. Adams, Belfast; Thomas Middleton Armstrong, Galway; Leopold J. J. Barnes, Galway; Richard J. Barry, Cork; Robert Blood, Galway; John King Brigham, M.A., Belfast; John Martin Browne, Galway; Andrew Lang Browne, Belfast; S. Burnside Boyd, Belfast; William Concannon, Galway; Alfred Davy, C.E., Galway; Benjamin Derham, Cork; William Derham, Cork; John Dick, Belfast;

Robert Drury, Galway; William Douglas, Belfast; Daniel Fegan, Belfast; John Gay French, Galway; Charles Henry Haines, B.A., Cork; William E. Johnson, Belfast; Samuel Johnson, Galway; Samuel Johnston, Belfast; Edward Henry Joynt, Galway; James Kerr, Belfast; John Knox, Belfast; Moore Killen, B.A., Belfast; Christopher Lloyd, Cork; James Lawless, Belfast; Redmond Lee, Galway; John M'Conaghey, Belfast; Alexander Oberlin M'Kellar, Belfast; Peter J. M'Quaide, Belfast; Joseph Mark, Belfast; John Marshall, B.A., Galway; John Morrow, Belfast; William N. Murray, Belfast; Joseph O'Brien, B.A., Cork; Patrick James Norris, Galway; Thomas O'Donnell, Cork; Robert Riddell, Belfast; William Ritchie, Belfast; Robert Saunderson, Galway; James E. Smith, Galway; Frederick H. Smyth, Cork; J. B. Spencer, Galway; Joseph Wilson Steele, Belfast; Hugh A. Torrens, B.A., Belfast; William Ratteliffe Tolerton, Cork; Francis J. Tuobeg, Cork; Thomas Wallace, Belfast; Alexander M'Weir, Belfast; William Williams, Galway; John Wilson, B.A., Belfast; Joseph Wilson, Cork; William Wilson, Belfast.

Action by a Medical Practitioner. — An action was brought last week in the Malton County Court by Dr. Scholefield, of Pickering, against Rev. T. Simpson, master of the Thoruton Grammar School. The sum claimed was £5 11s. for Medical attendance on the defendant's family during the year 1867. Defendant had paid £2 6s. 6d. into court, and resisted payment of £3 4s. 6d. on the ground that the death of defendant's son had been accelerated by the neglect of the plaintiff. The boy had suffered from diarrhœa, and Dr. Scholefield had attended him mostly twice a day. Dr. Wright, of Malton, was also called in. A sudden change having taken place in the condition of the patient, Dr. Scholefield was sent for, and found him to be rapidly sinking. Dr. Wright was telegraphed for, and arrived before death. Negligence was, however, pleaded, which defendant held was sufficient to justify his non-payment of the Medical charges. After hearing the Medical testimony, the judge said the Doctors virtually agreed, and no charge had been made out against the plaintiff's Medical skill. The jury returned a verdict for the plaintiff. The judge allowed costs.

The Hunterian Museum.— One of the important features in connexion with the annual election of Fellows into the Council of the Royal College of Surgeons is the interesting collection of preparations which have been accumulating by donation and purchase during the past collegiate year; these were displayed in the theatre of the College, and attracted the particular attention of a large number of the Fellows. The pathological collection has received a considerable share of attention during this time, and has been augmented by as many as sixty-seven new specimens, and 140 preparations have been remounted. Several Fellows and Members have contributed some most valuable additions, particularly Sir Wm. Fergusson and Messrs. Hilton, Hancock, Curling, Adams, Solly, and Cock, Partridge, Carr-Jackson, Nunneley, and Dendy. Of the most noticeable preparations are a myeloid tumour of the tibia, with a section of the same; a sprouting medullary cancer of the foot; an interesting specimen of necrosis of the jaw, showing the destructive effects of exposure to phosphorus fumes, and another exhibiting the dangers incurred by "smashers" in swallowing counterfeit coins, and described as ulceration of the œsophagus, with perforation of the aorta, from lodgment of a coin in the former; a skeleton of a new-born infant affected with rickets and hydrocephalus; a very large biliary calculus. Sir Duncan Gibb is a large contributor to this valuable department of the museum. In the physiological series we find the principal contributions from the Council of the Zoological Society, and, as showing the interest taken in the museum by learned foreigners, we find amongst the contributors Professor Peters, of Berlin, Professor Van Beneden, Sig. Maximo Ferrero, Dr. Haast, and, last not least, H.R.H. the Crown Prince of Prussia. The University of Louvaine and Administration of the Muséum d'Histoire Naturelle de Paris are also amongst the donors. In the osteological collection the improved method of articulating will be seen to have been carried to great perfection in a skeleton of a very fine French bloodhound prepared from an animal presented by Mr. Samuel Lane. This skeleton not only shows the general form and proportions of the animal, but is arranged to take to pieces, so that the articular surfaces of almost every bone can be separately studied; and it is especially deserving of mention, and must be very gratifying to Mr. Flower, the able Conservator of the Museum, that this method of mounting skeletons, as well as many processes for preserving and displaying soft structures which were originated in the College of Surgeons, have been already adopted in many museums both in this country and abroad, and we are told that frequent applications for information on all these subjects are made of the officials—a satisfactory proof that the College Museum not only maintains its own reputation, but is also doing good by diffusing generally the knowledge acquired in its somewhat large experience, and thus improving the general standard of museum work. Amongst the new specimens exhibited are some carefully executed dissections of the muscles of the face, neck, and extremities, the work of Mr. William Pearson, one of the attendants in this department of the museum, in which his father and grandfather so long and faithfully performed their respective duties. This exhibition of additions about to be made to the museum will remain open for a few days for the inspection of the Members of the College, and will well repay a visit.

Relief to the Sick and Wounded in Times of Maritime War.—Prize Essay.—The Prussian Central Committee for the Relief of the Sick and Wounded in Times of Maritime War offers a prize of 100 frederics d'or (equal to about £85) for the best essay on the following questions:— In what circumstances, under what form, and with what success, during the maritime wars of the past, has private charity assisted in saving the shipwrecked and taking care of the sick and wounded of the belligerent fleets? To what extent and under what conditions can the relief societies undertake this task with a probability of success? What arrangements ought to be made in time of peace, in order to obtain such results as may satisfy the wishes of philanthropy in this respect? Would the realisation of these wishes be hastened or secured if the Permanent Relief Committees, whose duties are to aid the Hospital and ambulance service of armies in time of war, were to establish a practical understanding with the existing life-boat institutions? The essays, written in German, French, or English, must be sent to the Prussian Central Committee not later than May 1, 1870. They must be without signature, but distinguished by a motto, and accompanied by a sealed note reproducing this motto, and giving the name and residence of the author. On September 30, 1870, the birthday of her Majesty the Queen of Prussia, the prize will be awarded to the essay to which it shall have been adjudged by a jury nominated by the committee. The author will have the right to publish the essay which shall gain the prize, but if within six months after the date of the decision the author has not availed himself of his right, the Prussian Central Committee may dispose of the essay.

Composition and Quality of the Metropolitan Waters in June, 1869.—The following are the returns of the Metropolitan Association of Medical Officers of Health:—

Names of Water Companies.	Total Solid Matter per Gallon.	Oxygen required by Organic Matter, &c.	Nitrogen.		Hardness.	
			As Nitrates &c.	As Ammonia.	Before Boiling.	After Boiling.
Thames Water Companies.	Grains.	Grains.	Grains.	Grains.	Degs.	Degs.
Grand Junction	19·33	0·077	0·090	0·000	14·5	3·7
West Middlesex	17·83	0·065	0·096	0·003	14·1	4·1
Southwark & Vauxhall	17·93	0·077	0·038	0·001	14·2	3·3
Chelsea	18·10	0·082	0·128	0·000	14·0	3·3
Lambeth	17·47	0·059	0·128	0·001	14·0	3·9
Other Companies.						
Kent	27·33	0·006	0·190	0·000	19·8	6·1
New River	16·33	0·035	0·102	0·001	14·0	3·3
East London	18·87	0·053	0·120	0·000	14·6	4·2

The average quantity of water supplied daily to the metropolis in the month of May last was, according to the returns of the Water Companies to the Medical Officers of Health, 92,830,840 gallons, and the number of houses supplied was 464,001. This is at the rate of 31·5 gallons per head of the population daily.

Note.—The amount of oxygen required to oxidise the organic matter, nitrites, etc., is determined by a standard solution of permanganate of potash acting for three hours; and in the case of the metropolitan waters the quantity of organic matter is about eight times the amount of oxygen required by it.

Ethnological Society.—The last meeting of the present session was held on June 22, Professor Huxley, president, in the chair. The subject brought forward was by Dr. King, the founder of the Society, entitled, "The Cranium and its Deformities in relation to Intellect and Beauty." Dr. King arranged the deformities of the cranium as artificial and natural. Of deformity artificial the flat-heads afford an example. They comprise several tribes in the neighbourhood of the Columbia River of North America. This custom of flattening the head is prevalent along the north-west coast of America,

from Salmon River to Unqua River, but it has also been observed in other parts of America, and is known to have prevailed amongst the ancient Peruvians. The burying-ground of the flat-heads is the disputed island of San Juan. It is a mere rock, with but a few trees. The flat-head was maintained by Tiedemann, Pentland, and Morton to be a natural formation upon examination of the flattened skulls found at Titicaca. It has since been found by an Arctic traveller, Ross-Cox, that it is an artificial deformity, and the process adopted for producing it is accurately described in his travels, and in all the works on ethnology—by Catlin, for example. The natural deformity was the main point of the paper, and Dr. King maintained it was going on in civilised life, and that, in the artificial deformity, there was "uniformity of error," in the natural deformity there was non-conformity. It was the mode of nursing that gave rise to it. The child, for instance, is nursed on one side, there being a loss of one breast, or the mother has twins, and she nurses one child on one side, and the other on the other side; or she is a wet-nurse, and she nurses her own child on the one side, and her foster-child on the other. This mode of nursing necessarily inclines one side of the head downwards—it may be the right side, or it may be the left side. Now, as the brain necessarily forms the brain-case, as the nut forms the shell, the brain in its growth, which is very rapid in early life, necessarily carries the several bones of the head, now incomplete, to the depending side, and thus the head of the child is larger on the depending side than the opposite for life, if not corrected before the several bones of the head are consolidated into one mass. Thus, the cranial vault is deformed, and, in proportion as the cranial vault is deformed, so is the face. The cranial vault of the European is well represented by the egg of the turkey. The forehead represents the apex of the egg, and the back head the base of the egg; reverse this, and the base of the egg will represent the forehead of the face, and the apex the chin. Deformity of face is therefore necessarily the result of deformity of the cranial vault. A further deformity of face takes place by the child sucking its thumb, the index finger being placed as a rest on the nasal bones, that inclining them to one side, either right or left, as the child takes to its right or left thumb to suck. Dr. King believes that intellectual deficiency is due to this cranial deformity. In order to obviate it Dr. King has taken a hint from the Esquimaux. He found in his visit amongst them that they nursed their children from their back. The child is placed at the back, and by a shrug of the shoulders is brought under the right or left arm as the mother desires; thus the right head and left head are depending alternately. Mr. Baynton and Messrs. Cole and Williamson exhibited a series of drawings illustrative of deformity of European heads, and amongst them several heads of acknowledged ability.

The Vienna Academy of Sciences. — Some recent elections into this celebrated body have given great satisfaction to the Medical Profession. Professor Billroth has been made a Corresponding Member, and Dr. Hering, Professor of Physiology at the Josephinum Military Medical School, has been advanced from the corresponding to the ordinary membership. But, best of all, Baron Rokitansky has been elected, by a large majority, President for the coming year. "We have a good right," says the *Wiener med. Wochenschrift*, "to rejoice in a choice which does so much honour to the entire Profession in Austria. Here we have a Medical Professor placed in the post of highest scientific honour in Cisleithan Austria—a choice which is also another intimation to the ultramontane party." The *Wiener Zeitung*, while stating that this choice has created the most gladdening impression in both Professional and non-Professional circles, hints a suspicion that the worthy recipient is accumulating rather too many offices in his person to admit of the satisfactory performance of their duties. "Professor of Pathological Anatomy, Medical Jurist to the Town of Vienna, *savant*, Member of the House of Peers, Medical Referee of the Minister of Public Instruction, member of a whole army of committees, Examiner in the *Rigorosen*, and President of the Academy of Sciences, constitute an accumulation of posts the duties of which cannot be fulfilled by any one man, and some of which clash with each other."

Caution to Ovariotomists.—Professor Braun, of Vienna, relates a case of ovariotomy (*Wiener Wochenschrift*, Nos. 23 and 24) which proved fatal from hæmorrhage twenty-three hours after the operation. At the post-mortem a piece of sponge was found which had been left in the cavity of the abdomen, but all present were agreed that it had in no wise contributed to the fatal issue. As all the sponges used were numbered, it is supposed that this piece must have broken off from one of them. At all events, had the patient lived it might have given rise to unpleasant complications. We presume this is the case which gave rise to the report that Professor Billroth had left a sponge behind after ovariotomy, and for spreading which he brought an action against Dr. Kraus, editor of the *Wiener med. Zeitung*, notwithstanding the apologies and regrets for the error which he offered to publish.

NOTES, QUERIES, AND REPLIES.

Be that questioneth much shall learn much.—*Bacon.*

Papier Mâché.—1. The examination for the L.R.C.P. Eng. is more theoretical, and that for the L.S.A. more practical, and of a somewhat different character.—2. No botany is required.—3. As a rule, not.

W. G., Chiswick.—He is an Edinburgh man, but has the M.R.C.S. Lond. in addition to three or four Edinburgh qualifications, has served in the Navy, is a Fellow of the Obstetrical Society, and writer on midwifery, and ought to be a man thoroughly to be relied on.

M.D., Weston-super-Mare.—The result of the recent Arts Examination will not be made known for a fortnight. There will be an examination at the Hall in September next, on passing which your son could at once enter on his Professional studies.

Dr. M.—A metropolitan Fellow will occupy the chair at the next festival. The election of President of the College of Surgeons will take place on Thursday next, when it is expected that Mr. Quain will be succeeded by Mr. Edward Cock, of Guy's Hospital.

A Great Sufferer.—We cannot recommend particular Medical men. If pressed to do so, we recommend such as hold high office, such as the President of the Royal College of Surgeons, Mr. Quain, 32, Cavendish-square; Mr. Partridge, New-street, Spring-gardens; Mr. Hilton, 10, New Broad-street.

M.D.—1. It is not absolutely necessary for a Surgeon in a merchant vessel to have a double qualification. Many now afloat have only one; some, perhaps, none.—2. We should say that a M.D. would be eligible for such an appointment.—3. The appointments rest with the owners or their agents. Mr. Moore, of Tower-hill, acts, we believe, as a Medical agent for such appointments.—4. The pay varies greatly. In emigrant ships it is so much a head for each passenger landed.

We have received a note from "A Medical Student" at one of our largest schools. He amply confirms what has been already said by our former correspondent as to the scarcity of subjects for dissection. The matter is now engaging our earnest attention.

R.S.—Yes, if he be qualified.

A Pupil will be obliged to pass the preliminary examination.

M.R.C.S., &c., can deduct the amount of the necessary expenses to which he is subjected in carrying on his Professional business from his return of income.

A. Z. cannot claim a fee under the circumstances stated.

Chirurgus.—A master is not liable for the payment of Medical charges for Medical attendance upon his servant unless he specifically contracts to be so liable. Many cases are on record in proof of this. An action might be brought in the case submitted to us, but we think it would be unsuccessful.

M.D.—It is a matter of taste. A Medical Practitioner who renders important Professional services to one of his brethren has every claim to be treated with kindness and respect. If an attempt be made to *remunerate* him with a paltry present, it would not be well for him to resent the insult, but it would be better for him to "pocket the affront."

A County Coroner suggests that in the clauses 10 and 11 and following of the Bill now before Parliament relating to the office and appointment of county coroners, etc., the salary should be fixed on the average of inquests held for two years previously. What objection can there be to this reasonable request?

"*Hurried to Death.*"—Under this title, the *Echo* of a day or two since had an article which "ran with the hare and held with the hounds." It was a notice of a recent work with the above title; but it was a notice unworthy of one of the most popular evening journals. Surely it was not necessary for the writer to sneer at the "Doctor." Why, the Doctors have done more than all the other classes of the community put together to prevent disease. The great sanitary reformers have been Doctors. Even their worst enemies cannot say that, in their desire to preserve and protect the public health, they have been actuated by selfish motives. Quite the contrary. Why, then, should a public writer think it necessary, in order to write smartly, to ignore the claims of "Doctors" to the gratitude of the community for their disinterested efforts in the cause of the public? It was members of the Medical Profession who first showed the evils of railway travelling, its influence upon persons affected with heart disease, the evils which resulted from hurrying to the train, the

mischief which ensued from being borne upon the line at the rate of fifty miles an hour. In its next article on "Hurried to Death," it is to be hoped the *Echo* will take counsel with itself and act justly.

Singular Method of Recovering from the Effects of Immersion.—A correspondent of the *Norfolk News* states that, on Sunday week, about noon, a lad named Wilson fell from Mr. Nash's Staithe, Charing-cross, Norwich, into deep water. George Warnes, without waiting to strip off a single article of his Sunday attire, plunged in, and, quickly sighting the lad, who had sunk the third time, caught him by the arm, and swam with him to shore, taking care to keep the lad's head under water, and thus avert the peril of an embrace. On reaching the staithe (a high one) he placed the death-like lad upon it, while he himself stood in the river. Finding that the lad seemed full of water, he rather forcibly struck his swollen and hardened stomach, causing him to open his mouth, whereupon Warnes thrust two of his fingers as far as possible down the lad's throat, and at once caused him to eject at least a quart of water. His next treatment was to commence ruhbing the chest, whereupon, in the space of about a minute or two, the lad's consciousness, and with it his sight, returned, and he exclaimed, "O Mr. Warnes, didn't I fight hard?" Brandy and salt, hot blankets, etc., were afterwards used. By Tuesday the lad seemed to have quite recovered from the shock to his system.

PURIFICATION OF SEWAGE WATER BY IRON.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I learn that the Dutch Water Commission recommend sewage water and Dutch river water to be purified for drinking by the addition of perchloride of iron, Fe_2Cl_6, in the proportion of 0·032 grammes to a litre of water, which must be allowed to stand twenty-four hours or more, and then be filtered before drinking. Can any of your readers give me practical information on this point? I am, &c. D.

COMMUNICATIONS have been received from—

Mr. W. B. WOOOMAN; M.D.; Mr. MATTHEW COATES; F.R.C.S. Eng.; Mr. W. TALLACK; Dr. T. KITCHENER; Mr. JAMES BIRO; Mr. SEQUEIRA; Dr. J. BRAXTON HICKS; Mr. DALTON; Mr. JAMES KELSO; Mr. W. T. GRANT; Mr. BELLAMY; Dr. INMAN; PAPIER MACHE; Dr. KER; Mr. MAUNOER; Dr. CHRISTIE; Mr. BANKART; Dr. THOROWGOOD; Dr. BRITTON; Mr. HENRY ARNOTT; Mr. MORRANT BAKER; A GREAT SUFFERER; A MEDICAL STUDENT; Mr. J. C. DEMPSTER; Dr. JOHN MURRAY; Mr. J. F. CLARKE; Dr. B. W. RICHARDSON; Mr. J. CHATTO; Mr. TAYLOR; Dr. LETHEBY; W. G.; Dr. MURRAY.

BOOKS RECEIVED—

Half-yearly Abstract of the Medical Sciences—Journal of Cutaneous Medicine, July—Lewins on the Identity of the Vital and Cosmical Principle—Pacific Medical and Surgical Journal, No. 25—Report of the Birmingham Medical Benevolent Society—Journal of Mental Science, No. 70—Pharmaceutical Journal, No. 121—Practitioner, No. 13.

NEWSPAPERS RECEIVED—

New York Medical Gazette—Newcastle Daily Journal—Medical Press and Circular.

VITAL STATISTICS OF LONDON.

Week ending Saturday, June 26, 1869.

BIRTHS.

Births of Boys, 1080; Girls, 1020; Total, 2100.
Average of 10 corresponding weeks, 1859-68, 1904·2.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	698	683	1381
Average of the ten years 1858-67	598·3	552·0	1150·3
Average corrected to increased population	...	...	1265
Deaths of people above 90	...	...	...

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-cough.	Typhus.	Diarrhœa.	Cholera.
West	463388	...	4	11	2	11	5	7	...
North	618210	...	2	15	...	26	13	6	...
Central	378058	...	2	5	1	9	6	3	...
East	571158	...	8	19	1	10	8	4	...
South	773175	1	7	15	2	20	6	8	...
Total	2803989	1	23	65	6	76	38	28	...

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·967 in.
Mean temperature	54·3
Highest point of thermometer	73·4
Lowest point of thermometer	41·4
Mean dew-point temperature	49·2
General direction of wind	N. & N.N.E.
Whole amount of rain in the week	0·20

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, June 26, 1869, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the year 1869.	Persons to an Acre. (1869.)	Births Registered during the week ending June 26.	Deaths. Corrected Average Weekly Number.	Deaths. Registered during the week ending June 26.	Temperature of Air (Fahr.) Highest during the Week.	Temperature of Air (Fahr.) Lowest during the Week.	Temperature of Air (Fahr.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3170754	40·7	2100	1462	1381	73·4	41·4	54·3	0·20	20
Bristol (City)	169423	36·1	110	76	*64	71·8	42·0	56·5	0·00	0
Birmingham (Boro')	360846	46·1	238	175	125	73·2	42·3	54·8	0·05	5
Liverpool (Boro')	509052	99·7	375	295	265	70·3	46·4	56·2	0·00	0
Manchester (City)	370892	82·7	232	210	*167	71·0	42·7	55·7	0·00	0
Salford (Borough)	119350	23·1	108	60	48	73·4	39·7	55·0	0·01	1
Sheffield (Borough)	239752	10·5	193	126	97	74·0	43·7	55·2	0·00	0
Bradford (Borough)	138522	21·0	130	71	50	70·0	45·6	56·5	0·00	0
Leeds (Borough)	253110	11·7	227	129	118	72·0	45·0	56·3	0·00	0
Hull (Borough)	126682	35·6	87	59	57	...	...	...	...	...
Newcastl-on-Tyne, do.	130503	24·5	61	69	43	71·0	44·0	52·7	0·00	0
Edinburgh (City)	178002	40·2	157	86	121	71·7	39·0	59·0	0·00	0
Glasgow (City)	458937	90·6	395	268	313	...	...	...	...	...
Dublin (City and some suburbs)	320762	32·9	107	158	110	76·1	46·3	59·4	0·03	3
Total of 14 large Towns	6546587	35·5	4520	3244	2959	76·1	39·0	56·0	0·03	2
					Week ending June 19.	Week ending June 19.				
Vienna (City)	(1863) 560000	...	...	...	334	...	...	61·7	...	...

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·967 in. The barometrical reading increased from 29·80 in. at the beginning of the week to 30·08 in. on Wednesday, June 23. The general direction of the wind was N. and N.N.E.

Note.—The population of Cities and Boroughs in 1869 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous.

* The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

APPOINTMENTS FOR THE WEEK.

July 3. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 1½ p.m.

5. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 1½ p.m.; St. Peter's Hospital for Stone, 2½ p.m.

ROYAL INSTITUTION, 2 p.m. General Monthly Meeting.

6. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.

7. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.

OBSTETRICAL SOCIETY. 7½ p.m.: Council Meeting. 8 p.m.: Dr. Westmacott, "On the Use of the Whalebone Loop." Dr. Lawson Tait, "A Case of Reduction of Chronic Inversion of the Uterus by sustained Pressure." Dr. Selby Norton, "On Teething." And the adjourned Discussion on the Report of the Infant Mortality Committee.

METROPOLITAN ASSOCIATION OF MEDICAL OFFICERS OF HEALTH, 4 p.m. Meeting for Election of Officers.

WESTMINSTER HOSPITAL SCHOOL OF MEDICINE, 11 a.m. Mr. C. Carter Blake's Lectures on the Comparative Anatomy of Warm-blooded Vertebrata—Lecture V.: The Class Mammalia.

8. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

9. *Friday.*

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

CHOCOLAT-MENIER.

(Manufactured only in France.)

ANNUAL CONSUMPTION EXCEEDS 5,000,000 lb.

The healthiest, best, and most delicious Aliment for Breakfast known since 1825; defies all honest competition, unadulterated, highly nutritious, and pure.

Sold in Half-pound Packets.

Wholesale, MENIER, 23, Henrietta-street, Strand, London.

Retail by all respectable Houses.

MUSCULINE-GUICHON,

A preparation of Raw Meat combined with cooling Fruits, in the form of Sugared Tablets, manufactured at the Monastery of Notre Dame des Dombes, Ain, France, under the superintendence of the Inventor.

The "MUSCULINE" is strongly recommended as a nutritive and restoring agent. It is one of the most powerful aids in combating the debility consequent upon *Consumption*, Diabetes, Anæmia, Cancer of the Stomach, Chronic Diarrhœa, Dyspepsia, &c., &c, and in protracted convalescence.

The "MUSCULINE" is superior as an invigorator to the various extracts of meat.

Introduced into England by THOMAS TOMLINSON, Chemist, 6, Lower Seymour-street, Portman-square, London, W., Sole Agent for Great Britain, of whom it may be obtained Wholesale and Retail; also of Messrs. Sanger, 150, Oxford-street, and Messrs. Newbery, 44 and 45, St. Paul's-churchyard.

In Boxes, 2s. each; by post, 2s. 2d.

LIEBIG'S FOOD FOR INFANTS & INVALIDS.

Prepared strictly from the Formula of Baron Liebig, by

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Sold in Tins, 1 lb., 1*s.*; 3 lb., 2*s.* 6*d.*; 6 lb., 5*s.*, by all Chemists and Druggists, and direct from Mr. Hooper's Establishments,

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Wholesale of Barclay, Edwards, Newbery, all Patent Medicine Warehouses, and Wholesale Druggists.

LIEBE-LIEBIG'S NOURISHMENT IN SOLUBLE FORM,

For INFANTS, WEAK CHILDREN, and CONVALESCENTS.

Prepared by J. PAUL LIEBE, Apothecary, Dresden.

No indigestible husk, no wood fibre, can derange the child's stomach, and no difficulty in cooking will impede the salutary effects of Baron von Liebig's formula.

Sold by all Chemists. Wholesale from all Wholesale Drug and Patent Medicine Houses.

Sole Wholesale Agents for Great Britain—A. and M. ZIMMERMANN, 7, Fen-court, Fenchurch-street, E.C.

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FOR PREPARING

LIEBIG'S CONCENTRATED PATENT MILK,

WITHOUT BOILING OR STRAINING.

The only genuine substitute for mother's milk, and the acknowledged best Food for INFANTS and INVALIDS. Perfectly free from husks.

This food entirely differs from all kinds of farinaceous mixtures, with or without Liebig's name. By simply dissolving it in milk and water in given proportions, it yields a food, as experience has proved, and as testimonials can show of a highly satisfactory nature. Price 1s. 6d. and 2s. 6d.

Sold by all Chemists and Patent Medicine Vendors, and by the Manufacturers, LIEBIG'S CONCENTRATED PATENT MILK COMPANY (G. MELLIN, Manager), 16, Tichborne-street, Regent-street, London.

BY ROYAL LETTERS PATENT.

DR. HASSALL'S FLOUR OF MEAT.

Universally approved by the Medical Faculty.

FOR THE IMMEDIATE PREPARATION OF BEEF-TEA,

CONTAINS THE WHOLE OF THE CONSTITUENTS OF THE MEAT,

Including Fibrin, Albumen, and Gelatine; is more nourishing than many times its weight of Raw Meat, requires no mastication, and is easy of digestion.

Invaluable for use in the Army, Navy, and Merchant Service, to Travellers, Tourists, and Sportsmen, and it is of vital importance to all Hospitals and Asylums in which the sick are congregated, and to Invalids generally, especially those suffering from Dyspepsia and Debility arising from Defective Assimilation and Nutrition. The BEEF-TEA made with the FLOUR of BEEF is FULLY EIGHT TIMES STRONGER and MORE NOURISHING THAN BEEF-TEA MADE in the ORDINARY MANNER, and far more nutritious than the Beef-tea (so called) prepared with LIEBIG'S EXTRACT, which does NOT contain Fibrin, Albumen, Gelatine, or Fat—the very principles which give the body its size, weight, and strength.

"Impossible to over-estimate the importance of the Concentrated Flour of Meat."—The Lancet.

"The Committee has every reason to believe that this is a preparation of considerable value."—Society of Arts.

FLOUR of BEEF for BEEF-TEA, Packages 2s. and 4s. John Bell and Co., Oxford-street; Savory, Moore, and Co., Bond-street; Fortnum, Mason, and Co., Piccadilly; and all Druggists and Italian Warehousemen, and Wholesale of

CROSSE & BLACKWELL, SOHO-SQUARE, LONDON.

*** This will be found a most delicious relish as a Sandwich, or spread on Toast or Biscuit. Mix a portion with the Butter before spreading.

GENERAL MEDICAL COUNCIL
OF
EDUCATION AND REGISTRATION.

TWELFTH ANNUAL SESSION,
HELD AT THE ROYAL COLLEGE OF PHYSICIANS.

FIRST DAY.—THURSDAY, JULY 1.

In addition to the *verbatim* report of the President's address and the summary of the debate thereon which we published in last week's *Medical Times and Gazette*, we now give some important extracts from the minutes of the first meeting of the Council on Thursday, July 1. The following communication from the Government regarding the amendment of the Medical Acts was read:—

Medical Department of the Privy Council Office, May 14, 1869.

Sir,—With reference to the Draft Bill which you recently brought under the Lord President's notice, as proposed by the General Council of Medical Education and Registration, for amendment of the Medical Act, 1858, his Lordship directs me to inform you that, with every wish to assist the Medical Council in accomplishing its important duties, he does not feel that he could undertake to bring the proposals of the Draft Bill separately before Parliament, as a measure recommended by the Government, unless he regarded them as covering all the ground where amendment of the Medical Act is wanted; for, considering that the Act has at present been more than ten years in operation, the Lord President presumes that a fair judgment can now be formed on its success and merits as a whole, and he thinks that a judgment of this more comprehensive sort must be the basis of any amending Bill to be introduced on the part of the Government. The Lord President would be glad to have the fullest possible explanations with the General Council on this larger aspect of the case, and, though the requisite consideration could not be given to the subject in time for legislation in the present far-advanced session of Parliament, his Lordship would hope to be able to deal with it next year in the light of such information as he may meanwhile receive.

On the present occasion the Lord President does not propose to enter minutely on the question of the working of the Medical Act, but there is one point which his Lordship would wish to bring specially under your attention. His Lordship is advised that the Act is seriously defective, as not providing for a satisfactory and uniform minimum standard of admissibility to the *Medical Register*, and as not enabling the General Council to issue regulations in this respect. The state of the law in the United Kingdom (unlike that which obtains generally in Europe in the same matter) allows a minimum qualification in Surgery to be registered without any qualification in Medicine, and similarly a minimum qualification in Medicine to be registered without any qualification in Surgery; and, so far as may be judged from a recently published analysis of titles contained in the *Medical Register*, it would seem that persons practising on those half-qualifications are to be counted by thousands in the United Kingdom. Cases are not infrequently brought under his Lordship's official notice where persons possessing only such half-qualifications undertake nevertheless to act in all departments of professional practice, and even obtain engagement as salaried attendants on the sick poor in relation to whatever diseases or injuries may affect them. The Lord President regards this state of things as open to serious objection, and his Lordship doubts whether Government could sanction any amendment of the Medical Act which should leave so great an existing evil undealt with. The Lord President is of course aware that at the present time most of the Examining Boards which confer half-qualifications voluntarily extend their examinations beyond the limits of their titular qualification; but his Lordship doubts whether that mode of action, at its best, can supply more than a very imperfect substitute for complete legal qualification, and whether, if it were universal and permanent, it would not itself tend to develop considerable new difficulties.

The Lord President understands that the General Council will now very shortly enter upon its annual session in London, and he accordingly directs me to suggest that perhaps you would bring the above branch of the subject under the particular consideration of the Council, with a view to his being favoured with any recommendation which the Council may be disposed to make in regard of it.

His Lordship further directs me to suggest that the same opportunity would be favourable for eliciting the opinion of members of the Council, whether, if new legislation is to take place, it would be desirable to change in any respect the constitution of Council which the Act of 1858 established.

I have the honour to be, Sir, your obedient servant,
(Signed) JOHN SIMON.

Dr. Burrows, F.R.S., President of the General Medical Council.

The following communication from the Garioch and Northern Medical Association respecting the representation of the Profession in the Medical Council was also read, and afterwards ordered to be inserted in the minutes:—

Inverurie, Aberdeenshire, May 1, 1869.

To the President and Members of the General Council of Medical Education and Registration of the United Kingdom.

Gentlemen,—At a meeting of the Garioch and Northern Medical Association, held here this day, the subject of the want of direct representation of the Medical Profession in the General Medical Council was considered by the Society, and it was resolved to communicate to you the opinion of the Society, that provision for such representation should be made in any amendment which may be proposed on the Medical Act.

The Association begs leave respectfully to submit the following statement and reasons in support of this opinion.

As the Council is now constituted, three-fourths of its members are elected by the licensing corporations, the remaining fourth being nominated by the Crown. The result of this constitution of the Council is that the interests of the licensing bodies are represented rather than those of the Medical Profession at large. The admitted evil of so many examining boards (nineteen in number) conferring diplomas by equally numerous and sometimes conflicting examinations is thereby perpetuated. Besides the inconveniences to the student, and the obstacles thus created to a better system of Medical education, the standard of preliminary and Professional examinations cannot be raised, as the competition among so many licensing bodies is naturally a competition downwards.

Moreover, the funds by which the expenses of the Medical Act, including those of the General Medical Council, are met, are provided not by the licensing corporations nor by Government, but by a direct tax on the members of the Medical Profession. Thus those are represented who are not taxed, while those who are taxed are not represented.

One of the methods by which it has been proposed to accomplish the object in question, is by adding to the Council members elected by the direct votes of registered Practitioners, arranged in districts. In the event of this method being adopted, the members thus elected, together with those nominated by the Crown, should not be less in number than those elected by the corporations.

The other method which has been proposed is that the representatives of the corporations, instead of being elected as at present by the governing or admitting body, should be elected by the members or graduates; those for the colleges by the fellows, members, or licentiates; those for the universities by the graduates.

The latter would be at once the more simple and the more complete of the two methods. It would avoid increasing the number of the Council; it would require simply a declaration to the effect that all registered members or graduates of the corporation shall be entitled to vote in the election of its representative; and by it there would be secured the representation both of the Profession at large and of what is good and of public interest in the corporations.

The Association therefore respectfully expresses the hope that, in any amendment of the Medical Act, clauses will be inserted by which the object in question—the direct representation of the Profession in the General Medical Council—will be secured.

I have the honour to be, Mr. President and Gentlemen,
Your obedient servant,
(Signed by order of the Association) JOHN STRUTHERS, Chairman.

A letter from Dr. Bell Fletcher, of Birmingham, requesting permission to attend with a deputation to present a memorial from nearly 2000 of the most distinguished teachers, writers, and Practitioners in England, Scotland, and Ireland, setting forth the necessity of obtaining an Act of Parliament to amend the Medical Act of 1858 and subsequent Acts, was also read, and ordered to be placed on the minutes.

On the motion of Dr. PAGET, seconded by Dr. STORRAR, it was unanimously agreed that the request of Dr. Bell Fletcher should be acceded to, and the deputation received by the Medical Council on Wednesday, July 7, at 3 p.m.

A number of recommendations of the Executive Committee respecting the expenses of the Council in printing were also read, and adopted *seriatim*, on the motion of Mr. CÆSAR HAWKINS, seconded by Dr. PAGET.

The REGISTRAR then read the following list prepared by the General Medical Council in 1866 and 1867, and intended to come into operation after October 1, 1868, of examining bodies whose examinations shall fulfil the conditions of the Medical Council as regards preliminary education:—

I.—UNIVERSITIES OF THE UNITED KINGDOM.

OXFORD.—Examination for a degree in arts. Responsions. Moderations. Local examinations (senior), certificate to include Latin and mathematics.

CAMBRIDGE.—Examination for a degree in arts. Previous examination. Local examinations (senior), certificate to include Latin and mathematics.

DURHAM.—Examination for a degree in arts. Examination for students in their 2nd and 1st years. Registration examination for Medical students. Local examinations (senior), certificate to include Latin and mathematics.

LONDON.—Examination for a degree in arts. Matriculation examination.

EDINBURGH, GLASGOW, ABERDEEN, AND ST. ANDREWS.—Examination for a degree in arts. Preliminary examination for graduation in Medicine or Surgery.

DUBLIN.—Examination for degree in arts. Entrance examination.

QUEEN'S UNIVERSITY (IRELAND).—Examination for a degree in arts. Entrance examination. Examination for the diploma of licentiate in arts. Previous examination for B.A. degree.

II.—OTHER BODIES NAMED IN SCHEDULE (A) TO THE MEDICAL ACT.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—Examination conducted, under the superintendence of the College of Surgeons, by the Board of Examiners of the Royal College of Preceptors.

THE SOCIETY OF APOTHECARIES OF LONDON.—Examination in arts.

ROYAL COLLEGE OF PHYSICIANS, EDINBURGH: ROYAL COLLEGE OF SURGEONS, EDINBURGH.—Preliminary examination in general education, conducted by a board appointed by these two colleges combined.

FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.—Preliminary examination in general literature.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—Preliminary examination, certificate to include mathematics.

APOTHECARIES' HALL OF IRELAND.—Preliminary examination in general education.

III.—EXAMINING BODIES, IN THE UNITED KINGDOM, NOT INCLUDED IN SCHEDULE (A) TO THE MEDICAL ACT.

ROYAL COLLEGE OF PRECEPTORS.—Examination for a first-class certificate.

IV.—COLONIAL AND FOREIGN UNIVERSITIES AND COLLEGES.

UNIVERSITIES OF CALCUTTA, MADRAS, AND BOMBAY.—Entrance examination, certificate to include Latin.

University of M'Gill College, Montreal.—Matriculation examination.

Universities of Toronto; King's College, Toronto; Queen's College, Kingston; Victoria College, Upper Canada.—Matriculation examination.

University of King's College, Nova Scotia.—Matriculation examination. Responsions.

University of Faedericton, New Baunswick.—Matriculation examination.

University of Melbourne.—Matriculation examination, certificate to include all the subjects required by the General Medical Council.

University of Sydney.—Matriculation examination.

Codrington College, Barbadoes.—1. English certificate for students of two years' standiug, specifying the subjects of examination. 2. Latin certificate, or "testamur."

Tasmanian Council of Education.—Examination for the degree of Associate of Arts, certificate to include Latin and mathematics.

Reports from the Branch Councils of the Medical Council, on the appointing a board for the examination of students in preliminary education, were also read. The Branch Council for England reported that such a power would not conduce to a more efficient and satisfactory system of preliminary examination.

The Branch Council for Scotland strongly recommended the appointment of a joint board for the purpose, over which the Medical Council could exercise direct control.

In bringing forward their report on the preceding remit, the Branch Council have to observe that the Medical Act does not authorise the Medical Conncil directly to establish an examining board, but that it is competent for the Council to recommend the formation of such a board by the licensing bodies jointly.

In this view the Branch Council have adopted the following report, as embodying the recommendations which they are of opinion might be made on the subject:—

The importance which the General Medical Council attach to the preliminary education of Medical students is evinced by the constant attention which the subject has received since the institution of the Council. Notwithstanding, however, the strenuous efforts which have been made to ascertain that students about to enter on the study of Medicine possess an adequate knowledge of those subjects which the Medical Council have laid down as a minimum standard of general education, there can be no doubt that the variety in the systems of examination recognised has failed to secure the desired result. In proof of this, the Scottish Branch Council have only to refer to the reports of the Committees on Preliminary Education, which will be found at p. 215 of vol. v., and p. 248 of vol. vi. of the Minutes of the Medical Council.

It appears to this Branch Council that many of the imperfections attending the preliminary examinations arise from difference, both as to the subjects of examination and the modes of conducting it, existing at the different recognised boards. The educational bodies recognised by the Council are too numerous, and the certificates they grant are based upon standards, in some cases higher, in others lower, than are recommended by the Council. The analysis of preliminary examinations prepared by Dr. Hawkins, which will be found at vol. iv., p. 75, of the Minutes (May 21, 1866), may be referred to in confirmation of this statement. It thus appears that equality in the standard of proficiency cannot be obtained with so great a variety of boards, implying also so great a variety of judges. Under the system in operation, it is impossible to secure that the nature of the questions set, even on the same subject, at the various boards, can be of similar value; or that the opinions of the examiners as to the merit of the answers can so harmonise that an approach to an equal or balanced estimate of proficiency can be looked for. It is evident from the reports on preliminary education already referred to, that none of the boards except those specially instituted by the licensing bodies have made any attempts to adapt their examinations to what the Council require from intending Medical students. It has been proposed, as a means of ascertaining that the recommendations of the Medical Council are carried out by the national educational boards, to institute a system for visiting and reporting on the examinations conducted by them, similar to that which has been adopted for the preliminary and professional examinations of the licensing bodies. When it is borne in mind, however, that these boards hold a position quite independent of the Medical Council, there can be little doubt that many of them would decline to admit any extraneous supervision; but, in any case, the exercise of a supervision so extensive would involve serious difficulty and expense.

In these circumstances, the Scottish Branch Council suggest that the General Council should recommend to the licensing bodies a system over which direct control could be exercised, and which might from time to time be adapted to the proper standard of preliminary education. The Branch Council are of opinion that in Scotland there are no insuperable difficulties in the way of establishing a joint board, such as is here proposed; and, if the Medical Council shall think that such a board would constitute a more convenient and efficient means of conducting the preliminary examinations than at present exists, the Branch Council have to suggest that the licensing bodies in each division of the kingdom should be invited to express their opinion on the subject of the contemplated recommendations.

The Branch Council for Ireland report "that this Branch Council is of opinion that it might be very desirable, if the legal rights and privileges of the several licensing bodies permitted it, were the preliminary examinations conducted by an examining board for each division of the United Kingdom."

The Branch Council for England also reported that "while recognising the advantage of instruction in logic as part of the education of a Medical man, it does not recommend the introduction of logic as a necessary subject of the preliminary examination of the Medical student."

Ultimately, on the motion of Dr. Fleming, seconded by Dr. Alexander Wood, it was agreed that a committee should be appointed to consider these reports on the subject of a board or boards for conducting preliminary examinations, and to report their suggestions on the subject.

The following petition, presented to both Houses of Parliament in pursnance of a resolution of the Council of July 6, 1868, praying for early legislation on the subject of secondary education in Scotland, was also read:—

To the Honourable the House of Commons in Parliament assembled:

The humble petition of the General Council of Medical Education and Registration of the United Kingdom

Showeth,—That the Council was established by the Medical Act passed in 1858 (21 and 22 Vict., cap. 90), and was by a later Act (25 and 26 Vict., cap. 91) made a body corporate.

That one of the principal duties of the Council is to keep and publish a register of such persons as have obtained, or may obtain, licences or other legal qualifications to practise Medicine or Surgery from bodies whose qualifications are recognised by the Medical Act, to the end that "persons requiring Medical aid should be enabled to distinguish qualified from unqualified Practitioners."

That, for the purpose of securing that all persons who shall be entitled to have their names and qualifications placed on the register shall have been duly educated and tested by examinations, certain powers of inspection and of representation to her Majesty's most Honourable Privy Council should need be conferred on the Council by the Medical Act.

That the Council are of opinion that the interests of the nation require that the education of Medical Practitioners should be raised above its present standard, and that it is their duty to the extent of their powers to promote its improvement.

That the Council are in the belief that a solid groundwork of preliminary general education is of the utmost importance to the successful prosecution of Professional study, and that the greatest impediment to sound Professional education is to be found in the defective early mental discipline of Medical students.

That, notwithstanding the desire of the several Medical corporations and universities of the United Kingdom to comply with the recommendations of the Medical Council that all persons, previously to being recognised as Professional students, shall pass an adequate examination in general knowledge, the Council have reason to apprehend that the maintenance of a sufficient standard is rendered exceedingly difficult, owing to the defective and limited education generally given in secondary schools.

That the views of the Council as to the defective state of secondary education is fully confirmed by the reports of the Commissioners on Secondary Schools.

The General Medical Council therefore pray your honourable House, without delay, to pass such laws as may seem to your honourable House to be best adapted to remedy the existing defects of endowed schools, and otherwise place the secondary education of the United Kingdom in a satisfactory state. And your petitioners will ever pray.

The Council then adjourned to Friday, at two o'clock.

Second Day.—Friday, July 2.

The Debate on the Amendment of the Medical Acts. Sir John Gray and the Medical Council.

Dr. Andrew Wood, in moving the first resolution—"That a committee be appointed to consider the question of the amendment of the Medical Acts, and that to this committee the communication from the Government on the subject be referred"—said: Whatever you may call this upon the minutes, any man who reads the communication must believe that it is a communication from the Government. And I am glad to think that it is so for this reason—that we have been going on from year to year knocking at the doors of successive Governments, one Government not a bit better than the other, whether Whig or Tory, and all we have got for our trouble has been a great deal of courtesy and very little material assistance. There is an old Scotch story that illustrates this, of an old elder who used to attend church, and as it is the happiness of Scotland to have a plate for collecting the offerings at the church door, he was one of those who took upon him that office. Now a certain Lady Betty, when she passed the elders who stood at the door, used always to give them a most elegant curtsey, and one day the old gentleman of whom I have spoken, said, "We need mair o' yer baubees, Lady Betty, and less o' yer menners." (Laughter.) However, now the Government have not only put themselves in communication with us, but they have actually pointed out to us several matters which they wish us to take under our consideration; and I think this is a favourable opportunity of saying something as to the working of the Medical Act of 1858, because it must be known to the members of this Council that last week in the House of Commons a most furious tirade was made against the Medical Council and the Medical Act by my friend Sir John Gray. The Medical Council have always been alive to defects in the Medical Act; we have evidence of that in the fact that from a very early period of their sittings they have set themselves about the task of amending that Act, and, had they obtained more assistance from the Government in former days, that Act would have been amended long ere this. I wish to state that I think there is far too great an impression on the public mind that Medical legislation concerns more the Profession than it does the general public. That I deny.

(Applause.) The object of Medical legislation is not directly to benefit the Medical Profession, though indirectly it does so, but to benefit the public; because, if you read the preamble of the Medical Act, you find that the object which a paternal Government had in sanctioning that Act was to enable the public to distinguish between qualified and unqualified Practitioners. There is another thing that I will allude to—we often see in the Medical journals great attacks on the Medical Act, and great opprobrium is thrown upon it because it is sometimes said, "This is the Bill of the corporations." There cannot be a greater mistake. That Act, with all its merits and demerits, is not the Bill of the corporations, but a Bill brought in in defiance of the corporations. The corporations, before this Medical Act was passed, met together and elaborated a Bill, which was called Mr. Headlam's Bill, and, notwithstanding Dr. Storrar's denunciation yesterday, I have no hesitation in saying that if Mr. Headlam's Bill had been passed, it would have gone a great length in carrying out the wishes of the Government with regard to the amalgamation of examinations. With regard to Sir John Gray's remarks, I feel that this Council is bound to vindicate itself, because he made a speech in the House of Commons extending to three columns and a half of the newspaper, which he has been kind enough to send me in order that there may be no mistake in any comments that I may make upon it. This speech was made in the course of the debate upon the superannuation of Medical officers in Ireland, and Sir John Gray, who seems to have been very full of the speech, and who seems also to be very proud of his speech, took the opportunity of bringing in, *apropos* of the matter, the whole question of the Medical Council and of Medical education in general. I think, if my friend had devoted a little more time in ascertaining what the real facts were, he might have saved himself from conveying a very false impression (I do not say he did it knowingly; I know he did not; he is a man of honour) to the House of Commons, by whom he was very loudly cheered, in regard to the Medical Profession and in regard to the acts of the Medical Council. He was making some remarks with reference to the age of candidates for the Poor-law service, and I will now read you two extracts from his speech:—"Sir John Gray felt indebted to his hon. friend for calling his attention to that Act, which he did not hesitate to say was a grievous failure. It was true there was some petty tinkering under that Act [Well, there is some truth in that], but the changes made, though tending to afford greater opportunities for the acquisition of knowledge and increasing the expense to the student, failed to enforce a sufficient test as to the fitness of the candidate for being licensed to practise, or, more properly speaking, to experiment upon the lives of the subjects of the Queen." Those are the terms in which Sir John Gray speaks of our Profession. Then he goes on and makes complaints against the licensing bodies in regard to their diplomas, and, speaking of the Army Board, he says:—"That board accepts any registered holder of a diploma in Surgery as a man who had given evidence that he had received a good preliminary Medical education, but they accept his diploma—and they are right—as proof of no more; and before they allow the holder of that degree (whether he has one or ten) to practise—to make experiments upon the valuable lives of the soldiers—they take him to the bedside and satisfy themselves that he is more likely to cure than to kill before they give the men over to his charge. (Hear, hear.) This is not done by the several licensing bodies, and he (Sir John Gray) complained of the gross neglect of their duty by the Medical Council in not having forced the licensing bodies to do this long ago." It is all very well to talk of forcing licensing bodies to do this long ago, but if Sir John Gray had studied the Medical Act before he made this speech, he would have known that the powers which had been communicated to the Council are not of so strong a nature as to enable them to carry out their resolutions when they are made. Then he goes on to say something else which astonished me—he said that one of the great advantages which were held out for the passing of the Medical Act was that the Medical Council would visit the several licensing boards with a view of ascertaining whether they were doing their duty; and he went on to say that this is a duty which the Medical Council have completely neglected. (Loud laughter.) Now, I think it would be doing a service if a copy of the various reports on the visitation of examinations were to be sent to Sir John Gray, and I think it would be a very good dose for him to swallow to read the whole of them from beginning to end. (Laughter.) With regard to the visitations of examinations, I now state publicly that this duty has been most conscientiously and laboriously fulfilled for years past by the Council, and not only that, but fulfilled with the effect of producing great improvements in examinations—(hear, hear)—and I do sincerely trust that this Council will continue to practise that visitation, because it seems to me that that is the only real and efficient control which was given by the Medical Act, and that, if they neglect that part of their duty, they neglect the most important part of all. Well, at all events, we have done what Sir John Gray says we have not done in that respect—have we done nothing more? He says that Sir Benjamin Brodie made a loud denunciation against the state of the Profession in his day, especially as regards preliminary, but also as regards professional, education. Well, I must candidly admit that at that period the state of the Profession, especially as regards preliminary education, was most deplorable. It was an intolerable thing that at that time you could get the degree of a university, the highest honour in Medicine, with no other test of preliminary education than the reading of a small passage in Latin. Has the Council done nothing since then? (Applause.) Why, Sir, if we look at the recommendations of the Council, we find that they require that every Medical student before he can be registered shall have gone through an examination in the English language and arithmetic, including vulgar and decimal fractions, algebra, including simple equations, Euclid, including the first two books, and any one of the following subjects:—Greek, German, natural philosophy, and mechanics, including hydrostatics and pneumatics. I know it has been said by the British Medical Association, who sent remonstrances up to this Council, that though we have instituted preliminary examination, we have pitched it very low. I do not admit that. The standard to which they would raise us is, it seems, the examination of the University of London. Well, I respect the examination of the University of London, but I say that for any sane man to require that as a preliminary entrance into the Profession is totally out of the question. I am quite sure that if we did pitch our requirements too high one of two effects would be produced: either the examination would become a sham, because you would not insist upon one-half you asked, or else you would starve the public of a proper supply of Medical Practitioners. I believe we have gone as far as we possibly can go, and I cherish this hope, that in a few years, when we have raised the character of the Medical Profession and operated as we are doing now by our examinations upon the lower schools of the country, we shall be able to insist upon a higher test of preliminary education. I recollect two or three years ago the Medical Council rather hastily adopted the resolution that Greek should be made compulsory. Well, there is no man that would put the education of a Medical man higher than I would if I could see my way to do it; but I was glad when the Council went back with regard to that and resolved they would not make it compulsory, because I knew as well as possible, and every man of experience among Medical students knew, that that was a thing which could not be insisted upon. Under these circumstances I say that when the Medical Council is accused of having done nothing for the Profession, there is left out of view the fact that they have, by their moral suasion, or by their regulations, or in some way or other, produced this effect, that I believe there is no licensing board in this country that is not insisting upon a preliminary examination. That was not the case in the days of Sir Benjamin Brodie. (Applause.) Then, again, we are told by Sir John Gray that it is all very fine to examine upon anatomy, and chemistry, and botany, and all those scientific things, but that will not enable a man to practise at the bedside; and he makes a great accusation against the Council that they have done nothing in the way of influencing the corporations to adopt clinical examinations. He is wrong there also, as he would have found if he had made a little more inquiry. I cannot speak exactly for England or for Ireland—they will be able to speak for themselves—but I can tell him this, that there is no board in Scotland that does not adopt a clinical examination. There is no qualification given without a clinical examination. The Edinburgh College of Surgeons, the Edinburgh College of Physicians, the Edinburgh University, the Glasgow University, the Glasgow Faculty, all require it, and the same in the case of Aberdeen. I say, therefore, that here again Sir John Gray has misled Parliament for want of knowledge, and that if he will read our Visitation of Examinations, which we shall have the honour of sending him—(hear, hear)—he will find that there also the Council has not been so neglectful as he has stated. Again, is it nothing that the Medical Council has also established an Imperial Pharmacopœia—a Pharmacopœia which, I believe, is now admitted on all hands to be as good as there is in the world? (Applause.) I come now to the question—Is there, or is there not, need of amending the Medical Act, and, if there

is, what are the chief things that need to be amended in it? The Council in former days had recommended the substitution of a clause for clause 40 in regard to the penalties upon those practising under false titles, and they have adopted also a clause enabling us to register colonial degrees. We all know there has been a very great outcry on the part of Medical Practitioners that the Medical Act has not protected them sufficiently—as if the Medical Act had been framed for any such purpose. I deny that the Medical Act was made to protect Medical Practitioners from quacks; and I say, if it had been so intended, most unquestionably it would have failed in its operation. Any man may attempt as much as he likes to put down the quacks in this country; but no amount of registration or anything else will be effectual so long as there are men who are willing to be quacked. But in the Act of 1858 the words were so obscurely stated that there has been a miscarriage of justice, and frequently men who were assuming false titles and sinning against the spirit of the Act could not be convicted under the letter. But I believe the clause suggested some years ago, which enforces registration and makes the register the proper evidence by which a judge is to discriminate who is qualified and who is not, will remedy that defect. With regard to colonial diplomas, that was a matter taken up at the request of Sir George Grey. We adopted a liberal policy, and I think, if we can get an enabling clause, we shall have shown our sympathies with the colonies and our wish to do them justice. (Applause.) But, notwithstanding all our labours, most unquestionably much more is required; and with regard to the communication from the Government recommending the amalgamation of the examinations, it is what I have always thought to be a most important matter, and it is a matter which we sought to obtain in former Parliaments. In Sir James Graham's Bill and in Mr. Headlam's Bill this was the very cream of this measure; but in the present Act there is nothing more than what anatomists would call rudimentary remains of development—there is a sort of permissory clause. There is but one opinion held now, whatever may have been held in former years—that there should be but one portal of entrance into the Profession, and that it should be required of every man that he should have been educated and examined in every individual part of his Profession. I trust, therefore, that in the Bill about to be brought in by Government there will be some additional arrangements like those contained in Mr. Headlam's Bill, or at all events a permissory clause by which we should be enabled at least to form an examining board in each part of the country. It would be a great boon to the licensing boards, who are not at all anxious—I may tell my friend Dr. Bennett that, as he seemed to be very warm upon the subject yesterday—to retain power over the preliminary examinations, but are, on the other hand, most anxious to get rid of that responsibility altogether as soon as they can see it placed in good hands, as not germane to their ordinary functions. I have only one word to add, and that is with regard to the constitution of the Council. I have already freely stated my opinions on the subject at the last meeting, and I have really nothing to add except this—that we must now go into the matter; we must now consider the constitution of the Council, and we must be prepared to give an answer to the Government, stating either that we believe the constitution of the Council to be perfect at present, or that we believe it requires to be modified—(applause)—and in the latter case we shall have to state to the Government how we think that modification should be carried out. You are quite aware that several projects have been entertained for this purpose. There is the project of adding to the Medical Council men directly sent by the franchise of the registered Practitioners; and there is also another, which I have never been able to approve of myself because I think it unworkable and clumsy. I mean the sending of two members to this Council by the different corporations and universities through the means of every large constituency, such, for example, as the College of Surgeons of England, which I think would amount to about 15,000 voters. These are matters which would require careful attention, and I do sincerely trust that you will agree with me that a committee at all events may be appointed. (Applause.) That committee will have pretty hard work before it, and very difficult work, but I think the members will be greatly aided if they will only refer back to the previous attempts at legislation and allow us to get a Bill of such a character as that it will have some permanency—(applause)—because I do not think it is conducive to the interests of the Profession or of the public to have from time to time small and imperfect bills which require tinkering up, thus keeping us in a state of constant agitation. It seems our motto for legislation should be "thorough;" I think the Government should take the matter up, and I trust that they will take it up in such a manner as that, when once they show their desire to benefit the public and the Profession, they will also show that we are not prepared to take any violent means which might have the effect of crippling, much less of destroying, these valuable institutions, the colleges of this country, which are peculiarly British institutions, and which, notwithstanding the abuse frequently lavished upon them, I believe have conferred great benefit upon the community and upon the Profession. With those words I beg to submit my motion.

Mr. Cæsar Hawkins (who was very imperfectly heard) seconded the motion. Referring to Mr. Simon's letter, he pointed out there would be no necessity for requiring students who desired to take the higher qualifications conferred by the universities to undergo the examinations for lower qualifications. Up to the present time there was nothing to prevent a man from practising Medicine or Surgery without any diploma, although he could not adopt any of the recognised titles. Before the Act of 1858 even this restriction did not exist, and there were not a few men of good position, who could without difficulty have passed the examinations, but who, from various causes, had never done so. He believed the Apothecaries' Society was the only body which did not now examine for the double qualification.

Mr. Cooper said that, as allusion had been made to the Apothecaries' Society, he had great pleasure in saying that the suggestions of the Council had been carefully followed by the Society in their examinations, and he appealed to the gentlemen who had visited those examinations whether they did not reflect great credit upon the Society.

Sir Dominic Corrigan reminded the Council that the question before them was whether or not a committee should be appointed to consider the amendments of the Medical Act. Mr. Simon's letter had been criticised by Mr. Hawkins, but he (Sir D. Corrigan) thought the Government ought to be met in a fair spirit. He took it for granted the committee would be appointed, and he therefore would not take up their time by making a speech in support of the resolution. But he felt bound to reply to some observations of Dr. Andrew Wood. He was sorry to hear the attack that had been made upon Sir John Gray, who was not there to answer for himself, and if no one rose to answer the criticism of Dr. Andrew Wood, it might be said that the whole Council agreed in them. Sir John Gray was a warm friend of the Profession. He had graduated in it himself, and even if he had fallen into a mistake and used rough words in the House of Commons towards the Council, allowances ought to be made for what was said in the heat of debate, and the fault should be attributed not to Sir John Gray himself, but to the sources from which he obtained his information. Dr. Andrew Wood had accused him of saying that the Act was a perfect failure. Was there a man at that time who could say he was wrong in that? [Dr. Andrew Wood: I do.] Dr. Andrew Wood may object to the word "perfect." Omitting that word, nobody would deny that the Act had been a failure. Sir John Gray said the Council had not succeeded in providing the country with well-educated Practitioners for the care of the poor; that the army and navy and Indian boards had been obliged to throw overboard altogether qualifications issued by all the licensing bodies in the kingdom and to examine for themselves. Was that or was it not the fact? and if so, did it not bear him out in the statement that the Act had been a failure? Next he charged the Council with not enforcing its own recommendations. Well, we might say the Council had not the power. Repeated assertions had been made at that board that the Council had the power, although he (Sir D. Corrigan) had always controverted the statement. Well, if Sir John Gray was under the impression shared by a great number of the Council that the power did exist to enforce the recommendations of the Council, he was quite right in charging them with a dereliction of duty in not having done so for the eleven years they had been in existence, for there was scarcely a licensing body in the kingdom that had not laughed at the regulations of the Medical Council. ["No, no," from Dr. Paget.] If they would hear him out, he would prove his words. One of the very first recommendations was that no man should obtain the high degree of M.D. without going through a degree in arts. What was the first body to tell the Council to mind its own business, that it had no concern in the matter, and could not enforce it? Why, the University of Edinburgh. (Laughter.) Did the Queen's University obey that? It did not. Did the University of Glasgow obey it? It did not. Did the University of St. Andrews? It did not. Either the Council had the power or not. If it had, after having issued that recom-

mendation, Sir John Gray was perfectly right in stating that the Council had neglected its duty in not having applied to the Privy Council to enforce its views. The Council was placed in a dilemma if it said that it had the power of enforcing its recommendations, because during the eleven years of its existence it had never done so, and he would go further than that and say that it had never attempted to do so. Dr. Andrew Wood stated that the visitation of examinations had been most laboriously and efficiently carried out. (Hear, hear.) He took leave to deny that, and he thought there was abundant evidence on the papers before them to support him in that denial. He found a careful calculation of the number of times the visitations had been made, and in the prospectus of one of those immaculate bodies in Scotland there was one little line which stated that if a young man paid ten guineas extra he could have a special examination in the evening. (Laughter.) Dr. Andrew Wood said the qualifications had been raised; he (Sir Dominic Corrigan) maintained that it had been lowered by the Medical Council. From the very foundation of the Apothecaries' Hall in Ireland no young man had ever been permitted to be bound apprentice to an apothecary without preliminary examination in Greek, whereas last year, when it was suggested that Greek should be made a universal requirement, and that it should date from the year 1870, that suggestion had been discountenanced by the Council, who thought that 1870 was too early a period to require a knowledge even of the Greek letters. (Laughter.) Again, they had excluded from their list the subject of botany. Was that advancing? The Army Board required it, and rejected students for ignorance of it. Again, Dr. Andrew Wood was certainly the last man that he would have expected to have heard uttering the sentiment that it was unwise to place qualifications too high. [Dr. Andrew Wood: Preliminary education.] And what was his reason? That if you demanded too high a standard, then there would not be a sufficient supply of educated Practitioners furnished to the country. (Laughter.) [Dr. Andrew Wood: No, no.] Then it was that you would not be able to supply a sufficient number of Medical men for employment in the country. How very liberal boards of guardians were in paying Medical men! And was it to be said, because beggarly boards of guardians wanted to reduce the emoluments of Medical officers to a ridiculously small sum, that the Council were to bow to their parsimony and educate their students accordingly? He remembered once saying to a member of an Irish board of guardians, who could not see why they should not get their Doctor as they got their baker—(laughter)—"It would be all very well if you would confide to the same gentlemen to whom you are going to hand over the poor the lives of yourself and family; but if you have only a toothache you will come up to Dublin for advice." (Laughter.) In place of such wretched suggestions let them keep their standard high, and let beggarly boards of guardians, if they did not wish to pay for well-educated men, find that the Council would not furnish them with ill-educated men. He would never forget the answer of the late Abraham Colles when examined before the House of Commons. On being asked would it not be right, or possible, or prudent to educate an inferior grade of men for the care of the poor, he answered, "I know of no mode of curing a poor man different from that of curing a prince." (Applause.) And yet they were now called upon to let in an inferior class of men in order to please niggardly boards of guardians. (Laughter and applause.) The learned Baronet then, in support of his assertion that preliminary education had advanced but little, read some returns from the navy boards, showing the number of rejections, and stated that, with such examples before them, it was scarcely possible to support the censure passed upon Sir John Gray, or to maintain that the Council had improved either the preliminary or the Professional education of the Profession. (Cries of "Oh! oh!") "Oh! oh!" was neither an argument nor a fact. Dr. Andrew Wood stated, with a great deal of pride, that there was not an examining board in Scotland which did not examine in clinical Medicine and Surgery. (Applause.) But was it not the fact that one of the Scotch universities gave degrees without any examination at all? (Loud cries of "No" and interruption.) He had papers somewhere which would prove it. They gave degrees to men over forty years of age. [Dr. Alexander Wood: But they examine them.] They conferred ten degrees per year upon men who were able to satisfy the examiners of their proficiency, provided they got certificates from gentlemen in the Profession that they were well-behaved men. (Laughter and "No, no" from Dr. Alexander Wood.) Dr. Andrew Wood, again, had been wrong in saying that no degree was given in any Scotch university without a clinical examination in Medicine and Surgery.

Dr. Andrew Wood: I mentioned Edinburgh, Glasgow, and Aberdeen, but I did not mention St. Andrews.

Sir Dominic Corrigan: You began your observations by saying that in Scotland there was not an examination, etc.

Dr. Andrew Wood: I was wrong, then, in that.

Sir Dominic Corrigan: At St. Andrews it was given without any teaching body at the university, without any examiners resident on the spot; and as to Clinical Surgery, there was no Hospital in the town. What could be said, then, as to the criticisms of Sir John Gray, with these facts staring them in the face? In place of attacking Sir John Gray, it would have been much more prudent to confine themselves to discuss the amendment of the Medical Act. Having now defended Sir John Gray as far as he ought to be defended, and as far as he (Sir D. Corrigan) felt it his duty to defend him, he would conclude by stating that the resolution had his hearty support.

Dr. Alexander Wood was not at all surprised to find Sir Dominic Corrigan defending his brother baronet, Sir John Gray, because he found the *Freeman's Journal*, about which Sir Dominic knew something, advocated opinions very similar to those of Sir Dominic himself. He hoped before long to see the learned baronet sitting beside his friend in the House of Commons, and delighting hon. members with that eloquence which had been so often admired at the Medical Council. The learned Doctor then made a spirited reply to the remarks of Sir Dominic Corrigan as to the failure of the Medical Acts, and the neglect of duty on the part of the Medical Council in raising the standard of education. For illustrations where corporations had set the requisitions of the Council at defiance they must look to Ireland; and again, as an example of recusancy on the part of members of this Council who refused to visit examinations, Sir Dominic Corrigan furnished in his own person an illustration of defiance towards the requirements of the Council. A more serious charge could not be brought against the Medical Council than that it had lowered the standard of preliminary education. Having been perhaps more engaged with that particular question than any other that had come before them, he might be allowed to say a few words in defence of the Council upon that point. Sir Dominic Corrigan had alluded to the non-requirement of Greek as a subject of preliminary education; well, at all events the Council had added several modern languages, and had improved the examinations in preliminary education as far as they had the power. They had visited them, and they had collected a vast body of evidence with regard to their present state, and a committee was at present sitting for the very purpose of endeavouring to act upon the information so obtained. Sir Dominic Corrigan had held up Irish Apothecaries as a model because they had been examined for years in Greek. It would have been rather more to the purpose if they had been examined in something which would render their licentiates better Practitioners. (Laughter.) In former years the learned baronet had been the first to criticise the licentiates of that Society, and now, when it suited his purpose, he held them up to the Council as models, as angels of light. The Council had given a good reason for not requiring an examination in Greek—namely, that they did not consider the state of education in the schools of this country was such as to warrant them in exacting it; but, to show their anxiety to raise the standard, he would remind the Council of the petition presented to Parliament upon the subject of general education. That was the true way to go to work; by the other method nothing more than a smattering would be acquired, and the baneful system of cramming would be encouraged to the uttermost. This was the very thing the Council from its experience wished to avoid, and therefore they had decided not to exact a knowledge of Greek until they could hope that such a knowledge would be thorough as far as it went. (Applause.) Sir D. Corrigan had quoted the navy returns for the same purpose—namely, to show a decline in the state of preliminary education. It was an insult upon the Council to say that they had lowered the standard in that respect when it was manifest that they had done their very utmost to raise it. With regard to the charge that the University of St. Andrews was entitled to confer degrees upon a certain number of graduates every year who brought certificates of proficiency, if it meant anything it meant that it was done without examination. Such was not the case. It was done after full and careful examination, as would appear from the report upon the examination returns signed by two gentlemen not at all likely to be partial—namely, Professor Syme and Dr. Fleming. Upon the whole he felt the Council would agree that Sir Dominic Corrigan had entirely failed to make out his case, had entirely failed to defend Sir John Gray from the charges brought against him by Dr. Andrew Wood, but that he had succeeded

most fully and completely, as he had often done before, in casting aspersions on the work and character of the Medical Council. (Applause.)

Dr. Thomson, as representative of the University of St. Andrews as well as of Glasgow, called the attention of the Council to the rules contained in the St. Andrews University Calendar, in explanation of the charge brought by Sir Dominic Corrigan against that institution. He would read the regulations with reference to the degree of M.D., which the University was empowered to confer upon candidates of forty years of age:—"The Degree of Doctor of Medicine may be conferred by the University of St. Andrews upon any registered Medical Practitioner above the age of forty years, whose Professional position and experience are such as, in the estimation of the University, to entitle him to that degree, and who shall, on examination, satisfy the Medical examiners of the sufficiency of his Professional knowledge. Provided always that degrees shall not be conferred under this section on a greater number than ten in any one year." He would also call the attention of the Council to the fact that the printed paper which he held in his hand, and from which Sir Dominic Corrigan had quoted, contained the very same regulation with regard to the examination required of candidates for the degrees in question by the University of St. Andrews—viz., "and shall on examination satisfy the examiners"—and in conclusion he drew their attention to the fact that the report of the visitors of their examinations was a highly complimentary one.

Dr. Leet felt bound to protest against the aspersions which had been cast upon the Apothecaries' Society of Ireland by Dr. Alexander Wood in replying to Sir Dominic Corrigan. The students had to undergo a most stringent and lengthy examination, and he could assure the Council that as Practitioners they had the confidence of the Irish public. Moreover it was found that candidates from different educational bodies had great difficulty in passing those examinations, and frequently complained of their severity.

Dr. Christison was glad to find that the charge brought against the University of St. Andrews had been disproved. At the same time, if anybody might be spared the test of an examination, he thought it would be Practitioners of known standing, and forty years of age. However, he had no doubt that, even supposing such a practice to exist at St. Andrews, the governors of that body would at once comply with any suggestion of the Council upon the subject. As to their not having a Hospital for clinical examination and study, there was one close by at Dundee, and he supposed it would not be gravely contended that residence on the part of the examiners was necessary to an efficient carrying out of their duties.

Dr. Andrew Wood desired to say a few words in reply to some misrepresentations on the part of Sir Dominic Corrigan. A great grievance had been made of the fact that he had criticised the speech of Sir John Gray when he was not here to defend himself. Well, Sir John Gray had made a furious attack upon the Medical Council when they were not present in the House of Commons to defend themselves. He (Dr. Andrew Wood) only wished he had been in the House of Commons, for in that case he would have broken a lance even with Sir John Gray. It was a foul calumny to represent that the Medical Council was a collection of delegates whose object was to advance the purely pecuniary interests of the bodies whom they represented, and he felt bound, when such suggestions were made in the House of Commons—especially as a fictitious importance was lent to them from the place where they were spoken—to take the earliest opportunity of protesting against them.

The motion was then put from the chair, and carried *nem. con.*

The following members were nominated to serve upon the committee:—The President, Dr. Bennett, Mr. Hawkins, Dr. Paget, Dr. Andrew Wood, Dr. Apjohn, Sir Dominic Corrigan, Bart., Dr. Parkes, Dr. Quain, and Dr. Christison.

It was then moved by Dr. Paget, seconded by Dr. Andrew Wood, and agreed to, that the communication from the Garioch and Northern Medical Association, and the letter of Dr. Prosser James, be referred to the committee just appointed.

The following letters, addressed to the Registrar in consequence of a resolution passed by the General Council on July 6, 1868, in reference to those licentiate bodies in Ireland who do not require the preliminary examination to be passed before Medical study is begun, were then read by the Registrar:—

King and Queen's College of Physicians in Ireland,
Dublin, March 10, 1869.

My dear Sir,—I am directed by the President and Fellows of the King and Queen's College of Physicians to inform you that they had under consideration at their meeting on Friday, the 5th inst., your letter of August 22, enclosing a resolution relative to preliminary examination which was passed by the General Medical Council on July 6, and that the following resolution was adopted by the College:—

"That the Council is in error in representing that throughout England and Scotland a complete uniformity has been brought about by the adhesion of the licensing bodies to the recommendation of the General Medical Council—viz., that 'the preliminary examination should be passed before Medical study is begun;' and, moreover, that the College is of opinion that the plan proposed by the General Medical Council of substituting a preliminary examination to be undergone previously to the commencement of Professional study, instead of encouraging an education in arts carried on for one or more years, is not calculated to advance the acquirement of a good general education."

I am, dear Sir, yours truly,
(Signed) James Little, M.D., Fellow and Registrar.

Francis Hawkins, Esq., M.D., Registrar, General Medical Council.

School of Physic, Trinity College, Dublin, June 15, 1869.

Sir,—In reply to your letter of August 22 last, and the resolution of the General Medical Council therein enclosed, I am instructed by the Board of Trinity College to forward the enclosed reply, and am

Your obedient servant,
(Signed) Samuel Haughton, Medical Registrar.

Dr. Francis Hawkins, etc., etc.

In reference to a communication from Dr. Hawkins, Registrar of the General Medical Council, to the Medical Registrar of Trinity College, enclosing a copy of a resolution passed by the General Medical Council of the United Kingdom on July 6, 1868, viz.:—

"That the Registrar be requested to address a letter to those licensing bodies in Ireland which do not require the preliminary examination to be passed before Medical study is begun, representing that throughout England and Scotland a complete uniformity has been brought about by the adhesion of the licensing bodies to the recommendation of the General Medical Council in this respect, and that it is highly desirable that students in all the three divisions of the kingdom should be placed on the same footing by the Irish licensing bodies using every means to obtain the necessary powers to enable them to require that preliminary education and examination shall be really preliminary to Medical study"—

the Board of Trinity College, having consulted with the King and Queen's College of Physicians, is not at present prepared to recommend a change in the existing arrangements in the subject of preliminary education. The board desires also to direct the attention of the Medical Council to the following resolution of the College of Physicians:—

"The College is of opinion that the plan proposed by the General Medical Council, of substituting a preliminary education to be undergone previously to the commencement of Professional study, instead of encouraging an education in arts, carried on for one or more years, is not calculated to advance the acquirement of a good general Medical education."

June 14, 1869. John Toleken, Registrar, Trinity College, Dublin.

Queen's University, Dublin Castle, June 26, 1869.

Sir,—In reply to your letter of August 22, 1868, enclosing a resolution of the Medical Council of July 6, 1868, respecting preliminary education, I am desired to express the opinion of the Senate that a mere preliminary examination is not a sufficient test of extra-Professional education.

I may also observe that the matriculation examination passed by the Medical students of this university constitutes only a part of the test in general education to which they are subjected.

I am, Sir, your obedient servant,
G. Johnstone Stoney, Secretary.

Francis Hawkins, Esq., M.D., Registrar.

A motion was then unanimously agreed to that these letters should be placed upon the minutes.

Dr. Apjohn, Dr. Aquilla Smith, Dr. Stokes, Dr. Andrew Wood, Dr. Alexander Wood, Sir Dominic Corrigan, Bart., Dr. Storrar, and Dr. Parkes then entered into a long discussion upon this correspondence; an attempt being made on the part of the English and Scotch representatives to get a categorical answer from Sir Dominic Corrigan and Dr. Aquilla Smith as to the practice of the Irish licensing bodies with regard to their requirements in the matter of preliminary education.

The hour of six, however, struck before any decisive conclusion was arrived at, and the debate was adjourned, on the motion of Dr. Paget, until Monday, the 5th.

Third Day.—Saturday, July 3.

The Council met at 1 o'clock with the intention of proceeding at once to committee business, but the minutes of the last meeting having been confirmed,

Dr. Alexander Wood moved that the report of the Committee on State Medicine be received.

Dr. Acland (the chairman of the committee) said: I proceed to lay before you the report which has been drawn up by the Committee on State Medicine. The report itself consists of only two pages, and probably it will save the time of the Council if I read it at once.

Report of Committee on State Medicine.

The State Medicine Committee appointed June 27, 1868, beg leave to report that, in pursuance of the instructions they received, dated July 8, 1868, they have forwarded to various persons at home and abroad the following letter and questions:—

"Office of the General Council of Medical Education,
"32, Soho-square, London, W., 1868.

"Sir,—A committee of the Medical Council has been appointed to inquire into and 'to report on the steps proper to be taken, if any, for granting diplomas or certificates of proficiency in State Medicine, and for recording the same in the *Medical Register*, due regard being had to the interests of existing health officers in the several parts of the kingdom.'

"The committee have decided that such diplomas or certificates ought

to be granted, after due examination, to persons who are already, or shall hereafter be, entered upon the *Medical Register*, and to no others.

"The committee are about to draw up a report on the education which, in their judgment, is proper for such persons, the time it should occupy, and the mode of examination.

"The committee would feel much obliged to you if you would give to them your opinion on these points, and on any others which may appear to you proper to be discussed by them.

"In order to assist you in arranging your answer, I venture to append a list of questions, by no means intending to limit the form or extent of your communication, but to indicate in certain detail the information the committee desire to obtain.

"A memorandum drawn up for another purpose is also enclosed.

"Of course the committee do not presume to trouble you to answer those inquiries with which you may not be familiar.

"The committee desire me to express to you their hope that the national importance of this question may prove a sufficient excuse for the trouble they are giving to you, and that you will be kind enough to return an answer before November to me at the above address.

"I am, Sir, your obedient servant,

(Signed) "Henry W. Acland, Chairman of the Committee."

"*Questions.*

"1. Various subjects, such as forensic Medicine, toxicology, morbid anatomy (human and comparative), psychological Medicine, laws of evidence, preventive Medicine, vital and sanitary statistics, Medical topography, and portions of engineering science and practice, have been suggested as those in which examinations should be passed by candidates for a diploma or certificate in State Medicine. Would you state what are the subjects which, in your opinion, should enter into a programme for this purpose?

"2. What is the time which should be exclusively given to these subjects, supposing it to be commenced after the completion of the ordinary period of Medical study?

"3. What might be the order of such studies? What should be the method of study adopted?

"4. In which of these subjects of study would practical instruction appear necessary?

"5. To what extent should the study of these subjects respectively be carried? Can you suggest any books which furnish an approximate standard of the knowledge you would recommend?

"6. What are the deficiencies which you have observed in Medical witnesses?

"7. How would you propose to remedy them? by what education—legal or scientific?

"8. How should a court of examiners in this subject be constituted?"

The committee desire to record their best acknowledgments for the great attention that has been paid to their request by the eminent persons who have replied to the questions.

Immediately following this report is an analysis of the answers from English correspondents. It has been thought desirable to keep this analysis distinct from the observations of the foreign authorities, whose letters cannot advantageously be dealt with in the same manner.

The answers from home and from abroad are all printed *in extenso* in an appendix.

Dr. Rumsey has favoured the committee with detailed personal observations on the evidence, and, although the committee have not thought it desirable to embody those remarks in their report, they have thought it right to place them before the Council.

The committee are unanimously of opinion that the evidence submitted in these documents warrants, and, indeed, demands, that the Council should insert the requisite clauses for providing a qualification in State Medicine in any amended Bill which may hereafter be prepared for Parliament.

Should the Council see fit to agree to this recommendation of the committee, the individual members of the Council will be able to give before the next session of the Council their serious attention to the details they would wish to see embodied in any scheme or by-laws for carrying such clauses into effect.

This seems the more necessary, because, although there is a uniform testimony among all the correspondents of the committee, that grave attention is due to the condition of public Medicine in the present state of this kingdom, there is great discrepancy as to the duties to be assigned to officers for forensic and sanitary purposes, and as to the conditions under which these officers are to be appointed. The committee are agreed that the thorough discussion of the question of appointments and duties in the public Medical civil service has become essential for the progress of social administration and organisation; and they think it reasonable that Medical students or Practitioners (however few they may be who wish to devote themselves wholly to this branch of the public service) shall obtain a diploma, certifying the possession of knowledge adequate to the end in view—viz., the prudent and skilled care of the public health and the solution of forensic questions.

As the Council will have the opportunity, at some future period, of discussing the documents now submitted to them, the committee do not consider it desirable at present to offer any detailed observations of their own; they recommend that the report and appendix be forwarded to the licensing bodies and other persons interested in the question of State Medicine.

Henry W. Acland, Chairman.
Robert Christison.
George E. Paget.
Edmund A. Parkes.
H. W. Rumsey.
Aquilla Smith.
William Stokes.
July 2, 1869. Allen Thomson.

In answer to this, replies were sent from Dr. Arlidge, Robert Baker, Esq., Dr. Lionel Beale, F.R.S., Dr. Bond, the Lord Chief Justice (Sir W. Bovill), Dr. W. Farr, F.R.S., D.C.L., Professor Guy, F.R.S., Dr. George Harley, F.R.S., Rev. Professor Haughton, M.D., F.R.S., D.C.L., etc., P. H. Holland, Esq., Gillham Hewlett, Esq., Sir William Jenner, Bart., M.D., F.R.S., Dr. Lankester, F.R.S., Dr. Letheby, the Right Rev. Lord Bishop of Limerick, Dr. Maclagan, Dr. Mapother, Dr. Henry Maudsley, W. H. Michael, Esq., Professor Rainy, Arthur Ransome, Esq., M.B., M.A., Dr. C. Lockhart Robertson, John Simon, Esq., F.R.S., D.C.L., R. Angus Smith, Esq., F.R.S., Ph.D., Dr. J. A. Symonds, Dr. Alfred S. Taylor, F.R.S., Robert Travers, Esq., Dr. Buchanan Washbourn, Right Hon. Sir W. Page Wood (Lord Hatherley); Dr. G. Varrentrapp, Frankfort; Dr. L. Pappenheim, Westphalia; Professor Rokitansky, Vienna; Dr. N. Geissé, Bad-Ems; Dr. Max v. Pettenkofer, Munich; Prussian Sanitary Code; Report by Dr. Geissé on State Medicine in North Germany.(a)

Dr. Acland proceeded: The question was one which might be described as one of the growing questions of the day; a year or two ago it was very little understood, and he (Dr. Acland) had been made the subject of a considerable amount of chaff for proposing to make what were called "Doctors in State Medicine." On the other hand, within the last two or three weeks he had had to undergo a small amount of chaff, as chairman of the committee, for having been so tardy in carrying out the recommendations as to making State Medicine Doctors. Thus had public opinion grown. (Applause.) The committee had collected information from some of the most skilled persons in this matter both at home and abroad, a list of whom would be seen when the report was laid on the table. There were communications from the present Lord Chancellor and other persons of eminence, as well as from some of the most scientific and eminent persons in Europe. It was true they were few, but their opinions were of great weight. He felt bound to thank Dr. Rumsey, who had been of the greatest service in preparing the report, and who had added an analysis, as an expression of his own opinion, which would be found to be of the utmost service in studying the documents. The committee thought they would be going too far if they had pressed upon the members of the Council any particular course; therefore they had decided to do no more than prepare this document, and respectfully to lay it before the Council. He trusted that at the next meeting of the Council (the committee having discharged any further duties which might be assigned to it in the course of the present session), the Council would feel itself in a position to introduce some such clause, as had been recommended by the committee, into the Medical Act. With regard to that clause, it was thought most desirable to suggest simply that the requisite clauses should be adopted in any Medical Act, without defining what those clauses would be; and the reason for that was that there was already a "Medical Acts Amendment" Committee sitting, and it was thought some trouble would be saved if the matter were placed in the hands of that committee. With these remarks he would simply present the report to the Council.

It was then moved by Dr. Paget, seconded by Dr. Andrew Wood, and agreed to, that the petition from the Lothians' Medical Association be received and entered on the minutes and referred to the committee on the amendment of the Medical Acts.

The following returns of examinations from the Medical Departments of the Army and Navy, and from the India Office, were then laid before the Council, and on the motion of Dr. Macrobin, seconded by Mr. Cooper, were ordered to be entered on the minutes. The following is an analysis of the returns which we have prepared in order to save space.

The standing orders were then suspended, and the Council proceeded to committee business, adjourning its formal sitting until Monday at 2 o'clock.

[Analysis of the Degrees, Diplomas, and Licences of Candidates for Commissions in the Medical Departments of the Army, of the Navy, and of the Indian Army, 1868.

	Examined.	Passed.	Rejected.
Licentiate of Royal College of Physicians, London	1	1	0
M.R.C.S. England	23	16	7
Lic. S.A. London	14	11	3
Lic. R.C.P. Edinburgh	36	23	13
Lic. R.C.S. Edinburgh	33	23	10
Lic. K. and Q. Coll. Phys. Dublin	16	12	4
Do. Mid. do.	4	2	2
L.R.C.S. Ireland	23	17	6
M.R.C.S. do.	3	2	1
Lic. Apo. Hall, Dublin	4	4	0
Lic. Faculty P. and S. Glasgow	2	2	0
M.D. Univ. Glasgow	3	2	1
M.B. do.	1	0	1
M. Chir. do.	4	2	2
M.B. Aberdeen	9	8	1
M. Chir. do.	9	8	1
M.D. Queen's Univ. Ireland	22	20	2
M. Chir. do., do.	13	13	0
M.B. Trin. Coll. Dublin	10	8	2
M. Chir. do.	7	5	2
Lic. Med. do.	1	0	1
M.B. Univ. Edinburgh	6	6	0
M. Chir. do.	8	6	2
M.D. do.	4	1	3
	256	192	64

(a) These, together with remarks on the above documents by H. W. Rumsey, M.D., are printed at length in the Appendix, which forms a volume of 96 pages. The pith of the whole Appendix will be found admirably condensed in Dr. Rumsey's laborious analysis and remarks on the evidence at the end of the pamphlet, and to this useful digest we advise all interested in the matter to resort.

These returns are gathered from the	No. of candidates.	Passed.	Failed.
Army examination, August, 1868	37	21	16
Indian army, February	24	20	4
,, August	22	10	12
Royal navy	38	30	8
	121	81	40

It must be remembered that from the 40 candidates who failed 16 would have been accepted had there been appointments open to them in the English or Indian army, and that one naval candidate was disqualified physically. Thus the number who failed for want of knowledge is reduced from 40 to 27. Only 7 of the naval candidates were well acquainted with Latin. It will be seen that the candidates had more than two diplomas apiece on the average. It is said of one who had three qualifications that he was deficient in all subjects. The subject in which the greater number were not sufficiently qualified was anatomy.—Ed. *M. T. and G.*]

Fourth Day.—Monday, July 5.

The minutes of the last meeting having been confirmed.

Dr. Arjohn and Dr. Paget spoke upon the adjourned debate with reference to the motion to place upon the minutes the letter from the Medical Registrar of Trinity College, Dublin; and contended that, as it had turned out upon inquiry that this letter was written without the sanction of the college authorities, it should not be placed upon the minutes, but merely acknowledged by the Registrar.

Dr. Storrar upon this, with the consent of the Council, withdrew his motion.

Dr. Aquilla Smith then moved—"That the report of the committee appointed by the Branch Council for England, respecting certain preliminary examinations (Minutes, vol. vi., p. 330), be printed in the minutes and referred to the Committee on Preliminary Examinations."

Sir Dominic Corrigan seconded the motion.

Dr. Alexander Wood said the report of that committee had been already drawn up, and this communication, therefore, came too late. If Dr. Smith would confine his resolution to the printing of that report on the minutes, he thought the Council generally would accede to it.

Dr. Aquilla Smith having amended his motion in accordance with this suggestion, it was unanimously adopted.

Dr. Storrar presented the following report of the committee appointed by the Branch Council for England on Nov. 25, 1868, to inspect the papers on general (preliminary) education (Minutes of the English Branch Council, vol. vi. p. 330):—

Report.

Of the papers applied for by the Registrar, those relating to three only of the recognised examinations have been received—viz. the Cambridge local examinations, senior; the College of Preceptors, first-class certificate; the Royal College of Surgeons of England, preliminary examination.

As regards the papers sent from the College of Preceptors, the Chairman, finding they were not in sets, and otherwise not such as were wanted, returned them through the Registrar; but no others have as yet been forwarded in their place.

The papers of the Cambridge local examinations, senior, comprised:—English, Latin, Greek, French, German, mathematics (geometry and algebra), and arithmetic.

The examination represents a high standard. The best answers are excellent, and even the worst afford proof of fair knowledge acquired through systematic training. The composition and spelling of English are good.

The papers of the Royal College of Surgeons of England (preliminary examination) comprised:—Dictation, English grammar and composition, English history, geography, Latin, Greek, French, German, arithmetic, Euclid, algebra, mechanics, chemistry, and natural history.

The standard of this examination is not a high one, but the questions are good, and would, if well answered, be an adequate test. The best answers are generally good, some of them excellent. The worst are, however, often bad—some so bad that it is not easy to see why they should have been held to be sufficient, the spelling being often bad, and the answers frequently such as to show an absence of all real knowledge of the subjects to which the questions relate. John Storrar, Chairman.

It was then moved by Dr. Paget, seconded by Dr. Storrar, and agreed to—"That a committee be appointed to rearrange the recommendations and opinions of the Medical Council on education, examinations, and registration."

The committee appointed consisted of Dr. Paget (Chairman), Dr Embleton, Dr. Fleming, and Dr. Leet.

On the motion of Dr. Alexander Wood, seconded by Dr. Paget, the name of Dr. Macrobin was added to the Committee on Preliminary Education.

Dr. Christison then moved—"That the Edinburgh University Calendar for Local Examinations for 1868 be submitted to the Committee on Preliminary Examinations, with a view to the Council receiving the report of that committee as to the sufficiency of the said local examinations to qualify students to commence their Medical studies."

Sir D. Corrigan seconded the motion, which was unanimously adopted.

The President announced that the hour of three had arrived, but Mr. Pattison was neither in attendance in compliance with the order of the Council, nor had his solicitor appeared on his behalf. In a matter of such importance and delicacy, the Council had thought it right to take every precaution, and had accordingly sent to Mr. Pattison's solicitor to ascertain the cause of this delay. Certain formal business was meanwhile transacted.

The reports of visitation of examinations at the Queen's University in Ireland were read, as follows:—

Report of the Visitation of Examinations at the Queen's University in Ireland.

The examinations in Medicine for the primary part, and for degrees, commenced on Monday, June 14, and were continued daily to the 24th of the month.

The primary examination occupied the first week, and the pass examination the second week.

I attended on two days in each week, and carefully noted the questions and answers, both written and oral.

The questions, as usual, were judicious and well diversified, and the answers in general were very good; but, in the absence of practical tests from important subjects, it is difficult, if not impossible, to say whether the candidates possessed "the requisite knowledge and skill for the efficient practice of their Profession."

At these examinations fifty-five passed the primary part, twenty-one obtained degrees in Medicine, and thirteen attained to the degree of Master in Surgery.

This university still permits students to enter upon their Medical studies without having passed an examination in arts; and with regard to the recommendations of the General Medical Council "as to the method of conducting Professional examinations" (see Minutes, vol. vi. July 6, 1868), I find that those numbered respectively 1, 7, 8, with the former part of number 4, are followed at these examinations, and that those numbered 2, 3, 5, 6, with the latter portion of number 4, have not been adopted.

June 26, 1869. C. H. Leet, M.D.

Report of the Visitation of Examinations at the Queen's University in Ireland.

Having inspected and reported on the first part of the Medical examinations of the Queen's University held in June last, I since visited the examinations on the second part of the course, or pass examinations for the degrees of M.D. and M.Ch., held in September and October following.

The subjects comprehended in this part of the examination are anatomy, physiology, Medicine, Surgery, Medical jurisprudence, and midwifery.

The examinations were conducted orally and by printed papers, and the anatomy and Surgery were further carried on by demonstrations on the skeleton and on the dead subject. There were about fifty candidates present; they were allowed three hours for answering the printed questions on each subject, and from ten to fifteen minutes for oral questions.

The questions were clear and definite in form, and afforded a fair test of the theoretical knowledge of the candidates. Of 72 candidates who were examined for the degrees of Doctor of Medicine during the collegiate year, 52 passed, and 22 of the number attained to the degree of Master of Surgery. There is more of the practical element than formerly introduced into these examinations, but it is desirable that it should be extended to other important subjects, especially to Medicine; and I think that, until adequate means are available for conducting examinations at the bedside, certificates from clinical teachers in Hospitals should not be received unless they testify for the proficiency of the candidate in the diagnosis and treatment of disease.

March 16, 1869. C. H. Leet, M.D.

Moved by Dr. Fleming, seconded by Dr. Andrew Wood, and agreed to—"That the reports of visitations of Professional examinations at the Queen's University, Ireland, now read, be entered on the minutes."

Dr. Parkes wished to call the attention of the Registrar to the following report of the Committee on the Visitations of Examinations with reference to the Queen's University in Ireland. In vol. v. page 247, of the minutes, were these words—"The committee are informed that the student may follow his Professional studies two years before passing his preliminary examination in arts." The Council directed the attention of the university to the evil of this, as permitting insufficiently educated persons to enter on Professional studies. Again, at page 90, these words appear—"Information has been received from the Secretary of the Queen's University in Ireland, stating that the report of the Medical Council on the visitation of examinations had been referred to the Committee of the Senate, which had not yet reported on the subject." He wished to ask whether the report of that Committee of the Senate of the Queen's University had been yet received by the Council.

The Registrar: It has not.

Dr. Parkes then gave notice of motion for the next day, that the Registrar be requested to write to the Queen's University for the report of that committee.

Sir Dominic Corrigan said the letter read from the Queen's University in answer to a similar inquiry was a sufficient answer to the question put by Dr. Paget—namely, that that university declined to accede to the view of the Medical Council until they suggested some better course for carrying it out. At present they thought their own course the best, and they told the Council so. Therefore he thought no more information was required upon the matter. The learned baronet then referred to a statement by Dr. Leet in a report which he had drawn up (referring to certain colleges in Ireland) that there was an

excellent preliminary examination. He would like to know whether Dr. Leet had ever inspected a single paper or taken any other steps to ascertain what their examinations were.

Dr. Leet said he got his information from the professors of the colleges.

Sir Dominic Corrigan: Oh! The reason he dwelt upon the matter was that, being a member of the Senate of the Queen's University of Ireland, he was unable to endorse Dr. Leet's statement. The Senate had no control over the colleges except when the student came up for examination, and the Senate of the Queen's University found themselves unable to trust to college examinations, but recommended the student to go through an education and examination in arts during the first two years of Medical study at the university. They trusted so little to those wonderful preliminary examinations which Dr. Leet had lauded from knowing nothing whatever about them—(laughter)—that, no matter what college professors might say to them, they did not accept the certificates of a single student who came before them for examination. While upon the subject of the Queen's University he might remind those who had made attacks upon it that if they studied the army and navy returns they would find there was scarcely a single graduate of the University who had been rejected. Therefore, looking "upon this picture and upon that," the critics would do well to turn their attacks elsewhere.

Dr. Bennett thought Sir Dominic Corrigan's explanation was exceedingly unsatisfactory with reference to the practice at the Queen's University. The recommendation of the Council was that all students, before commencing Medical education, shall have passed a preliminary examination in arts, and it was for the Council to judge whether the answer which had been returned by the Queen's University was a sufficient reason for not acting in accordance with the recommendation.

Dr. Alexander Wood was perfectly prepared to second a motion upon the subject if Dr. Bennett would put his remarks in that form. He hoped the Council would not be satisfied with questions from that side of the table and answered by the learned baronet on the other. Something further was required in order to penetrate the mystery which wrapped round the Queen's College of Ireland, and he would suggest that a series of questions should be framed, and should be submitted by the authority of the Council, through its Registrar, to the official representative of the Irish college, with a request that they should give definite and precise answers thereto, upon which the Council could proceed in a business-like manner. Sir Dominic Corrigan seemed to mistake altogether the object of the Council insisting upon preliminary examination taking precedence of the commencement of Professional study. He seemed to think the sole object was to secure that the full-fledged graduate should be qualified in Arts. That was not the real intention of the Council. It was to secure that the Medical student, before commencing his Medical study, should have such an amount of general information as would enable him profitably to attend the lectures of his Medical teachers.

On the motion of Dr. Fleming, seconded by Dr. Andrew Wood, the foregoing reports were entered on the minutes.

Dr. Pattison's Case.

The President then announced that it had been discovered that Dr. Pattison's communication had been sent to the office in Soho-square, and hence the delay. He felt they had, therefore, done well to wait. The circumstances of the case were well known to the Council, having been published in the newspaper reports of a motion for a criminal information against Dr. Pattison in the Court of Queen's Bench. Upon that the proceedings of the Council were founded, and, in the first instance, the solicitor's attention had been called to it, and he was now in attendance to give them advice upon the subject.

Mr. Ouvry stated that, by direction of the Branch Council, he had summoned Dr. Pattison to appear before the Medical Council to answer a charge of misconduct under the 24th section of the Act. At first he had desired to appear by counsel, but, that being refused, he had sent in a written statement to the Council. The evidence in support of the charge consisted of an office copy of an affidavit by Charles Frewen, Esq., filed in the Court of Queen's Bench, and under which the rule *nisi* for the criminal information was granted. Upon the rule coming on for argument, Mr. Frewen withdrew from the charge on the defendant apologising and paying the costs of the information. The affidavit filed was a joint deposition of Mr. Frewen and Mr. Langham, his solicitor, and it stated at length the circumstances under which Dr. Pattison had been guilty of the conduct complained of. It appeared that he had attended Mr. Frewen's wife for cancer, and had received fees amounting to £164 during her lifetime. Upon her death he sent in a further demand for 100 guineas, and, upon this being repudiated by Mr. Frewen, he threatened an action against him. This action was not proceeded with, but an irritating correspondence was kept up on the part of Dr. Pattison until Mr. Frewen wrote requesting that this should cease, and that the action should be proceeded with. Thereupon Dr. Pattison again wrote to Mr. Frewen, enclosing him proof sheets of his late wife's case, and stating that, as he was about to publish a book upon cancer, he thought it right, as Mr. Frewen was so fond of litigation, to give him notice of what he was about to publish. The case was described in the coarsest way, and in a manner calculated to wound the feelings of a man of honour in their most sensitive part. The judges of the Court of Queen's Bench, when they found Mr. Frewen had consented to a compromise, said that this was one of the cases which made them regret the absence of a public prosecutor. It was impossible for the court to make the rule absolute without placing themselves in a false position; but the case appeared to come clearly within the criminal law, and they could only regret that the applicant had been satisfied with the arrangement which had been effected.

Sir D. Corrigan said he felt it his duty to give expression to the opinion of the Council that the conduct of Dr. Pattison was certainly infamous in a Professional point of view, and justified the Council in striking off his name from the Register. He therefore moved "That John Pattison, of 10, Cavendish-place, St. John's-wood, M.D. of New York, is judged by this Council, after due inquiry, to have been guilty of infamous conduct in a Professional respect."

Dr. Rumsey seconded the motion, and congratulated the Council upon being able to purge the ranks of the Profession from such a man.

The motion was then put to the vote, and carried *nem. con.*

Dr. Bennett then moved "That the said John Pattison, having been judged by the General Council, after due inquiry, to have been guilty of infamous conduct in a Professional respect, the General Medical Council do hereby adjudge that the name of the said John Pattison be erased from the Register, and do by this order direct the Registrar to erase his name from the Register aforesaid."

The motion was seconded by Mr. Hawkins, and unanimously adopted.

On the motion of Dr. Stokes, seconded by Mr. Hargrave, a copy of the Council's orders, signed by the President and countersigned by the Registrar, was ordered "to be transmitted to the said John Pattison."

The following communication from the Royal College of Surgeons of England respecting vaccination was then read:—

Royal College of Surgeons of England, November 18, 1868.

Sir,—I have laid before the Council of this College your letter of the 22nd of July last, transmitting, by direction of the General Council of Medical Education and Registration of the United Kingdom, copies of two recommendations issued by that Council relating to vaccination, together with copies of the report of a committee of the General Medical Council on the same subject, and expressing the hope of that Council that these recommendations will be adopted by all the bodies mentioned in schedule (A) of the Medical Act; and I am desired to acquaint you that the Council of the College, having fully considered the recommendations, adopted them, and, at the same time, resolved that the regulation restricting the grant of the certificate of instruction and proficiency in vaccination to Surgeons holding the appointment, or possessing the opportunities enumerated in the second recommendation, be applicable to candidates commencing their Professional education for the diplomas of this College on or after October 1, 1868.

I am, Sir, your obedient servant,

F. Hawkins, Esq., M.D., etc., etc. Edward Trimmer, Secretary.

On the motion of Mr. Cæsar Hawkins, seconded by Dr. Macrobin, this communication was received and entered on the minutes.

Communications from the Medical Teachers' Association of London were then read, received, and referred to the Committee on Medical Education.

A certified extract having been read from the minutes of a meeting of the Royal College of Physicians of Edinburgh, at which meeting Lima Abraham La'Mert was deprived of the licence of the College,

Dr. Alexander Wood moved—"That the Registrar do forthwith erase from the Medical Register the qualification of Lima Abraham La'Mert as a Licentiate of the Royal College of Physicians of Edinburgh." The College of Physicians had been very much blamed for allowing this name to remain so long upon their register. It was removed from the College of Surgeons of England some years ago, and it would have been removed from the Edinburgh College of Physicians but for a technical difficulty in the way. As a justification he would mention that that body, however, was the first to stir in the

matter, and the Council owed to them the great advantage that they were able to remove the father of this individual from the Register some year or two ago, and also that they were able to get rid of another of the fraternity, who kept an indecent museum in the immediate neighbourhood of the College of Physicians. Lima Abraham La'Mert applied for a licence to the College of Physicians, and underwent an extremely satisfactory examination. But his name was not a sweet one, and the College took the unusual precaution of requiring him to sign a document that, in the event of the College giving him a licence, he would not join any advertising firm. He immediately, however, joined a firm of which his father and brother were members, and the College tried to put in force the document which he had signed, against him, but they were advised that it was an illegal contract, and therefore they were foiled in that particular. They afterwards cited La'Mert to appear before the College on account of a publication which he had issued, and in which his name was published. He appeared before the College by counsel, who endeavoured to screen him by putting forward a statement that the father was the author of the book, and had put his son's name to it without his knowledge, and subsequently against his protest. Upon that the College immediately got a justice of the peace and made Mr. La'Mert make an affidavit to that effect, by means of which the Medical Council had been able to remove the father from their Register. (Laughter and applause.) Meanwhile, the son had taken his departure to India, and the only evidence that could be got against him was given by himself in a police-court, and was quite conclusive against him; but, being advised that they could not proceed upon a newspaper report, it was found necessary to send to Calcutta and get authorised extracts from the proceedings of the court. This was done at great expense; but unfortunately the ship which contained them, unable to bear the filthy burden, went to the bottom, and the affidavits were lost. (Laughter.) The College then determined to go upon the newspaper reports, and he did not think their proceedings could be challenged. However, the great fact remained that Mr. La'Mert was no longer a member of the College of Physicians of Edinburgh, and that therefore the last tenticle which bound him to the Profession was severed.

The resolution was seconded by Dr. Embleton, and carried unanimously.

Dr. Aquilla Smith stated that Mr. La'Mert was still a Licentiate of the Society of Apothecaries of London, and he hoped the representative of that body would draw attention to the fact.

An application from Mr. George Peterson Bernard, whose name, it appears, had been erroneously erased from the Register in consequence of a mistaken obituary notice, was then unanimously acceded to.

The Registrar then read an application of Mr. Evan Thomas, who had been removed from the Register for perjury, to be reinstated. The documents in support of his application were numerous, and it was proposed that a committee should be appointed to consider them.

Dr. Alexander Wood felt bound to oppose the appointment of a committee. The removing of the name from the Register was not like the sentence of a court—a punitive measure, which after having been suffered for a time might be withdrawn—but the Council had declared itself determined to keep the ranks of the Profession clear, and he did not think any lapse of time would be sufficient to warrant the restoration to the Register of a person who had been guilty of perjury. There were some offences which might justify a reconsideration of the Council, such as the offence of a man who had given a wrong age; but when a man had been convicted of a crime by the courts of the country, and had been deposed from the ranks of the Profession on that account, he thought no application for reinstatement should be listened to.

Dr. Aquilla Smith then moved, and Dr. Christison seconded, that the application be refused.

Dr. Quain and Dr. Andrew Wood strongly urged that they should hear what the man had to say, either by counsel or by the appointment of a committee.

The Registrar accordingly proceeded to read a number of documents, including memorials praying for the reinstatement of Mr. George Peterson Bernard. Among others was a letter from Mr. Baron Martin, the judge who tried him, and a memorial signed by the Board of Guardians of Manchester and a committee of magistrates of the Carlisle Infirmary. There was also a petition signed by forty-one members of the Royal College of Surgeons praying that the Council would reconsider their sentence. A newspaper report of the case was also read, and

Dr. Quain and Dr. Andrew Wood expressed themselves perfectly satisfied that the application should be refused.

Dr. Bennett inquired how it came that Mr. Bernard was still a member of the Apothecaries' Society.

Mr. Cooper stated that an inquiry had been made on a previous occasion, and the Society found they had not the power to erase his name.

Dr. Paget: The Amended Medical Act gives you the power now.

Dr. Alexander Wood: You really must use the scrubbing brush. (Laughter.)

A similar application from Thompson Whalley, whose name had been erased from the Medical Register for fraudulently obtaining certain policies from a certain insurance company with intent to cheat and defraud (for which he suffered fifteen calendar months' imprisonment with hard labour in the House of Correction), was also read by Mr. Ouvry, together with a certificate of good behaviour from the vicar of the parish, and a memorial signed by twenty Medical men.

Mr. Cæsar Hawkins moved, and Dr. Paget seconded, a resolution that the application be not complied with. Carried *nem. con.*

A communication contained in a letter to Dr. Acland from the Bishop of Christ's Church, New Zealand, respecting the educational regulations of Christ's College in New Zealand, was then read, and ordered to be referred, with the documents accompanying it, to the Committee on Preliminary Examinations.

An application from the Principal and Vice-Chancellor and the Dean and Faculty of Medicine of the M'Gill University for recognition of the degrees of that University, similar to that granted to the University of Melbourne by the General Medical Council during its last session, was then read.

Dr. Sharpey said the Council had no power to accede to such an application. It was founded upon a mistaken idea as to the recognition granted to the University of Melbourne last year. It had been agreed that when the Medical Act was amended the graduates from the University of Melbourne should be exempted from the year's residence required before they could be put on the Register.

Dr. Embleton remarked that this was the second application of the kind which the Council had received.

Dr. Sharpey said that it would be unnecessary for the Council to come to any formal resolution upon the matter—that a letter from the Registrar explaining all the circumstances would be sufficient.

Dr. Paget thought it would be more courteous to refer the communication to the committee sitting upon the Medical Acts amendment, but

Mr. C. Hawkins urged that it would be better to adopt Dr. Sharpey's proposal, as the Council knew they had no power to grant the application.

The hour of six having arrived, the debate was adjourned, and the Council rose until the morrow 2 p.m.

Fifth Day.—Tuesday, July 6.

The business of the day commenced with the adjourned debate upon the application from the M'Gill University for the recognition of its degrees.

Mr. Cæsar Hawkins moved, and Dr. Sharpey seconded, the following resolution:—"That the Principal and Vice-Chancellor, and the Dean of the Faculty of Medicine of the University of M'Gill College be informed that they have not correctly understood the proceedings of the General Medical Council in its last session relative to the University of Melbourne; that the Council have no power under the Medical Act to place on the Register the graduates in Medicine of any foreign or colonial university not practising Medicine or Surgery in the United Kingdom before the passing of that Act, but that, should such power be conferred on the Medical Council, the claims of the graduates of M'Gill University will receive due consideration."

Carried unanimously.

A letter from the Parliamentary Committee of the British Medical Association was then read, and ordered to be referred to the Committee on Amendments of the Medical Acts.

Mr. Cooper, referring to the degree which Mr. La'Mert was reported to hold from the Apothecaries' Society, stated that, having consulted their legal adviser upon the subject, he found they had no power to strike any one off from the list of their licentiates. He very much regretted this, because he felt that any man who was unworthy to be on the roll of the College of Surgeons was equally unworthy to be reckoned among the licentiates of the Apothecaries' Society. (Applause.)

Mr. Cæsar Hawkins, in moving "That Mr. Ouvry be re-

quested to examine the evidence on which Mr. La'Mert had been deprived of his diploma by the Royal College of Surgeons of England, and of his licence by the College of Physicians of Edinburgh, in order to ascertain whether this Council will be authorised to erase his name from the *Register*, under the 29th clause of the Medical Act," stated that he feared the Council would be powerless to remove Mr. La'Mert's name until their next session, as certain formalities would be required to be gone through which would occasion that delay.

Dr. Bennett then moved "That the standing orders be suspended, and that Mr. Ouvry be at once consulted with a view to ascertain whether the Council could not proceed to strike Lima Abraham La'Mert's name off the Register during the present session of the Council."

The motion was seconded by Dr. Alexander Wood, and carried *nem. con.*

A letter from Dr. Bulmer respecting Canadian degrees was then referred to the Committee on the Amendments of the Medical Acts.

The same course was adopted with regard to a letter from Dr. Forster respecting registration in the Channel Islands.

A letter from the Danish Minister announcing the presentation by his government of a copy of the Pharmacopœia Danica to the Medical Council was then read, and a vote of thanks to the Danish Government was unanimously accorded by the Council.

A somewhat lengthy communication from the Royal College of Surgeons of Edinburgh was then read.

Dr. Alexander Wood inquired from the representative of that body whether the communication was *ex proprio motu*, or whether it had been invited by the Council.

Dr. Andrew Wood stated that it was sent *ex proprio motu* from the Royal College of Surgeons of Edinburgh.

Dr. Alexander Wood, under those circumstances, felt bound to raise the question whether this communication should be entered on the minutes. Nobody would deny the right of any body connected with this Council, or any individual interested in the matters which came before them, to address any communication they pleased; but there was extreme inconvenience in the course which the Edinburgh College had pursued. It might be very gratifying for the Council to know that the Committee of the Royal College of Surgeons of Edinburgh highly approved of their conduct in certain respects. It might possibly influence their debates to know that the same body disapproved of their proceedings in certain other respects; but what he wanted to point out was the extreme inconvenience of the Council suffering itself to be lectured by other bodies in this way. He thought that it would be quite sufficient if such a communication was ordered to lie upon the table, and should certainly vote against its appearance on the minutes. The College of Surgeons of Edinburgh had a most able representative at the Council, and any opinions which they had to express were expressed most ably by him in debate. That was the proper way for bodies having representatives on the Council to approach the Council. But the College of Surgeons of Edinburgh, not content with that, had added a sort of review or criticism of the proceedings of this Council. It put him in mind of the old story of the slave who, when his master was beating him and lecturing him at the same time, said "If preachee, preachee, and if floggee, floggee, but no preachee and floggee too." If every body who had representatives at that table were to follow such a course, their minutes would be overloaded with communications of that sort, and the greatest inconvenience would arise.

Sir D. Corrigan moved that the communication be placed on the minutes. If he wished to hear sentiments expressed calculated utterly to destroy the Council, he could not wish for anything further than what had just fallen from Dr. Alexander Wood—namely, a denial of the right of any body to address this Council.

Dr. Alexander Wood: I said no one can deny the right of any body to address this Council, but as to the convenience of such a course, I expressed very considerable doubts.

Sir D. Corrigan: The statement made was that it was inconvenient for any body to come and lecture the Council. In other words it was proposed that the Medical Council should place itself in privilege above the House of Commons, and above the House of Lords; for although every man in the country and every district had a representative in the House of Commons, the humblest individual in the country, to say nothing of an important corporate body, had the right to send a memorial to Parliament. Instead of looking upon such a thing coldly, he (Sir D. Corrigan) was disposed to regard such communications with great favour, and the proposition laid down by Dr. Alexander Wood was so extraordinary that he felt it his duty to take an exactly opposite line, and to move that this communication be inserted upon the minutes.

Dr. Andrew Wood felt obliged to Sir D. Corrigan for taking up this matter, and replied to the very unprovoked attack made by Dr. Alexander Wood upon the College of Surgeons of Edinburgh. In order to justify the document, he would call the attention of the Council to its contents. They had been put in as concise and distinct a form as possible, and had, in fact, included eight memorials in one. First of all, having failed to obtain redress from the Government in the matter of lunacy certificates, the college had memorialised the Council to take action in the matter. So far from that being any slight upon the Council, it appeared to him to be the strongest expression of confidence possible to give, because they came to the Council asking them to help them and to redress their grievances. Again, upon the subject of vaccination, was there anything disrespectful to the Council in telling them that they had agreed to adopt the directions issued by the Council upon that subject, and were taking means to carry them out? (Applause.) Or with reference to the visitation of examinations, the visitors having reported some defects in the examinations of the College of Surgeons, was there anything wrong in coming to the Council and telling it that its suggestion had been attended to, and that the matters complained of had been removed? (Applause.) The next matter was a matter in which certainly the college had declined to follow the recommendations of the Council; but he thought there was no disrespect in coming and giving their reasons for maintaining their own opinions. On the contrary, he thought there was something honest in it, and he only wished Sir Dominic Corrigan, on behalf of the body which he represented, would give as distinct a statement with reference to the subject of preliminary examination. Or again, with reference to the returns of the Army and Navy and India Medical Boards, the college stated their conviction that these reports and returns gave false impressions with regard to many licensing boards, and that, from the way in which they were framed, an erroneous idea went forth as to the qualifications of various candidates: they asked at the same time that these defects should be remedied; and, further than that, they had a very decided objection to the Army and Navy Boards being placed as a sort of revising body over all the Medical boards of the country, being unable to see anything in their constitution which would seem to give them such a pre-eminent position. The college, moreover, expressed its opinion that the proper method of supervising Medical examinations was that provided by the Act of Parliament—namely, the sending down of visitors by the Council, whose suggestions the Medical boards throughout the country were always ready to obey. There was nothing disrespectful in that, but rather the contrary: and if they had passed an opinion that they were opposed to the institution of diplomas in State Medicine, and gave their reasons for it, they might be worth very little, but they were honest statements, and the Council could give what weight to them they liked. The only remaining topic touched upon was the report upon preliminary education, in reference to which the communication stated that the college had already adopted the regulations of the Medical Council; that they highly approved of its decision in not making the study of Greek compulsory, but at the same time hoped that the time would soon come when, from the improved state of education in the country, they would feel themselves in a position to do so. He would tell Dr. Alexander Wood that he would like to have something of the same sort from the body which he represented, for such frank communications between licensing bodies and the Medical Council did a great deal more good than apathy and want of interest and disregard for the recommendations of the Council. He believed he might claim for the body which he represented as high a respect for the Medical Council as any other body entertained, and he looked upon this communication as merely a form of testifying that respect which was entertained by the Royal College of Surgeons of Edinburgh for the Medical Council.

Dr. Bennett said he would not oppose the motion if Dr. Alexander Wood thought the College of Surgeons would expect the Council to put their communication on the minutes. At the same time he could not help seeing that it would have the effect of encumbering the minutes.

Dr. Andrew Wood said that, after the remarks which had been made by Dr. Alexander Wood, he considered it necessary to press the motion.

Dr. Flemino, while admitting fully the right of everybody to memorialise the Council, pointed out the extreme incon-

venience which would result if such a privilege were generally indulged. It appeared to him strange that the College of Surgeons should criticise the report on State Medicine, which was in an unfinished state, and which they could never have seen.

Dr. Andrew Wood replied that they had taken the information from the proposal of Dr. Acland.

Dr. Alexander Wood had no desire in the remarks he made to cast any slur on the College of Surgeons of Edinburgh; it was simply with a view of protecting this Council from what he believed to be the beginning of a most inconvenient practice.

Dr. Christison, while feeling bound to vote for the motion if it were pressed to a division, would be glad to see it withdrawn if Sir D. Corrigan and Dr. Andrew Wood could see their way to so doing.

Dr. Storrar would encourage every form of petition and communication between the licensing bodies and the Council; but at the same time the Council must always exercise its own judgment in regard to placing such communications on the minutes or not. He did not think that this communication was one which ought to be placed on the minutes.

Sir Dominic Corrigan replied, and pointed out that many other communications of much less importance had been already admitted on the minutes during the present session. He therefore could not consent to withdraw his motion.

The President, in putting the motion to the vote, stated that he had no intention of voting upon it, but he felt bound to express great regret that the suggestion of Dr. Christison had not been acted upon, and the motion withdrawn, for he certainly did feel that extreme inconvenience would necessarily arise by the introduction of a document of this kind, which certainly was an invitation to corporate bodies each year to send in communications containing reviews or criticisms of the proceedings of the Council.

The motion was negatived by a majority of one, the numbers and names being as follows:—

Ayes.	*Noes.*
Sir Dominic Corrigan.	Dr. Bennett.
Mr. Cæsar Hawkins.	Dr. Storrar.
Dr. Embleton.	Dr. Alexander Wood.
Dr. Andrew Wood.	Dr. Fleming.
Dr. Aquilla Smith.	Dr. Macrobin.
Mr. Hargrave.	Dr. Thompson.
Dr. Apjohn.	Dr. Lect.
Dr. Parkes.	Dr. Sharpey.
Dr. Christison.	Dr. Rumsey.
	Dr. Stokes.

Declined to vote, 2—Mr. Cooper and Dr. Paget.

A letter from Dr. Maclagan, of Berwick-upon-Tweed, respecting lunacy certificates having been read,

Dr. Andrew Wood moved that a communication be addressed to the Home Secretary upon the subject, calling upon Government to redress the grievance. He pointed out the great inconvenience which existed in the present state of the law, an instance of which had lately come under his notice, where a gentleman travelling in England having been taken mad at Preston Railway Station, his friends were actually obliged to send to Scotland for a Medical Practitioner before they could get a certificate which would enable them to remove him to a Scotch asylum.

Dr. Macrobin seconded the motion.

Dr. Bennett suggested it would be desirable to communicate with the Lunacy Commissioners before taking any step in the matter, and after some remarks from Dr. Fleming the motion was put to the vote and carried unanimously.

A memorial from Practitioners in Lanarkshire respecting misconduct on the part of a registered person was about to be read, when the Council requested the reporters to withdraw, it being doubtful whether the matter contained in the memorial were libellous or not.

Dr. Parkes then moved—"That the Registrar be requested to write to the Secretary of the Queen's University in Ireland, asking for the report of the committee of the Queen's University, to which the report of the committee of the Medical Council on the visitations of examinations was referred." The question he wished answered was whether the Queen's University had complied with the recommendation of the Council respecting preliminary education. He found that every other licensing body had complied with the request of the Council except the Queen's University, from whom the answer had come that the matter had been referred to a committee, which committee, however, had not yet reported on the subject. The object of the motion was to obtain the report of the committee, and he would propose, by leave of the Council, to add the following sentence:—"That if this committee have not reported, the Registrar be requested to write and require a definite reply to the passage in the report of the Committee on the Visitation of Examinations which referred to the preliminary examinations of the Queen's University."

Dr. Embleton seconded the motion, and said that what he wanted was a distinct answer in writing as to what the Queen's University intended to do.

Dr. Storrar quite concurred in the general spirit which had actuated the mover and seconder of this motion, but he thought the time had gone by when it was desirable to put it in force, because, although no direct reply had been obtained from the Queen's University to the question put to them some two years ago, the Council was nevertheless acquainted with the fact from Dr. Leet's visitation of the examinations, and in other ways, that the Queen's University still persisted in allowing students to commence their Medical studies before they had passed the arts examination, which the Council declared ought to be preliminary. Without indulging in any rhetorical display, he would call the attention of the Council to a simple statement of the facts upon this question. Some years ago—almost indeed from the commencement of this Council—it was decided that it was important students should pass an arts examination preliminary to the commencement of Medical study. It took some time to bring the examinations of all the bodies in conformity with this recommendation; but in England and in Scotland it might now be said that all the bodies in Schedule (A) had conformed to it. The only difficulty was in bringing the standard of examination up to the point desired; but there was no dispute either in the English or Scotch colleges as to the preliminary examinations. In Ireland it was otherwise; and, particularly, the Queen's University had distinctly declared that that was not the practice there, and that they did not approve of the course suggested by the Council. This matter ought to be settled one way or the other. Either the Council was wrong or it was right, and without any severe remarks of a personal kind, or directed towards any particular college, the time had now arrived when it ought to be made clear whether the communications of the General Council were to be attended to or not. He had, therefore, a motion to propose, which was an amendment upon Dr. Parkes's—"That this Council having issued recommendations to the bodies enumerated in Schedule A of the Medical Act—viz., that no Medical student shall be registered until he has passed a preliminary examination, as required by the General Medical Council,' and 'that no licence be obtained at an earlier period than after the expiration of forty-eight months subsequent to the registration of the candidate as a Medical student'—and this Council having learnt that the regulations and practice of the Queen's University of Ireland are not in accordance with these recommendations, the Council request the attention of the Queen's University to this want of accordance, and express the hope that, before the next annual meeting of the Council, the University may be able to announce to them that their regulations and practice are in conformity with the aforesaid recommendations, and thereby avoid the necessity of a representation being made by the Council on this subject to her Majesty's most Honourable Privy Council, under the 20th section of the Medical Act."

Dr. Bennett felt the importance both of the motion and of the amendment, because this question of preliminary education lay at the root of all progress. All the licensing bodies, with the exception of the Queen's University, had carried the recommendations of the Council into effect sooner or later, and at all events had acknowledged the good sense of the regulations and the desirability of enforcing them—manifesting in that way their readiness to assist the Council in carrying out its functions. In the case of the Queen's University it appeared they had not only done so but distinctly expressed an opinion which was not in unison with that of the Council. Without considering the question whether the Queen's University had or had not good grounds for holding that opinion, it was quite clear on their own confession they declined to act in accordance with the regulations of the Council; and the Council was placed in this position—that a regulation which it considered to be the very foundation of all progress in Medical education was distinctly repudiated by one of the licensing bodies. Under these circumstances the Council would be guilty of the greatest dereliction of duty if it failed to obtain obedience to its regulations, and to avail itself of the power conferred by Act of Parliament of asking the interference of her Majesty's Privy Council. He trusted that Sir D. Corrigan and the Irish members would see the extreme desirableness of preventing the necessity for any such application, but he (Dr. Bennett) did not hesitate to declare that

he should be quite prepared to support any motion for referring this matter to the Privy Council if it was found that all efforts were vain to enforce obedience to the Council's regulations. He believed they would have the support of the Profession at large in such a step, and certainly they would have the support of Sir John Gray, after the oration which he made in the House of Commons. (Laughter and applause.)

Sir D. Corrigan would not have risen but for the threat that the proceedings of the Queen's University would be brought before the Privy Council. Speaking as the representative of the Queen's University, he accepted the challenge, and, as far as his influence went, he would refuse to accede to the recommendation of the Council on extra-professional education, because he believed the Council was wrong, and that the Senate of the Queen's University was right, upon that subject. It must be remembered that the question was not one of whether a preliminary examination should or should not be gone through; the question was which system of preliminary education was the best, and he warned the Council to look well before they dared to bring the Queen's University before the Privy Council. *In limine* they would be met with this objection, that no man could be summoned to undergo a penalty for not following a recommendation. The authorities might recommend travellers to proceed by one of two roads, but there could be no penalty for choosing one rather than another. The Council had not yet issued a regulation upon the subject—why not? Because they were afraid. So that upon the very threshold of the Privy Council they would be turned out upon that law point. The only question upon which the Queen's University could be taken before the Privy Council was one upon which he (Sir Dominic Corrigan) was quite ready to meet the Council—namely, whether the plan laid down for educating a body of persons for the Medical Profession by the Council was better than the plan followed by the Queen's University. That was the question; and the very first document he would produce on the table of the Privy Council would be the returns from the Army and Navy Boards, which showed that, from the commencement of those returns up to the present time, not a single graduate of the Queen's University, as far as he knew, had been rejected. [A voice: That is not so.] Perhaps he was wrong in saying not a single one; but at any rate the numbers rejected of graduates of that university were far less than those from other quarters. There was a test upon which he would meet them before the Privy Council as to whose system was the best. It was not fair to say that the Irish bodies neglected extra-professional examinations. It was true they did not require their students to go through such a wretched preliminary examination as that which was visited by Dr. Storrar. And what was his report upon it? "Very often bad—some so bad that it is not easy to see why they were allowed to pass." And then they talked about taking the Queen's University before the Privy Council to disfranchise it because it did not follow their wretched plan, for he could not call it anything else. He would like to see them there. What did the Queen's University do last year when a man was examined and passed his Professional examination in Medicine and Surgery and all Professional subjects, but was reported at the Senate to have been deficient in his extra-professional papers? Why, they sent him back for a year. Was that neglecting extra-professional education? The Queen's University admitted no man to pass its examination who had not undergone the most strict examination in arts. They contended that their plan of education in arts was better than that recommended by the Council, which persisted in receiving crude little boys of 14 or 15 years of age who had passed a most imperfect preliminary examination, which was to test once and for all his proficiency in general education. The Council had passed the second *lustrum* of its existence; from the course they were pursuing they would never see a third, if he was at all able to read the signs of the times. The Council accepted the certificates of other bodies upon extra-professional subjects, and he would call attention to the papers at the Cambridge local examinations for boys not exceeding fifteen years of age, which were received as a sufficient foundation for subsequent Professional study of the man, without any requirement of future examination in arts. The question was which mode was the best of preliminary study, that recommended by the Council or that pursued by the Queen's University. He was quite prepared to meet them at the Privy Council, especially upon such examination papers as those issued by the Cambridge and Oxford local examiners, whose certificates the Council accepted. The learned baronet then proceeded to cite some amusing instances of sentences without verbs, and of questions involving "bulls" and other inaccuracies. For instance, the Oxford papers gave the following sage advice:—"Candidates are recommended not to dwell too long upon any single question, so as, if possible, to answer all upon the paper;" and the Cambridge professors required to know "the male of heifer." He had been charged by Dr. Alexander Wood with thwarting the Council in refusing to bring a recalcitrant body before the Privy Council on a former occasion. Dr. Wood alluded to the case of the College of Surgeons of London, against which there was at that time the same personal feeling as now existed against the Queen's University. The resolution which was opposed by him was a gross libel upon a body which had produced a Cooper and a Brodie, and which was then singled out by them as a sort of *bête noire*, just as they now sought to make a *bête noire* of the Queen's University. The Medical Council had, by lowering the minimum of education, lowered the maximum of qualification for the Profession, until at the present moment the certificate of any educational establishment from Nova Scotia to the Cape of Good Hope that a preliminary examination had been passed by any boy before the age of fifteen, was considered a sufficient foundation for after Professional study. And then to talk of haling the Queen's University before the Privy Council! He accepted the challenge, and was quite prepared to stand or fall by any comparison which might be drawn between the one system and the other, especially if the army and navy returns were consulted.

Dr. Alexander Wood, in reply to the remarks of the last speaker, said that, while always admiring the talents of Sir Dominic Corrigan, there was one gift which he did not admire, and which he was thankful not to possess, and that was the perverse ingenuity with which, on almost every occasion upon which he addressed the Council, he covered up the real question at issue, and raised other suggestions and illustrations for discussion which had nothing whatever to do with the subject on hand. The learned baronet had boasted his accuracy of reference, but he (Dr. Wood) remembered an occasion upon which a calendar was telegraphed for from Edinburgh, to settle a dispute upon a matter of fact with Dr. Syme; and Sir D. Corrigan, when he found he was wrong, refused to apologise. Again, during the present session he had read a document and omitted a portion of it which told in favour of his opponent, Dr. Thomson. As to the charge that the Queen's University had been singled out for persecution, the truth was that it was Sir D. Corrigan himself who had singled out the body whom he represented by stating that under no circumstances, as far as his influence could affect its decision, would the Queen's University accede to the recommendations of the Council upon this subject of preliminary examination, and he had just expressed himself prepared to go even before the Privy Council breathing the same defiance which he had breathed at the Council table to-day. He felt the time had now arrived when the Council should take some decisive action in the matter.

The hour of six having arrived, Dr. Embleton moved the adjournment of the debate, and the Council rose until Wednesday, 2 o'clock.

Caruncul\u00e6 Myrtiformes. — M. Demarquay, commenting upon the case of a young woman sent to his Hospital from the country, in order to have some malignant tumours removed from the genital organs, observed that on examination everything was found in a normal condition with the exception of the *caruncul\u00e6 myrtiformes*, which, being somewhat enlarged, were mistaken by the Practitioner for epithelioma. It is, he observed, by no means rare for him to have similar cases sent to him by Practitioners who are not accustomed to the constant examination of the organs like himself.—*Union Méd.*, June 20.

Iodine and Aconite in Periodontitis.—We quoted in our number for February 20 a statement by Professor Abbott, of New York, to the effect that of all the remedies for periodontitis he had found equal parts of officinal tincture of iodine and tincture of aconite root applied to the gums by far the most effectual. He applied it with a camel's-hair brush or a piece of wool at the end of the stick, in the early stages of the inflammation once a day, and in very severe cases twice. Unfortunately, he did not state the dose, but this omission he has supplied in a communication to the *Dental Cosmos*, in which he also states that he is more than ever satisfied with the remedy. In each application from two to three drops of the mixture are used—that is, one or one and a half drop of the aconite. He adds that "the fluids of the mouth should be kept from it until the alcohol is sufficiently evaporated to prevent its being washed from the part to which it is applied. This requires about a minute."

ORIGINAL LECTURES.

BY DIRECTION OF THE RADCLIFFE TRUSTEES.

LECTURES ON THE GERMINAL OR LIVING MATTER OF LIVING BEINGS.

DELIVERED IN THE MUSEUM AT OXFORD

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OF MENTAL NERVOUS ACTION.

OF MENTAL AS COMPARED WITH MECHANICAL ACTION—OF THOUGHT AS A RESULT OF CHEMICAL ACTION—IS THE BRAIN TO BE LOOKED UPON AS A VOLTAIC BATTERY?—ON EXPRESSING THOUGHTS—OF THE NERVE MATTER CONCERNED IN MENTAL ACTION—OF THE CHARACTER OF THE GERMINAL MATTER—OF THE NATURE OF WILL, AND OF THE LIFE OF GERMINAL MATTER TAKING PART IN MENTAL OPERATIONS.

(*Continued from Vol. I 1869, page 622.*)

Of Mental as compared with Mechanical Action.

If a machine could be made which would change from time to time, of its own accord, the kind of work it performed without any alteration being made in its mechanical arrangements, a rough comparison might be drawn between such a machine and the brain, but a machine of the kind supposed exists not, and is not conceivable.

Do the actions of the mental apparatus exhibit any analogy to those performed by a vast number of highly complex machines so arranged as to be under the influence of one person, this or that being made to work according as he willed? In this case we must further suppose every machine to be constantly wound up ready to be brought into operation on the instant, and capable of being stopped with facility. Or can we imagine an immense telegraph system which, besides communicating information, shall be capable of effecting mechanical work? The supposed machines must have no breaks or any of those arrangements to prevent injury or over-action, as in the various kinds of apparatus made by us. And further, our machine ought to be made of soft material, like brain-matter, and every portion of it should be capable of gradual renovation. Such conditions, however, we know, cannot possibly be fulfilled, and therefore no true analogy exists between any machines made by us and the nervous mechanism concerned in mental action. But admitting that they might be, and without laying stress upon the fact that the nervous apparatus, unlike the machine, keeps itself in order and in working condition if only the rest needful for its repair and renovation be granted, we have still to discover the hand that guides the mental engine, its superintendent, who bids the wheels revolve or stops them, who allows the work to proceed or checks it, as he wills. What sort of a guide can we find in the case of the mental machine, where is he seated, and how does he influence the complex apparatus under his immediate care and sole control? In what spot in the brain are we to search for him? But is not the structure of the grey matter such as to preclude the possibility of the existence of anything exhibiting an analogy to any mechanical arrangements known? We understand its construction sufficiently to justify us in concluding that the nervous matter operates in a manner different in principle from that of any known mechanism.

It has been said that in the brain we have "molecular machinery" *built* by the sun, but no one has shown what this supposed molecular machinery is like, what is its structure, how it acts, or how it is formed. Molecular machinery is a term which conveys no idea whatever to the mind. No one could draw or make a model of the supposed molecular machinery. We may have molecular matter, and we may have machinery, but there are no machines the molecules of which are active, and there are no molecules which act like machines—in fact, there is no molecular machinery, and it is scarcely necessary to say nothing whatever has been built by the sun. The expression is altogether incorrect, is calculated to mislead, and, there is reason to think, has led many to accept conclusions utterly at variance with established truths.

Of Thought as a Result of Chemical Action.

Some have expressed the opinion that thought was to be explained by the oxidation of chemical compounds in the brain. Judging from some of the remarks which have been made concerning the supposed chemical changes in nerve matter, one would infer that the brain, instead of consisting of millions of separate anatomical units exhibiting an elaborate structure and arranged in beautiful order, was but a mass of fatty albuminous pulpy material, rich in phosphorus, the action of which was determined by the oxidation of certain of its component elements, particularly the last, the oxygen being carried to the nerve pulp, and the products of chemical change being removed from it by the blood circulating in the vessels freely ramifying in the substance of the pulpy mass. But although there is no doubt that in the *expression of thought* chemical changes take place in the nerve matter, it has yet to be proved that thought itself results from chemical change. It would be more in accordance with what we know to conclude that thought preceded and determined the chemical change occurring in the brain matter, than that it was a consequence of it. Chemical change will not alone account for any vital acts whatever. If the movements of part of a mass of living matter in advance of other parts were due to chemical action, such movements would soon be produced in the laboratory, but chemistry has not yet advanced one step in this direction. The special action of any particular apparatus is not usually explained by asserting that it is due to the disintegration and oxidation of its constituent parts—of its wheels and cranks, for example—and yet some will have it that the action of the cerebral apparatus is to be satisfactorily accounted for by the disintegration and oxidation of the matter of which it is composed.

Is the Brain to be looked upon as a Voltaic Battery?

"Another hypothesis, to the legitimacy of which no objection can lie, and one which is well calculated to light the path of scientific inquiry, is that suggested by several recent writers, that the brain is a voltaic pile, and that each of its pulsations is a discharge of electricity through the system. It has been remarked that the sensation felt by the hand from the beating of a brain bears a strong resemblance to a voltaic shock, and the hypothesis, if followed to its consequences, might afford a plausible explanation of many physiological facts, while there is nothing to discourage the hope that we may in time sufficiently understand the conditions of voltaic phenomena to render the truth of the hypothesis amenable to observation and experiment."(a) By adducing in its favour such a statement as that about the resemblance of the beating of a brain to a voltaic shock, Mr. Mill condemns his favoured hypothesis, for it is certain that if there be any resemblance between a brain and a voltaic pile it is not of the kind implied.

Mr. Grove has recently(b) remarked that in "a voltaic battery and its effects" we have "the nearest approach man has made to experimental organism;" but surely it should be shown in what particulars a voltaic battery resembles an organism. All organisms come from pre-existing organisms, and all their tissues and organs are formed from or by a little clear transparent structureless moving matter which came from matter like itself, but may increase by appropriating to itself matter having none of its properties or powers. Now, voltaic batteries do not grow or multiply, nor do they evolve themselves out of structureless material, nor, if you give them ever so much pabulum in the shape of the constituents of which they are made, do they appropriate this. What, then, does Mr. Grove mean by asserting that a voltaic battery is the nearest approach man has made to experimental organism? Has man yet made any approach whatever to experimental organism? What does Mr. Grove mean by the term *experimental organism?* If any apparatus we could contrive developed all possible modes of force—motion, heat, light, electricity, magnetism, chemical action, and any number of others to be discovered—that apparatus would still present no approach whatever to any organism known. Of course such a thing might be *called* an organism, just as a watch may be called a creature, or a worm a machine; but everything that lives, every so-called living machine grows of itself, builds itself up and multiplies, while every non-living machine *is made, does not grow, and does not produce machines like itself.* Mr. Grove further says that in the human body we have chemical action, electricity, magnetism, heat, light, motion, and possibly other forces, "contributing in the most complex manner to sustain that result of combined action which we call life." Here it seems to be affirmed that forces sustain the result of their own combined action, but surely this is only asserting that these forces sustain

(a) Mill's "Logic," p. 18.
(b) *British Medical Journal*, May 29, 1869, p. 486.

themselves. Heat, light, electricity, etc., sustain the result of the combined action of heat, light, electricity. It is, moreover, said that what we call *life* is the result of the combined action of motion, heat, light, electricity, etc., which are but different forms or modes of one force. But, as every one knows, we may have any and all modes of force *without life*. Life, therefore, it would seem, involves something besides force, or is something different from it.

But it may be that each little brain cell with its connected fibres in some way resembles a minute voltaic battery with its wires; the matter of which the cell is composed undergoing chemical change, in the course of which slight electrical currents are developed. These being transmitted by the fibres ramifying to different parts exert an influence upon tissues and organs among which they ramify. In this case some further arrangement is required by which the action of particular cells and fibres is determined or prevented. Perhaps the closest analogy we can draw between cerebral action and that of an electrical battery is the following:—We may suppose multitudes of delicate conducting wires or threads ramifying over extensive tracts of tissue, the action of which is determined by the currents traversing the wires. Situated among these wires or threads, we may suppose little bodies connected with one another which are capable of undergoing alterations in form. Not the slightest movement can occur in any part of these bodies without an effect being produced upon the currents traversing the delicate wires which impinge upon them. Points in a vast number of circuits differing widely in their ultimate distribution are thus brought, as it were, within the influence of these little bodies, and the rate of transmission of the current through many different wires having different destinations and acting upon diverse machinery may thus be affected at the same moment, determining a variety of actions. But if it be admitted that the brain in structure and action resembles such an arrangement of minute voltaic batteries and conducting wires, we have to explain how all these were formed and made to take up the positions they occupy in relation to one another and to other organs before we can give an account of its action. For the kind of work performed by a machine is due to its structure as well as to the forces by which it is set in motion. And further, the movements occurring in the little bodies supposed to act upon the currents transmitted by the threads must take place spontaneously, which in any artificial arrangement is of course impossible.

On Expressing Thoughts.

But in considering the nature of mental nervous action, it is necessary in the first instance to distinguish clearly between the mental action—the actual thought—and its expression. The conversion of thoughts into symbols which others can appreciate is due to a highly elaborate mechanism working in the most perfect manner, but it by no means follows that if we understood exactly the manner in which the mechanism works, we should therefore be able to form an accurate conception of the nature of thought itself. Thoughts and ideas may, and in some cases do, undoubtedly exist, although they cannot be expressed in any way in consequence of the destruction or derangement of the mechanism concerned in expression. And in certain forms of cerebral disease intellectual action is performed, although the mechanism concerned in expression is completely deranged. Ideas are formed by the mind, and although the person can indicate this and convince us by his gestures that he has the idea, he is quite unable to express it and make it intelligible to others. The mechanism concerned in expressing thoughts consists of a nervo-muscular apparatus arranged with such consummate skill, and occupying so small a space, that it is possible for the mind to form but a most imperfect conception of the arrangement of even a very small part of it.

It is difficult in many cases to decide to what extent the apparatus concerned in expressing ideas is engaged in silent reasoning and cogitation. When we think over complex matters, and reason upon them, we work with certain mental images or symbols of the things, but certainly not with the verbal expression of them, nor even with their representatives, but with something far short of either, though sufficiently distinct and exact nevertheless. A great number of these images may be marshalled, as it were, before the mind almost in a moment, and conclusions arrived at which would require the greatest cleverness and a long time accurately to express. And in but too many instances, after making the greatest efforts, we only succeed in conveying to the minds of others the roughest, coarsest representation of a mental image which to us is distinct, clear, and perfect in all its details. And it is well known how much more fatiguing is the operation of expressing than that of thinking and drawing conclusions mentally. The results of a few hours' thinking, obtained without any perceptible exhaustion and without any conscious effort, may require many days' hard labour to reduce to a form intelligible to other minds, and in this operation even the health may suffer, as well as the mental vigour be impaired. It would therefore seem as if thinking and cogitation belonged to the class of actions I have distinguished as *vital* which are performed without waste or change in constitution of material substance, while the expression of thought undoubtedly involves material changes of the most active kind. We may roughly compare the first to the acts of an engineer who directs and controls a machine, and the last to the work of the machine itself. The engineer or superintendent, it may be said, merely exerts a directing and controlling influence which has nothing whatever to do with the combustion of coals or the falling of the weights, uncoiling of the spring, etc. He contributes nothing that can be weighed or measured towards the work performed by the machine. He can exist without the machine, and the latter may act without him, yet we all know how very much the result produced, as regards quantity and quality of work, is due to his interference.

(*To be concluded.*)

ORIGINAL COMMUNICATIONS.

NORWEGIAN NOTES.

By JONATHAN HUTCHINSON, F.R.C.S.,
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(*Continued from Vol. I. 1869, page 683.*)

I saw at the Christiania General Hospital several other cases of much interest in reference to the treatment of syphilis. Among them were two infants suffering most severely from the congenital form.

Syphilitic Disease of Viscera in an Infant.

One of these, an infant, aged eight weeks, was very ill. Its liver was much enlarged, and probably the spleen also. Dr. Bidenkap told me that he had begun with syphilisation, but, the inoculations not taking, he had abandoned the plan, and was now contenting himself with giving iodide of potassium to the mother. The mother's history was interesting. She had never been syphilised, nor had she taken mercury or any other specific. Her primary disease was at the time believed to be local, and she had double suppurating buboes, but never any rash whatever. The fact that her infant has suffered with such unusual severity cannot be considered encouraging to the adoption of the merely expectant plan. It will probably die.

Severe Congenital Syphilis after Cure of the Mother by Syphilisation.

The other infant also presented severe symptoms, and I should think its recovery doubtful. Dr. Bidenkap was adopting the syphilisation plan of treatment, and was inoculating every second day. I inquired as to how its mother had been treated, and was informed that she had gone through a complete course of syphilisation by Professor Boeck two years ago; that after fourteen weeks' treatment, all symptoms having disappeared, she was discharged "cured," and had remained well ever since. She was a young unmarried woman, and looked now in good health.

At first sight this is a clear fact against the idea that syphilisation really eradicates the taint, for here we have a well-"cured" woman becoming the mother a year later of a wretchedly diseased child, just as we see so often after other methods. It is only fair to the plan, however, to suggest that the taint may have come from the father's side also. The Christiania Surgeons, however, and the Professor himself, I believe, amongst them, fully admit that syphilisation-cures do not prevent the cured from becoming the parents of tainted offspring. Dr. Bidenkap said to me, "We have had a large number of mothers who, after such cures, have borne healthy children, but in many it has happened otherwise." Dr. Fayes, in a report from the Lying-in Hospital, has recorded eighteen cases in which syphilised women became mothers afterwards, and states that almost all their children died with more or less distinct syphilitic symptoms. Some have even asserted that "the offspring of syphilised women are invariably syphilitic." The most that Dr. Gjor, the very intelligent Surgeon to the Christiania Lock Hospital, and an advocate of syphilisation,

can assert for it, in this respect, is that its results are not worse than those of other methods.(a)

Cure by Syphilisation does not prevent Transmission to Offspring.

We may, then, I think, take it for proven that syphilisation can make no boast as to preventing the occurrence of transmission to offspring—one of the main objects of all plans of treatment, and perhaps the very best test of the reality of a cure.

Our Norwegian *confrères* have great advantages over us in inquiries of this kind. Their towns are small, and, the population being stationary, their patients cannot escape them. These advantages have been put to use with the most praiseworthy zeal and industry. Records are kept at each public institution, and if a woman should be delivered in the Maternity of a pocky child, her antecedents can, in all probability, be easily ascertained by reference to the archives of the General Hospital. So far as a stranger could appreciate, it also appeared to me that there is an amount of friendly co-operation in these matters from which we in England might well take example.

The Male Venereal Wards—Patients under Lock and Key.

The feature which first called for notice in passing to venereal wards for men was that they were all as carefully locked as those of a lunatic asylum. Dr. Bidenkap told me that "otherwise the men would escape."

"Then," I asked, "have you power to keep them here against their wills?"

"Certainly," he replied.

"Do you really mean," I urged, "that you can make any man who has syphilis come under treatment whether he wishes it or not."

"Certainly," he said, "we do not consult them about that. If I know that a man has syphilis, it is at my discretion to order him into the Hospital, and to make him stay there till he is well. If I think he may be trusted not to risk the spreading of the disease, I allow him to remain at large; otherwise I take him in."

"Then," I asked, "can you go to a man whom you suspect of having the disease and compel him to submit himself to your examination?"

"I would not go to him. I would send a policeman, and make him come to me."

Dr. Bidenkap, I must state, in addition to his Hospital appointment, holds the office of Medical Director of sanitary matters to the town, and is thus especially concerned in carrying out the laws against contagious diseases. I gathered from our conversation that it is not unusual to enforce them in the case of males amongst the poorer classes, and in females it is of course constantly done. Subsequently, during my visit to Bergen, Dr. Hjerdal confirmed the above statements as to the stringency of Norwegian law, but he thought that it was rarely enforced in the case of men. In the Bergen Sygehus, or General Hospital, the venereal wards contained much fewer patients than those of Christiania, and none of them were locked.

Syphilisation in the Male Wards.

Almost all the men whom I saw were under syphilisation treatment, and most of them were doing well. Dr. Bidenkap said that three months was an average stay in Hospital, and that they were never allowed to go until well. No treatment is ever adopted until *bonâ fide* secondary symptoms show themselves. Dr. Bidenkap appears to believe firmly, though not enthusiastically, in its comparative advantages over other methods. He does not consider it so efficient against tertiary as against secondary symptoms. I saw a man named Johan O., now aged 27, who had syphilis eight years ago, and tertiary ulcers in the throat two years ago, for which latter he was syphilised and got well. He is, however, now again under care for the same, though in a milder form. Sarsaparilla is now being tried.

I shall recur to the subject of the treatment of syphilis when I have seen the Bergen Hospitals and those at Christiania a second time. It will be seen that two very important experiments are being tried here, and tried, too, boldly, on a large scale, during a long series of years, and with special advantages—the first the plan by syphilisation, and the second that by the entire disuse of mercury and other specifics. It is possible that syphilisation is, as many believe, only expectancy in reality. At any rate both are well worthy our attention.

(a) I have taken some of these facts from the printed report of a discussion at the Christiania Medical Society, at a meeting held in the beginning of the present year. It contains the opinions of many observers, and, as it took place after the report to our own Medico-Chirurgical Society by Mr. Lane and Mr. Gascoyen, has additional value. The opinions are very various, and some of them strongly against syphilisation. Dr. Boeck has, with his characteristic love of truth and of full investigation, had the whole report translated into English.

Prevalence of Cryptogamic Skin Diseases.

I inquired of Dr. Bidenkap as to the relative prevalence of the several forms of cryptogamic skin disease. On most parts of the Continent these are, I believe, much more frequent than in England. He told me that Norway was no exception to this rule. Tinea versicolor he regards as so common that "almost every one who wears woollen has it," and it is not thought worth treating. Both ringworm and true favus (hero skurv) are, I said, very frequent.

Alopecia areata is reported not common. Dr. Bidenkap does not believe that it is cryptogamic. There was no case of favus in the Hospital. Professor Boeck also reported favus as fairly common, and as I do not in London, in the practice of the Skin Hospital and the London Hospital both together, see more than one or two a year, I think we may feel certain that it is far more frequent in Norway.

Rarity of Molluscum Contagiosum.

The curious malady known as Molluscum sebaceum or contagiosum is, on the other hand, I believe, almost an English disease. It is very rare in Paris and in Berlin and Vienna, and no Continental atlas with which I am acquainted contains a portrait of it. Professor Boeck told me that he did not think he had ever seen it, and Dr. Bidenkap had seen only one or two cases, and had obtained no evidence as to its contagiousness.

On the Frequency and Severity of Scabies.

I have not as yet seen any case of unusually severe scabies (Scabies Norvegica), and am told that they are very rare. Of scabies in its ordinary form there are plenty of examples. Oliver Goldsmith, when he travelled through Norway, observed that almost all the peasants had the itch, and I fear that the last century has but little mended matters. Neglect of ordinary cleanliness, difficulty in obtaining Medical advice, and the habit of shaking hands on all possible occasions, may perhaps combine to explain this prevalence. If you give a Norwegian peasant anything, and he wishes to express his gratitude, he will shake hands with you. Thus you have to shake hands with all the waiters, chambermaids, and carriole-boys with whom you have business, and may thus enjoy the opportunity of inspecting many hands in the course of a day. Even to the most cursory glance a large number of them show signs of the disease. At a little roadside inn (Haeg) I gave a small present to each of five children in succession, in order to have an opportunity of seeing their hands, and all of them had most unmistakable itch. In some districts, however, I see but little of it. All the Surgeons with whom I have conversed admit its extreme prevalence. It is almost a pity that the Government, which is parental in many matters, and is zealous in its efforts to improve the condition of the peasantry, does not take measures to put the means of cure of scabies within the easy and gratuitous reach of all.

The Prurigo of Hebra.

Hebra has restricted the old name "prurigo" to one single group of cases, of which he has given a very clear description.(b) Its special features are extreme itching without proven cause, the appearance of a lichen rash, usually placed in certain definite positions, and arranged symmetrically. It commences in childhood, and lasts, in spite of all treatment, through life, without tending to shorten it, unless, adds the Professor, its intolerable annoyance causes the sufferer to commit suicide. Its cause is unknown, but it is to be taken for granted that it is not an external one. I think it will be granted by English observers that cases fitting with this description are very rare. I have myself been carefully on the look-out for such, and have found very few indeed. Two recently under care, to which I was disposed for some time to give this name, were afterwards proved to be attended by body lice, and in all probability caused by them. Yet in Vienna Hebra speaks of the disease as frequent, and refers to an experience of thousands.

Dr. Bidenkap, who formerly studied under Hebra, showed me two patients in whose cases this diagnosis had been given. One was a girl of about 15, and the other a lad a year or two older. Both had suffered for years, and in both, from scratching, etc., the skin had become thickened, of a deep brown from pigment, and spotted over with small whitish but indistinct scars.

In both patients I thought there was good reason to suspect scabies; indeed, in one it was known to have been present, and both were to me suspicious of pediculi. We talked over these conjectures, and Dr. Bidenkap alleged, with much force, that if any large proportion of the cases of Hebra's prurigo are really

(b) See New Sydenham Society's translation of his work.

badly cured scabies or pedicularia, then ought that malady to be very frequent in Norway, whilst in truth it is very rare.

The state of skin in Dr. Bidenkap's two patients as regards pigmentation and evidences of scratching very much reminded me of some of Hebra's plates illustrating the eruption consequent upon lice, and I cannot help still feeling some suspicion that after all a local, and not a constitutional, cause may possibly be at the bottom of the matter.

No Out-patients' Department.

I did not see much of interest amongst the other patients in the wards for skin diseases. There is no out-patients' department, and thus I had no opportunity for seeing in rapid succession a large number of "common cases."

TREATMENT OF URETHRAL STRICTURE BY FORCIBLE DILATATION WITH MR. B. HOLT'S INSTRUMENT.

By J. FAYRER, M.D., C.S.I., F.R.S.E.,
Professor of Surgery, and Senior Surgeon Medical College Hospital, Calcutta.

I HAVE on former occasions described certain cases of stricture in which this mode of treatment was practised, and have expressed my impression that it is a valuable addition to our Surgical resources in the treatment of this disease. It is unnecessary for me to repeat what I have already said generally in favour of forcible dilatation, but I may add that with greater experience I have acquired greater confidence in this mode of treating urethral strictures. The force which is necessarily used in the operation is suggestive of danger, and I confess that I had considerable misgiving as to its propriety at first; but I have now no hesitation in using the instrument, and I believe it to be generally attended with as little danger of causing constitutional mischief as may be the passage of an ordinary bougie through a tightly contracted and irritable stricture. I certainly have seen as severe an attack of urethral fever follow the latter as the former operation. In the *Medical Times and Gazette* of August 18, 1866, I recorded three cases of stricture treated in this way, and in the Indian annals I have described three similar cases. In an address on Surgery to the British Medical Association, in speaking of urethral fever, March, 1868, I also described a case which proved fatal after the operation, and it is therefore unnecessary to recur to them. I shall, however, give an abstract of other cases since treated which serve to confirm the favourable opinion I have formed of the operation.

Case 1.—T. S., a Swiss cook of a ship, aged 52 years, a healthy-looking man, admitted on March 4 with a tight irritable stricture of ten years' duration. For some time the ordinary treatment by dilatation was tried, but the progress made was very slow. On May 8, the stricture was ruptured by the passage of Holt's largest dilator. Very little bleeding followed, and comparatively slight constitutional disturbance. A full-sized catheter was passed immediately after the withdrawal of the dilator, and repeatedly afterwards until he was declared cured on July 25.

Case 2.—L. A., an East Indian, aged 50, was admitted on July 27 with stricture of one year's duration. The urethra was strictured in two places—one in front of the scrotum, the other just in front of the bulb. He was otherwise in good health. The director having been introduced with some difficulty, the largest dilator was at once passed. A large catheter was passed immediately and daily afterwards. The constitutional symptoms were very slight, but he had incontinence of urine for some days. He rapidly recovered, and was discharged cured on August 8.

Case 3.—B. C. Gossamee, Hindoo, aged 40, admitted June 22 with stricture and urinary fistula, combined with scrotal elephantiasis. The stricture was very narrow, and just in front of the bulb. The stricture was split with the largest-sized dilator, and kept dilated with a full-sized catheter. The sinuses closed, and the scrotal tumour was then removed, from which having recovered, he was discharged.

Case 4.—S. C. G., a Hindoo boy, aged 5, was admitted on August 14, 1866, with a contraction of the urethra near the neck of the bladder, the result of lithotomy performed two years previously. The director having been introduced into the bladder with some difficulty, the smaller dilator was passed, and a corresponding catheter was passed immediately after. He attended for some time as an out-patient, and appeared to be cured.

Case 5.—D. I., a healthy-looking young Hindoo, aged 24, admitted on September 3, with a stricture in the usual site. It was not very tight, nor of long duration. It was split with the full-sized dilator the same day, with comparatively little pain or hæmorrhage. He would not remain in Hospital, but attended as an out-patient for a few days until he was cured.

Case 6.—M. C. B., Hindoo, aged 60, a trader, was admitted on September 5, with stricture of some years' duration, situated in front of the bulb. The director was passed with great difficulty, and the full-sized dilator passed on the 8th. He recovered rapidly, attending as an out-patient until he was cured.

Case 7.—E. S., an American, steward of a ship, aged 32 years, admitted on September 7, with a tight stricture of ten years' duration. The stricture was ruptured with the full-sized dilator. He would not remain, but attended as an out-patient until cured.

Case 8.—F. K., a Mahomedan servant, aged 44 years, admitted on March 11, 1867, with stricture in the usual situation of eighteen months' duration. No. 4 catheter was passed with difficulty on March 11, the stricture was split with the full-sized dilator; this was followed by a full-sized catheter. He did well, and left the Hospital on March 17 of his own accord.

Case 9.—A., a Malay khalassie, aged 25 years, was admitted on April 29, 1867, with a very tight almost cartilaginous stricture just in front of the bulb, of three years' duration. Catheters No. 2 and 4 were passed with great difficulty until May 2, when the stricture was at once split by the passage of the full-sized dilator. This was followed, as usual, by a full-sized catheter, which was passed daily until May 27, when he was discharged cured.

Case 10.—J. O., European, aged 36 years, admitted December 21, 1867, with stricture of ten years' duration, the stricture just in front of the bulb. It was split on December 24 with the full-sized dilator; this followed, as usual, by a full-sized catheter (No. 12). He was discharged cured on February 15, 1868. On admission, catheter No. 2 was passed with difficulty.

Case 11.—R. B., Mahomedan, aged 30 years, admitted July 6, 1868, with stricture of six years' duration. Had several times been in great trouble from retention of urine. The stricture was split with the full-sized dilator on the 7th, and he was discharged cured on August 1, No. 12 passing easily.

Case 12.—W. A., sailor, European, aged 33 years, admitted on August 18, 1868, with stricture of eleven years' duration. The stricture came after gonorrhœa, was in front of the bulb, and very narrow. It was split with the full-sized dilator on August 22, and he was discharged cured on September 6, 1868.

(*To be continued.*)

PHARMACEUTICAL CONGRESS.—It is announced that an International Pharmaceutical Congress is to be held at Vienna next September, at which numerous questions of great importance will be discussed. Among others a project for a universal pharmacopœia is to be brought forward, with the view of preventing the serious inconveniences which so often arise from the making of prescriptions by foreign Physicians

TRANSFUSION OF NON-FEBRILE BLOOD IN ACUTE TRAUMATIC AND SUPPURATIVE FEVER MENACING LIFE.—Professor Hueter, of Greifswald, publishes a preliminary communication in which he suggests the propriety of this treatment when life is seriously menaced by the febrile action set up after accidents and operations. He refers to three cases in his own Clinic in which the practice was resorted to, and although it did not save the patients each transfusion was followed by remarkable temporary amendment. From half to a whole pound of blood was thrown in by arterial transfusion, the radial and tibialis postica being selected; and when there is not anæmia present he thinks some venous blood should be at the same time abstracted from the opposite extremity.—*Centralblatt*, May 22.

PASSAGE OF AN IRON SHAFT THROUGH THE SKULL.—With reference to the extraordinary case which we noted in our number for April 24, page 444 (a man living for several years after the passage through his skull of an iron bar 3 ft. 7 in. long, and weighing 13 lbs.), the *Boston Medical Journal* adds "that the tamping iron entered by its pointed end the left side of the face, immediately anterior to the angle of the lower jaw, and, passing obliquely upwards and backwards, emerged in the median line, at the back part of the frontal bone, near the coronal suture." The cranium and bar are both deposited in the Museum of the Harvard University.

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Medical Times and Gazette.

SATURDAY, JULY 10, 1869.

THE GENERAL MEDICAL COUNCIL.

Our costly little Medical Parliament is now once more in full session, and we doubt not that the opening address from its President, which we were enabled to publish last week, has been eagerly and carefully studied by the Profession in order to gain some knowledge of what are likely to be the most important subjects of consideration and debate. For ourselves, we have read Dr. Burrows's clear, able, and weighty speech with very great satisfaction, for he set forth in the most forcible manner his carefully considered opinion that the most important and successful method that can be adopted for the improvement of Medical education "will be the establishment of a good examining board—a joint examining board for each division of the United Kingdom." Strongly as we have felt and urged the necessity and importance of such a step, it has, we confess, been always with a feeling of despair of its attainment. But now, when the President of the General Medical Council has so decidedly and openly pronounced in its favour—when the expression of his opinion has been received by the Council with applause—when he informs us that the Committee on Medical Education have arrived at a similar conclusion, and we find that the Lord President of the Privy Council, in his most important communication to the Medical Council, urges the need of reform in the same direction—when we see such an agreement of opinion by all the most weighty authorities, we cannot doubt for a moment that the desired reform will shortly follow. Of course there will be much opposition, our old friend "vested interests" will be active and noisy, and many serious difficulties and obstacles will have to be overcome, but the work will be accomplished, and the scandal of nineteen examining boards competing downwards for the sale of Medical and Surgical diplomas must ere long be wiped out.

The whole of the communication from the Privy Council is of great importance, and not the less so because, while made in the name of the Lord President, the voice may probably be considered to be also the voice of the "obedient servant" who signs it—the Medical Officer of the Privy Council, a gentleman whose opinion must have great influence and weight with that august body on such a matter as Medical education. The Lord President holds out a hope that next year Government will take charge of a Medical Acts Amendment Bill, but intimates that if such is to be the case the Bill must be no attempt at mere partial and piecemeal amendment, but a large, well-considered, and statesmanlike measure, "covering all the ground where amendment of the Medical Act is wanted," and he asks the zealous co-operation of the Council in the preparation of such a measure. His Lordship also invites the Council to consider at the same time whether its own constitution may not also be reformed and amended.

With such subjects for deliberation, put forward in such a way, it will be admitted that the present session of the Council will be one of the most grave importance, to a degree, indeed, which it would not be easy to exaggerate; they are subjects demanding most careful, and probably, as Dr. Burrows fears, "very prolonged," consideration, and the manner in which they are handled, and the decisions arrived at on them, must very largely influence the future of the Council, and the consideration and weight it will possess with the Profession and the Government.

With a fine national instinct for the possibility of a row, Sir Dominic Corrigan seized the earliest opportunity for expressing his belief that the President was no longer legally in existence, and, with exquisite courtesy and candour, added that he himself "had been canvassed for Professor Syme, and believed he would be elected." By reference to the minutes of last year's proceedings it was easily shown, however, that the President had been re-elected for the full term of five years; and we do not doubt that the members of Council heartily congratulate themselves on having, at this the most important period in the Council's existence, so highly valued and thoroughly proved a guide and ruler as Dr. Burrows.

The Council will not be left in any doubt about the wishes and feelings of large numbers of the Profession as to what amendments are needed in the Medical Act and in its own constitution. Already on the first day of the session it received a communication on these points from the Garioch and Northern Medical Association, and a request that a deputation might present a memorial on the same subjects from a large body of the Profession, "including many of the most distinguished teachers, writers, and Practitioners in England, Scotland, and Ireland;" and doubtless many other bodies will follow suit.

The Profession, which pays all the expense of the Council, will notice with approval that the Executive Committee has made several recommendations for lessening the expenses of the Council in printing, and that these recommendations were adopted.

The rest of the first day was occupied by the subject of preliminary education. Reports were received from the Branch Councils, in answer to a request remitted to them by the General Council last year, that they would consider how far it might be desirable and feasible to appoint a board by the General Council, or by each Branch Council, to arrange and conduct, under their supervision, the examination of students in preliminary education. The Branch Council for England shortly expressed an opinion that such a step would not in England conduce to a more efficient and satisfactory system of conducting the examinations in preliminary education. The Branch Council for Ireland still more curtly opined "that it might be very desirable, if the legal rights and privileges of the several licensing bodies permitted it, were the preliminary examinations conducted by an examining board for each division of the United Kingdom," while the Branch Council for Scotland sent up a somewhat lengthy and elaborate report to the same effect as that from Ireland. The Council discussed these conflicting opinions, and at last sent them to a committee.

The Branch Council for England, also, in answer to the question how far it might be desirable to add logic to the subjects of preliminary examination, reported that while they recognised the advantage of instruction in logic to Medical men, they did not recommend its being made a necessary subject of their preliminary examination.

On the second day a committee was appointed "to consider the question of the amendment of the Medical Acts," and to it are referred the communications on the subject from the Government and from various more or less important Professional bodies. The resolution to appoint this

committee was introduced by Dr. Andrew Wood in a rather lengthy defence of the Medical Council in reply to what he was pleased to call the "furious tirade" made against it in the House of Commons by Sir John Gray. This led to a mutually recriminatory and by no means short discussion by the Scottish and Irish members; some of it was amusing, and sometimes it was decidedly warm, as became the nationalities chiefly engaged, but we venture to think it was as decidedly a waste of time. No doubt Sir John Gray's statements were exaggerated, and his information anything but perfect or correct; but a very plain, concise, and simple notice of his mistakes as to facts might, under the circumstances, have satisfied Dr. A. Wood, and saved much time. Had that learned member of the Council been addressing the same audience that Sir John Gray spoke to, it would have been a very different matter; he might then have given the fullest and freest play to his eloquence. He might even have exceeded the "three columns and a half of the newspaper" which he mentions, with some envy probably, as the length of Sir J. Gray's speech. But we cannot, much as we admire him, flatter him with the idea that gentlemen of the House of Commons will read his speech. And if any M.P. who heard Sir J. Gray should by any happy fortune look at this discussion in the Medical Parliament, he will certainly pass on from Dr. Andrew Wood's speech to Sir Dominic Corrigan's, and then, with a shrug of the shoulders, will suspect that Sir John "was not so far out after all." However, we quite agree with Dr. A. Wood that it would be a very fair punishment were Sir John Gray made to read from beginning to end the whole of the various reports on the visitation of examinations.

The remaining part of the second day's sitting was devoted to the consideration of some communications from the King and Queen's College of Physicians in Ireland, Trinity College, and Queen's University, Dublin. It appears that these bodies do not require the preliminary examination to be passed before Medical education is begun, and the Registrar of the Council had been directed to address a letter to them, "representing that throughout England and Scotland a complete uniformity has been brought about by the adhesion of the licensing bodies to the recommendations of the General Medical Council in this respect," and that it is highly desirable that the Irish licensing bodies also should require that preliminary education and examination "shall be really preliminary to Medical study." The Registrar of the King and Queen's College of Physicians replies, in the name of his College, first, that the Council is in error in representing that a complete uniformity prevails in this matter throughout England and Scotland; and secondly, that in the opinion of the College the plan proposed by the Council "is not calculated to advance the acquirement of a good general education." The Registrar of the K. and Q.C.P.I. does not condescend to specify any exceptions which might justify his denial of the complete uniformity which the Council had declared to exist in England and Scotland, and we are not able to supply this rather remarkable defect, as it seems to us, in his letter.

The Secretary of the Queen's University writes that the Senate considers that "a mere preliminary examination is not a sufficient test of extra-Professional education." And the Board of Trinity College, "having consulted with the King and Queen's College of Physicians," is not prepared at present to recommend any change in the existing arrangements on the subject of preliminary education.

Several of the English and Scottish members of the Council endeavoured to obtain from Sir D. Corrigan and Dr. A. Smith distinct information as to the practice of the Irish licensing bodies with regard to their requirements in the matter of preliminary education, but without any clear or satisfactory result.

On Monday the subject again turned up on a notice of motion, by Dr. Paget, for some further information from the Queen's University in Ireland, and Sir D. Corrigan observed that the letter above mentioned was sufficient; he did not say it was *satisfactory* happily, but remarked that "at present the Queen's University declined to accede to the view of the Medical Council." "They thought their own course the best, and they told the Council so. Therefore he thought no more information was required on the matter." He then alluded to "a statement by Dr. Leet in a report which he had drawn up (referring to certain Colleges in Ireland) that there was an excellent preliminary examination." He wished to know the grounds for that statement; had Dr. Leet ever inspected any of the examination papers?

Dr. Leet replied that "he got his information from the Professors of the College!" Upon which, Sir D. Corrigan, who is a member of the Senate of the Queen's University, informed the Council that that University utterly distrusted the college examinations; that "no matter what college professors might say to them, they did not accept the certificates of a single student who came before them for examination," and that therefore they recommended the student to go through an education and examination in arts during the first two years of study at the University."

The whole affair seems very Irish, and would be very amusing but for the waste of time it causes in the Council, and as showing the wilfulness and obstinacy with which some of the licensing bodies still resist the recommendations of the Council. It is an excellent example of the difficulties the Council have to deal with, and of the vanity of "moral suasion." We must hope that the amended Act—that beautiful but most vague vision of a very dim future—will give the Council power to enforce their recommendations when moral suasion has failed.

On Saturday, the third day, the second report of the Committee on "State Medicine" was received. The report itself is very short, but is accompanied by a copious appendix containing information from some of the most skilled persons in this matter both at home and abroad. We must defer our remarks on this subject to a future opportunity, only noting now that the Committee are unanimously of opinion that "the Council should insert the requisite clauses for providing a qualification in State Medicine in any amended Bill which may hereafter be prepared for Parliament."

The returns of examinations from the Medical Departments of the Army and Navy, and from the India Office, were also received, and a condensed table of them will be found in our report of the Council's proceedings.

On Monday Dr. Storrar presented a report from the committee appointed by the Branch Council for England to inspect the papers on preliminary education. Papers relating to three only of the recognised examinations had been received. Those from the College of Preceptors were imperfect and insufficient for the purpose of the committee. With the "Cambridge Local Examinations, Senior," the committee was highly satisfied; but their report on the preliminary examination papers of the Royal College of Surgeons of England is anything but flattering. The list of subjects is very long, and the committee state that the questions are good, the best answers good, and some of them excellent, but that the worst answers are often bad—"some so bad that it is not easy to see why they should have been held to be sufficient, the spelling being often bad, and the answers frequently such as to show an absence of all real knowledge of the subjects to which the questions relate." Comment on this would be superfluous; we leave it to the digestion of the Members and Fellows of the Royal College of Surgeons of England.

A considerable part of the fourth and some of the fifth days were occupied in matters of justice. John Pattison, M.D. New York, had been summoned before the Council on a charge of "infamous conduct in a Professional point of view." He did not choose to appear either personally or by counsel, but sent a written defence. Mr. Ouvry read to the Council all the evidence in support of the charge, and Dr. Pattison's written

answers, and the Council, having first resolved that the charge was fully proven, then ordered that Dr. Pattison's name should be erased from the Register. Our readers will, no doubt, recollect enough of the case Frewen *v.* Pattison in the Court of Queen's Bench to make it unnecessary for us to load our pages with Dr. Pattison's letter to Mr. Frewen, and his statement of the lady's case, which he threatened to publish. We will only add to Mr. Ouvry's statement that not only was the patient's case most coarsely described, with imputations of neglect, meanness, and parsimony on the side of the husband, but the names of the patient, with all addresses in town and country, were given at full length. The qualification of Lima Abraham La'Mert as a Licentiate of the Royal College of Physicians of Edinburgh was ordered to be erased from the Medical Register.

Applications from Mr. Evan Thomas and Mr. Thompson Whalley to be reinstated on the Register were considered and refused.

On Tuesday, the fifth day, a long report was received from the Royal College of Surgeons of Edinburgh, and a long fight followed to determine whether or not it should be placed on the minutes. Dr. Alexander Wood objected to its insertion, and we think that the minutes certainly ought not to be laden with the memorials, addresses of advice, etc., that any college or other body may choose to send to the Council; but the Doctor contrived so to tread on the toes of the representative of the College, and on the coat-tail of Sir Dominic Corrigan as the representative of Liberalism, that they moved the insertion of the document, fought the question, and lost it by one vote.

The conduct of the Queen's University in Ireland with regard to preliminary examinations was then brought forward, and Dr. Parkes made a mild and genteel motion to ask for further information. Dr. Storrar, however, thought the time had arrived for something more than a repetition of polite requests, and he proposed a resolution ending with "the hope that before the next meeting of the Council" the University would be able to announce to them that they had complied with their recommendations, and so "avoid the necessity of a representation being made by the Council on the subject to her Majesty's most honourable Privy Council." This was, of course, fiercely fought over, and the debate was adjourned to Wednesday, when this show of vigour was refused, and the original motion passed.

THE REPORT OF THE WATER-SUPPLY COMMISSION.

The report of the Water-Supply Commission deals with the means whereby London is to be provided with water, and the first portion of it considers the propositions which have been made for obtaining a large supply of pure water from the Welsh mountains or the Cumberland lakes. Both of these schemes the Commissioners decidedly reject. The chief ground of objection is the expense, which in the one case is estimated at £11,000,000 and the other at upwards of £13,000,000. It is, therefore, to the Thames that London must look for its water supply, but supplemented by the River Lea, either directly or indirectly through the New River, and the chalk wells. It is noteworthy that the objections which have been raised to the Thames are found, on careful investigation, either to vanish, or, at all events, to be balanced as regards the rival schemes.

The first thing to be considered in any question of water supply is quantity. It has been contended that the Thames supply is insufficient, and that a much greater quantity might be procured from Wales or Cumberland, but this is not exactly true. All our great water-gathering grounds are in the west, for it is the west and south-west winds which carry with them most moisture, and it is in the west country where our highest hills, those which are most likely to condense these rain clouds, are to be found. It is well known that what we term springs are only the restoration to the surface of the water which has sunk into the soil during the prolonged winter rains; consequently, where the ground is tolerably level, we should expect to find these supplies most permanent. There is no doubt whatever about the large quantity of water which might be collected in Wales, but the mountains there are steep and rugged, the rain which falls upon them is speedily shed off them, and, were there no means of storing this winter supply, we should be worse off than with the Thames. This river has a most extensive watershed, and, as a consequence, is less affected by droughts than any other river in the kingdom, so that if dams or tanks, or great reservoirs, are to be necessary, why not have them on the Thames rather than in Wales? Moreover, the Thames is a natural conduit which is not liable to leakage, whereas either of the other schemes implies an artificial channel of enormous length, which could not fail to entail loss both by leakage and by evaporation. Other considerations point the same way, such as the injustice of rendering the whole kingdom subservient to London. Then again, there is the fact of the low pressure with which the water from Wales or Cumberland would reach London, rendering pumping quite as necessary as it is now; whilst finally it may be remembered that a very large quantity of water is daily pumped from the Thames into the watershed of the Severn for the supply of a canal. This we might certainly claim as ours by right. There cannot, therefore, be a doubt about the *possibility* of our procuring quite as much water as we want from the Thames itself; but there is also the question of *propriety*, for if it can be clearly shown that the Thames water is unfit for use, we should not be justified in introducing it into our dwellings, provided better could be got, for after all such cases are relative. The Americans out in the plains are forced to use water so strongly impregnated with soda, that to us it would be undrinkable, whilst they not only habitually use it, but, like George the First with his stale oysters, come to like it. And so of many others. Fortunately, we are not reduced to such straits, for the water with which we may supply ourselves is both plentiful and excellent.

The two objections urged against the Thames water are—first, that it is hard, and, secondly, that it contains organic impurities. No doubt Thames water is hard as compared with mountain water, which, as a rule, is soft; but hardness is not noxious. The hardness of a water depends on the presence in it of one or more salts of lime, as the bicarbonate or the sulphate. The former is obtained by the gradual percolation of the water through a chalky or calcareous soil, such as that which constitutes a great portion of the Thames valley, and may be got rid of without any very great difficulty. The other is a tougher customer: it is that found in Paris water, and cannot be easily removed. For drinking purposes, the presence of a small quantity of calcareous matter is of no great consequence; but for washing and manufacturing purposes it is wasteful, occasioning the consumption of more soap than does soft water. When, however, the water is boiled, much of the calcareous matter is thrown down, forming what is called a fur in the boiler, but the water is thereby softened. Most of our mountains are slaty or granitic, so that water falling upon them is not thereby hardened, but acquires properties which, as far as cities are concerned, are more serious. The fact is that soft water acts much the more readily on leaden pipes, for the salts in the hard water combine with the lead, and give it a protective covering like that of varnish; but the soft water carries off the lead with it, entailing in those who use it carelessly all the risks of gradual lead-poisoning.

Glasgow and Aberdeen have water of this soft character. That of Glasgow is procured from Loch Katrine, and is as nearly as possible pure; that of Aberdeen is from the Dee, and also contains remarkably little impurity, except occasionally a dingy tinge of peat water. But either of these waters, if allowed to stand in a leaden cistern for forty-eight hours, would

be dangerous: they would contain a quantity of lead which would surprise those who saw the water tested for the first time. Hardness, therefore, is not altogether a disadvantage, nor softness an unmixed advantage.

The other objection to Thames water—viz., that it contains organic impurities—is a much more serious one, and, if sustained, would show it to be unfit for its purpose. It would seem to be almost absolutely certain that some diseases—as cholera and typhoid fever—are more readily propagated by water than by any other medium. Further, it is maintained that human excreta, when thrown into rivers, have themselves the power of inducing disease in those that dwell below and drink of its waters. Enough, at all events, has been proved to make us exceedingly wary of a water which contains organic nitrogenous matter of an animal origin. But running water is a powerful oxidising agent, and substances exposed to its influence speedily combine with its oxygen. The fact that Thames water is purest at Kingston tells strongly in this way. Under such circumstances, bodies containing nitrogen exhibit that element as a *nitrate* of something or other, and in this shape it is harmless. Sometimes, however, water contains nitrogen in another form—that of ammonia—and this is always to be looked upon with suspicion. Still, the modern tests for ammonia are so delicate, that a few dead cats and dogs, with such other animal *débris* as are never wanting in our rivers, would go very far to explain the trace of ammonia in the almost infinitesimal quantities which Thames water exhibits. But, after all, the towns in the Thames valley above the London intake do pour their sewage into the river. The Thames Conservancy have the power to prevent this, and it is our interest to see that it is so. When this has been done, the Thames water will be altogether unobjectionable as a water supply. The quantity it can yield is more than enough for our wants. What more is required?

Such are the general conclusions of the Commissioners as to the Thames. If they had sat fifty years ago, when Londoners drank water taken opposite Hungerford-market, they might have come to somewhat similar conclusions.

THE WEEK.

TOPICS OF THE DAY.

Sir John Gray seems destined to establish the benefit which Medical Members of Parliament are capable of rendering to the public as well as to the Profession of Medicine. Of course the speech in which Sir John Gray first attacked the present system of Medical education and examination was not, to use a favourite simile of Mr. Lowe's, a neutral picture. Lights and shadows were pretty thickly laid on. But it is impossible to deny that it was such an exposition of the real state of things as was likely to arrest the attention of the House of Commons. This, after all, is what is needed. The question which he asked on Tuesday, as to the "qualified" "Surgeons and Physicians"—we notice that there are very few qualified apothecaries—who are rejected by the army and naval boards, and the answer elicited from Mr. Bruce cannot be disregarded as a sign of the times either by the Medical Council or by the examining boards. There is no doubt that if the House of Commons are once convinced of the necessity of a higher and more uniform standard of Medical education and examination, the thing will be accomplished, and the Profession and the public will be the gainers. The best proposal, and that by which no injustice can be done, is that of a conjoint examination board in which each division of the Profession shall be duly represented, and before which each student shall be obliged to present himself at the end of each period of study; and no licence to practise in any special branch, or degree in Medicine, should be granted by any university or examining body unless the diploma of the conjoint board have been previously obtained.

If the decision in committee on the Bill for the Superannuation of the Irish Poor-law Medical Officers, that the necessary funds should not come out of money voted by Parliament, imply diminished security and diminished superannuation allowances, we hope that an effort will be made to give the Bill its original shape either on the third reading or in the upper House. Had the interests at stake been those of railway contractors, or architects, or lawyers, or almost of any other Profession than that of Medicine, there would, we suspect, have been a fuller House to decide the question.

The traditions of the party represented by the present Government in reference to the treatment of men of science—alive or dead—seem not likely to be forgotten during his tenure of office by Mr. Lowe. A Conservative Premier could appreciate the services of and the national veneration for Faraday, and, disregarding any custom to the contrary, could assert the propriety of giving such a man a national monument. The Liberal Chancellor of the Exchequer raises a questionable precedent into a rule in order to prevent the nation, as a nation, paying a tribute of respect to the memory of perhaps the greatest philosopher of modern time. The French Emperor, if we mistake not, has called a street by the name of Faraday. The English Liberals will not vote a sixpence to engrave his name on a stone.

We omitted to state last week, in noticing Dr. Grainger Stewart's candidature for the chair of Pathology in Edinburgh, that Dr. R. Sanders is also a candidate. Dr. Sanders is well known for his numerous and valuable contributions to the *Edinburgh Monthly Journal*.

Dr. Rutherford has been elected to the chair of Physiology at King's College, vacant by the resignation of Dr. L. Beale.

An inquest has lately been held by Dr. Lankester which has terminated in the censure of a Medical Practitioner—Mr. Harley, who is a district Medical Officer of St. Pancras, and has held a temporary office under the new Board of Guardians in St. Pancras Workhouse. The case was that of Mary Allen, who died in St. Pancras Workhouse on June 25. On May 28 she had been sent into the workhouse by Mr. Harley, in consequence, according to one account, of scarlatina, according to another of catarrh. On June 4 Mr. Harley discharged her, believing her, as he said, to be well. Other witnesses, however, affirmed that he had confessedly discharged her to clear the Infirmary, as he said he was sent by the guardians to diminish the number of patients in the Infirmary. This Mr. Harley emphatically denied. After the woman left the Infirmary it seems proved that she improved in health up to a certain period, justifying, as Dr. Lankester observed, Mr. Harley's opinion of the case. On June 9 she complained of having hurt herself by carrying a basket of linen. Mr. Harley had continued to attend her after she had left the Infirmary, and on June 13 it is said that she asked him to send her back. It appears that erysipelas came on, and on Sunday, June 20, Mr. Harley sent her into the Infirmary, where she died delirious on the following Friday. Now, from this plain statement of the case, we do not see that Mr. Harley has been in any respect to blame. The woman had out-door relief and constant Medical attention after she left the Infirmary, and when her case assumed a serious aspect she was sent back. The complaint against Mr. Harley was that he had turned her out too soon, and that in consequence her death had been brought about. But this view, as Dr. Lankester showed in his summing up, was not supported by the evidence. The woman's improvement after she left the Infirmary confirmed Mr. Harley's view of the case. The jury, however, were only prevented by Dr. Lankester from returning a verdict which would have been equivalent to manslaughter against Mr. Harley, and as it was they appended to a verdict of "Death from natural causes" a rider, in which the conduct of Mr. Harley in order-

ing Mary Allen out of the Infirmary before she was wholly cured was described as improper and dangerous—a censure in which Dr. Lankester said he did not agree. From all the facts, it seems clear that Mr. Harley has been made the victim of parochial quarrels. It may be that he has allowed himself to be too much a partisan, but, from the published evidence in the case of Mary Allen, we do not think his conduct justifies the imputations cast upon him.

We are glad to see that a committee has been organised, and subscriptions are already coming in, for the purpose of rendering assistance to Mr. W. O. Berry, of Wimbledon, in defraying the legal expenses which he has incurred in consequence of the abominable attack recently made on his character. Our readers will remember that Mr. Berry was charged by a servant girl with having committed a capital offence. The evidence proved that Mr. Berry was not even in the house at the time when the offence was alleged to have taken place, and Mr. Berry was immediately discharged by the magistrate who heard the case. He subsequently prosecuted the girl for perjury, and she was proved guilty, but acquitted on the ground of insanity; but in thus clearing his character he incurred a considerable expense, to liquidate which the present movement has been set on foot. We are sure that the appeal of the committee to the Medical Profession will not be made in vain.

The Birmingham papers contain the report of an important meeting of the Birmingham Medical Registration Association, convened on Saturday last under the presidency of Dr. Bell Fletcher, to obtain amendments of the Medical Act. A previous meeting had taken place, in which a memorial had been agreed upon for presentation to the General Medical Council and to the Secretary of State. To this we shall hereafter refer in our notice of the proceedings of the Medical Council.

The increased mortality from scarlet fever in London excites some alarm. The deaths during the second quarter of the year from this one disease were 644, or 49 per week; and now 75 deaths were registered for the week ending July 3.

A SECOND MEDICAL CONGRESS OF ALL NATIONS.

Undismayed by the somewhat problematic success of the last General Medical Congress, our Continental brethren are engaged in attempting to secure a second grand meeting, this time to take place in Florence, the capital of modern Italy. The Congress will be opened on September 20, a time when Florence is not the most enjoyable spot on earth, for the heat is generally rather oppressive. The honorary Presidency has been offered to Professor Bouillaud, who occupied the chair at the former meeting in Paris during the time of the Exhibition. The programme has not been badly selected, and the questions proposed for discussion are of considerable importance. The first deals with marsh miasm, a subject with which unfortunately modern Italian Physicians are likely to be only too well acquainted. This is to be considered with reference to the conditions which favour its development, its effects on man, and the most efficacious measures for destroying its causes and effects. The second theme is the therapeutic value of our methods of treating cancerous affections locally, their indications and their counter-indications, as well as the proper value of general treatment. The answers here are sure to be unsatisfactory; the most promising of all methods—Broadbent's—has not turned out as well as we could have desired. The treatment of gunshot wounds, especially with reference to modern warfare, is next proposed for discussion. The experience of our recent great wars has thrown new light on this interesting topic, and much information has been collected, especially by American and German authors. The question which is now being so much discussed in this country—the relative value of domestic and Hospital Medical assistance—follows next. On this Sir J. Simpson's researches have thrown a flood of light. The tolerably well-worn topic of the influence of railway travelling on health is that next proposed for discussion. Unfortunately it cannot be separated from a number of other conditions all more or less inimical to health. The conditions which favour the production of endemic or epidemic maladies in our great towns, the means of preventing them, and the advantages which can be drawn from great rivers or the sea which washes them is the sixth subject proposed, whilst, finally, the rights and duties of a Medical man with regard to the legislation of different countries, and the amelioration which may be reasonably expected, constitute the last subject of discussion. As above hinted, we do not expect anything very great in a scientific respect from the Congress; but if it only gives an upward impetus to Italian Medicine, we shall exceedingly rejoice. The country which boasted some of the greatest of our Profession has fallen lamentably behind. Since the union of Italy there have been many signs of a resuscitation, one of the most promising being a prospectus of an elaborate dictionary of Medical science. The specimen we have seen was not one to gloat over, still to be viewed with favour as full of promise for the future.

THE HERBERT HOSPITAL.

It has at last been determined that the Herbert Hospital at Woolwich, hitherto conducted on the general Hospital system, shall be entirely under Medical control. Colonel H. J. Shaw retires permanently from the post of governor on August 1, and it is stated that Mr. Hawtree, the present captain of orderlies at Netley, proceeds to Woolwich, to assist the principal Medical medical officer in his new administration. This change cannot fail to be acceptable to the Medical officers of the army. We have frequently remarked upon the anomalous relative positions of the military and Medical authorities of the Herbert Hospital. The mere fact that the entire accommodation for the latter within the precincts of the Hospital consists of a single room for the Medical officer on duty, while the quarters occupied by the military commandant became, by a gradual process of absorption of rooms originally intended for Medical officers, a most extensive suite of apartments, and that the principal and other Medical officers were compelled to live at a considerable distance, in barracks or hired lodgings, was sufficient to strike the ordinary mind with amazement. The necessity of a commandant for the Army Hospital Corps is supposed to be the reason assigned that a similar change of administration is not yet effected at the Royal Victoria Hospital, Netley, but we can hardly see on what grounds a Major-General with extra staff pay should be retained for the military command of two or three hundred Hospital orderlies.

POOR-LAW MEDICAL OFFICERS.

The Medical Officers of unions and parishes in England should endeavour to secure for themselves a boon similar to that which their brethren in Ireland seem in a fair way to obtain. The Medical Officers' Superannuation (Ireland) Bill proposes that annual allowances shall be granted to Medical officers of unions and Dispensary districts, even though the officer shall *not have devoted his entire time to the service of the union*. Therein lies the whole gist of the matter; for although, as the law now stands, boards of guardians in England are empowered, under 27 and 28 Vict. cap. 42, to grant superannuation allowances to Medical officers, as to other persons, they can do so only when the officer has devoted his whole time to the service of the union. This restriction has hitherto precluded the guardians from any extensive exercise of their power, but should the Medical officers procure for England and Wales an Act removing this barrier, one of their chief causes of complaint would be done away. The Irish Bill, which consists of but two clauses, has been issued as amended in committee. It bears the names of Mr. Brady, Mr. Pim, and Mr. Trant Hamilton. The following is the text of the Bill as amended in committee. It is entitled "A Bill to provide for Superannuation Allow-

ances to Medical Officers of Poor-law Unions, and of Dispensary Districts of such Unions, in Ireland."

"Whereas it is expedient that provision should be made to enable superannuation allowances to be granted to Medical officers of Poor-law unions in Ireland, and of Dispensary districts of such unions, who become disabled, either by infirmity or age, to discharge the duties of their offices, be it therefore enacted by the Queen's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:—

"1. That the board of guardians of any union in Ireland may, at their discretion, with the consent of the commissioners for administering the laws for relief of the poor in Ireland, grant to any Medical officer, including in that term a Surgical officer, of such union, or of any Dispensary district in such union, an annual allowance, under and subject to the provisions of the Act to provide for superannuation allowances to officers of the union in Ireland, passed in the twenty-eighth year of the reign of her Majesty, notwithstanding such Medical officer shall not have devoted his entire time to the services of the union, and such allowances shall be paid out of the rates of the union exclusively.

"2. This Act shall be called 'The Medical Officers' Superannuation Act (Ireland), 1869.'"

EXHIBITION OF HOSPITAL APPLIANCES IN HOLLAND.

THE Central Committee of the Dutch Association for the Care of Sick and Wounded Soldiers has resolved to hold at the Hague, in September, an exhibition of objects connected with the transport, treatment, victualling, and lodging of sick and wounded persons, and invites both contributors and visitors to it. Contributors should give notice before August 4 to Dr. L. H. Verwey, Secretary of the Association, of the objects they may intend to send. The European Statistical Congress is to be assembled at the Hague on September 6, and the Hospital exhibition is intended to be opened at the same date.

CORONERS' FEES TO ARMY MEDICAL OFFICERS.

THE rule, that in cases of coroners' inquests on persons who have died in Hospitals, the resident Medical officer in actual attendance on the patient during life is not entitled to any fee from the coroner for his attendance during the inquiry as to the cause of death, and for such evidence as he may be able to give, has, we are informed, been extended in its application to the Medical officers of the army in a manner which we consider to be hardly fair. It has been decided by the authorities that in case of an inquest held by the civil power to investigate the cause of death of a soldier or of any member of his family, the military Medical officer is not entitled to receive any fee from the coroner for such evidence as he may give before the court of inquest. It may, of course, happen that an inquest may be occasionally necessary in the case of soldiers dying while in Hospital under the treatment of the Medical officers of the regiment, and in all such it is only right that the military Medical officer should be on the same footing as his civilian brother, but it also happens not unfrequently that soldiers meet their deaths not only out of Hospital, but out of barracks, and from causes quite independent of any disease for which they may ever have been under the treatment of the Surgeons of their regiments, or may die in Hospital in consequence of accidental or malicious injuries. Now what we wish to advance is that, if under such circumstances the Surgeon of the regiment be summoned before the coroner for the purpose of giving his Professional opinion as to the cause of death, he is fairly entitled to the usual fee. To this it may be objected that a Military Surgeon may be ordered by his commanding officer to attend the coroner's court and to give his evidence. To this we reply that the fact of the civil power having taken up the investigation, and being in all respects, under our constitution, paramount to military authority, all military witnesses come before it in a purely civil capacity, and as such are entitled to all the fees which it is the custom of the law to allow to civilians; and that although the military authorities, as such, may order their servant, the Military Surgeon, to attend the inquiry, and to give his evidence as to questions of *fact*, they should not expect him to give a Professional opinion, which they could not obtain from a civil Practitioner without paying him for it. We should like to see this question made the subject of judicial consideration and decision, particularly as we are strongly of opinion that the view which we have above advanced is the correct one.

FROM ABROAD.—BIOSTATIC IMMUNITIES OF THE JEWS—M. LE FORT ON VENEREAL DISEASES.

M. LEGOYT terminates with the following conclusions an elaborate paper which he recently read at the Paris Statistical Society on "Certain Biostatic Immunities of the Jewish Race in Europe:"—

"The facts which are here collected, and which are nearly all derived from official sources, are almost unanimous in demonstrating that the Jewish race is distinguished from the other European races, in a biostatic point of view, by the following phenomena:—1. Its general fecundity is less. 2. So is it, at least as a general rule, with regard to its legitimate fecundity. 3. It is especially so in relation to its natural or illegitimate fecundity. 4. In an equal number of births, there are fewer children born dead, which indicates that the Jewish woman passes through her period of gestation more favourably than the Christian woman. 5. But the most remarkable privilege of the Jews is, without contradiction, their relative low mortality, and that even when they are members of the lowest classes of society. This lesser mortality is not (and we cannot too much insist on this point) the natural consequence of a lesser fecundity, as, with an equal number of births, they count fewer deaths, and that by calculating on Halley's method—that is, in supposing the births equal to the deaths (taking place at the same ages)—it is found that they have a mean and probable life which is longer than that of the autochthonic races. It would not be correct to say that this difference in mortality is due to a large relative preponderance of adults, since in Prussia, which is the only country in which this portion of the population has been enumerated by age, there is found to be a greater number of children in it than in the Catholic and Evangelical population. 6. We have, moreover, seen that, as a consequence of this characteristic physical aptitude, the Jewish race becomes acclimatised everywhere, and propagates itself under every latitude. 7. Finally, we have shown that the Jews are possessed of a special aptitude enabling them to struggle against infected media, and protecting them against contagious diseases."

After discussing the various explanations of these immunities offered by different observers, M. Legoyt states that he believes the greater longevity of this race may be explained by the following considerations:—1. The Jews marry earlier than the Christians, and thus derive at an earlier age the advantages which statistics show are incident to the married state. Still, from their well-known prudence and circumspection, it is not to be supposed that they enter upon this until prepared to meet its exigencies. Among them hasty and rash marriages, which are alike hurtful to the health of parents and children, are rare. 2. The fecundity being less, they can pay much more attention to the preservation of their children. 3. By reason of the small number of illegitimate children they have, they escape the exceptional mortality which sweeps away such children. 4. The Jew does not pursue any calling which demands very hard labour. He is neither an agriculturist, a labourer, mechanic, sailor, nor miner. Before all things, he is the shopkeeper, merchant, banker, artist, *savant*, man of letters, or public functionary. 5. The Mosaic law contains ordinances which, being purely hygienic, must exercise a favourable influence on the health—*e.g.*, the verification of the condition of slaughtered animals, the frequency of ablution, the practice of circumcision, and the separation from the husband until a week after menstruation, etc. 6. The strength of the family feeling among the Jews. It is only when it is absolutely impossible, and without distinction of rank, that a Jewish woman does not suckle her child. The children, too, are the objects of incessant and most vigilant

care, which indeed is returned by the respect and solicitude which these manifest for their parents, especially when aged or infirm. This is probably one cause of the rarity of suicide among the Jews. 7. The sobriety of the Jews is incontestable. 8. Throughout the entire Jewish community, a warm feeling of charity for the indigent and miserable prevails. 9. The religious Jew is remarkable for his great serenity of mind, and his deep-seated faith in Providence and the high destinies of his race. The constancy, the *pérennité* of the Jewish temperament, is well reflected in his religious faith, which has remained immovable for so many ages. 10. The morality of the Jews, as deduced from criminal statistics, seems to be real, and is only an indication of those regular habits of life which exercise so great an influence on the duration of life.

A paper relating to the "Clinical History of Venereal Diseases," read at the Société de Chirurgie, a short time since, by M. Léon le Fort, but which we were then unable to notice, is one of considerable interest. The materials have been obtained during the two years 1866-67, when the author was Surgeon to the Midi, and consequently had a great number of cases under notice. After submitting these cases to diligent analysis, he finds that there are 4987 sufficiently precise and reliable to enable him to come to an opinion on various interesting points.

1. *Blennorrhagia.*—The number of cases treated amounted to 2583—*i.e.*, 597 in-patients and 1986 out-patients—and the points investigated were the frequency of the affection, the duration of the period of incubation, and the epoch at which orchitis appeared and its relation between this complication and the treatment employed. (*a*) Its *frequency* in Paris must be very considerable, seeing that in this one service 2583 patients were treated in seventeen months. Among this number, 914 had already had gonorrhœa, 129 with orchitis, 19 with ulcers not followed by syphilis, and 27 with chancres followed by syphilis. Less than one-half and more than a third of these patients had had one or more blennorrhagias before, and the same may be observed with regard to the other patients treated for the various forms of syphilis; so that among the 4987 patients, 4287 either were under treatment for blennorrhagia or had already had it once or several times. (*b*) *Incubation.*—The necessity of eliminating doubtful cases reduces the number in which the duration of this could be ascertained with any approach to exactitude to 2070. Among this number, 50 patients observed the first signs of the gonorrhœa at the end of twenty-four hours, 149 after two days, 327 after the third day. The highest number corresponded to the eighth day, which probably included some cases which really appeared on the seventh or ninth. Classifying the results by periods of four days, it was found that there were 778 within the first four, or 37·5 per cent. of the total; 869 from the fifth to the eighth, or 41 per cent.; 276 from the ninth to the twelfth, or 13 per cent.; 112 from the thirteenth to the sixteenth, or 5 per cent.; and from the seventeenth to the twentieth only 17 patients. From the fourth to the eighth day is, then, the period during which gonorrhœa ordinarily appeared, and during the first eight days it had appeared in more than three-fourths of the cases—1647, or 79·5 per cent. As to the long incubations of six weeks of which Hunter speaks as occurring, no example of them was met among the 2070 patients, and in only 35 out of the whole 2070 did the incubation exceed the fifteenth day. (*c*) *Blennorrhagic orchitis.*—Of the proportionally large number of cases (645) observed, the complication appeared only in 24 during the first week, in 93 during the second week, in 182 from the fifteenth to the thirtieth day, and in 150 between the first and second month. The patient is not secure from an attack until a much later period. Thus in 42 it appeared between the second and third month, in 26 after the third, in 14 after the fourth, and in 25 after the sixth. As to the side affected, this was, in 540 cases in which this was specified, the right in 269 and the left in 227, corroborating the general observation that the affection is rather more frequently found on the right side. In 44 of the 540 cases the orchitis was double. As to the influence of various modes of treatment, as injection, etc., in inducing the complication, M. le Fort denies it, and he explains the greater frequency of its occurrence in cases that have not been treated at all by the fact that the duration of the blennorrhagia is in consequence more prolonged.

2. *Chancres.*—M. le Fort found in 1805 cases of chancre 967 soft or simple, and 838 indurated chancres. How great a discrepancy prevails among observers in estimating the proportion may be seen from M. Puche's 10,000 cases observed in the same Hospital, among which he found 8045 simple and 1955 indurated chancres. As to the number of chancres, M. le Fort finds it specified in 736 *soft* chancres, as single in 456 and multiple in 280. As to the *incubation* of *soft* chancre, an examination of 661 cases in which this could be ascertained with some exactitude leads M. le Fort to believe it to be in general very short. In 209 it appeared within the first four days after coition, and in 301 during the next four days, making 510 out of the 661 cases within the first eight days—*i.e.*, 77 per cent. In 131, or 19 per cent., the chancre appeared during the second week, and in 20 only was it delayed longer, and never beyond the thirtieth day. In fact, the duration of incubation is still less than represented above, for, owing to the habitual neglect of cleanliness by Hospital patients, the chancre may exist several days before being noticed by the patient. Of the 838 *indurated* chancres in only 438 could reliable accounts of the period of incubation be obtained, exhibiting a marked contrast with soft chancre. Thus, only in 5 did it appear between the second and fourth day after coitus, in 60 between the fifth and eighth day. In 77 per cent. soft chancres appeared during the first week, and only 11 per cent. of hard did so, while but 3 per cent. of soft chancres appeared between the seventeenth and thirtieth day to 30 per cent. of indurated. Taking the total of 1099 cases in which the duration of the incubation was noted, it was found that the indurated chancre had a mean duration of nineteen days, and the soft non-syphilitic chancre one of seven days.

After a comparative view of the seat of soft and hard chancre, M. le Fort terminates his paper with some observations on inoculation. This he strongly recommends being performed just above the umbilicus, instead of at the lower part of the abdomen or on the thigh. In these latter situations it is by no means uncommon to find inoculation followed by great detachment of the skin, or even phagedænic ulceration, accidents he has never observed in the situation indicated.

PARLIAMENTARY.—THE REPORT ON NAVAL HOSPITALS—THE PROPOSED MONUMENT TO FARADAY—VOTES FOR THE UNIVERSITIES OF LONDON AND GLASGOW—MEDICAL OFFICERS' SUPERANNUATION (IRELAND) BILL—MEDICAL EDUCATION—CONTAGIOUS DISEASES (ANIMALS) BILL.

In the House of Commons, on Monday, July 5, Mr. Alderman Lusk asked the First Lord of the Admiralty if he had any objection to lay upon the table of the House the recent report of the Civil Commission on Naval Hospitals, and if he could state the cost of that Commission.

Mr. Childers said that the report of the Civil Commission on Naval Hospitals had been under the consideration of the recently appointed Medical Director of the Navy. The report would be laid upon the table of the House in a few days. The cost of the Commission was £353 13s. 6d.

Dr. Lyon Playfair asked the Chancellor of the Exchequer whether the following extract of a letter purporting to be written by him, dated May 5, 1869, and read at a public meeting on June 21, was correctly reported:—

"I do not in the least doubt the signal merits of Faraday, and I hope that a monument may be erected worthy of so great a man; but I cannot consent to appropriate public money towards the monument of a private citizen, however illustrious. I do not make this rule—I find it."

And, if it were a correct extract, whether he would state to the

House the exact terms of the rule to which he referred, and the date at which it was made.

The Chancellor of the Exchequer: The extract is perfectly correct, but I am sorry to say that I am not able to state the exact terms of the rule to which I referred. I find that the statues in London, putting aside the Kings, have been erected by means of funds provided in the following manner:—That of Lord Nelson was paid for by public subscription and by Parliamentary grant, and that of Sir J. Franklin by Parliamentary grant only. All the other statues have been erected by subscription only, and I deduce from these facts the rule that it is not the general custom for Parliament to make grants for this purpose. Of course, Lord Nelson was an exceptional person, who does not appear twice, perhaps, in the history of a nation. The only other exception was the recent one of Sir John Franklin, whose strange and tragic death and the feeling occasioned by it may well account for his case being made an exception. I think, also, that the history of England shows that it has not been customary for us to erect monuments at the public expense to private citizens, however illustrious they may have been. Take the catalogue of illustrious names—Shakespeare, Milton, Newton, and Locke—and you will find that no monuments were erected at the public expense to their memory. Without any disrespect, therefore, to his memory, I think that Faraday may be well content to be passed by in such company. (A laugh.) I will say, further, that the principle of this country has been to have its citizens actuated by a feeling of duty rather than of glory, and that the nation is not in an ascending scale which is prodigal of its rewards. (Hear, hear.)

In Committee of Supply, the House voted £30,000 for buildings for the University of London, and £20,000 for Glasgow University.

The House went into Committee on the Medical Officers' Superannuation (Ireland) Bill.

Mr. Ayrton moved the addition of words at the end of clause 2, providing that no payments towards the objects of the Bill should be made out of moneys voted by Parliament.

Mr. Synan protested against the amendment.

The Committee divided, with the following result:—

For the amendment	44
Against it	10
Majority	34

The provision was therefore added to the Bill, which passed through Committee.

In the House of Commons, on Tuesday, July 6, Sir J. Gray asked the Secretary of State for the Home Department whether the General Council of Medical Education and Registration, appointed under the Act 21 and 22 Victoria, cap. 90, had "represented" to the Privy Council that the official reports forwarded to the Council for their information in the years 1865, 1866, 1867, and 1868, by the heads of the Military and Naval Medical Departments, complained of the "ignorance" of a large proportion of the licensed Surgeons and Physicians who annually presented themselves as candidates for Medical employment in the army and navy; and that the returns show that within the period embraced in the reports named more than 150 licensed Surgeons and Physicians who were entitled to hold any Poor-law or other civil Medical appointment in the empire were rejected by the Military and Naval Medical Boards.

Mr. Bruce: No such representations have been made by the Medical Council to the Privy Council either with respect to the Medical men rejected upon examination by the Military and Naval Medical Boards, or with respect to the granting of licences to the 150 rejected candidates; but I have reason to know that the fact has come under the notice of the Medical Council and excited their serious attention. I am informed that the Privy Council is at the present time in communication with the Medical Council with a view to considering whether the Medical Act may be so amended as to insure a higher efficiency in the Medical Profession of the United Kingdom.

The Committee on the Contagious Diseases (Animals) Bill was taken at a morning sitting. Some hours were occupied in fighting over again the battle of last year on an amendment to clause 15, moved by Mr. C. S. Read. It required the slaughter at the port of landing (with certain exceptions) of all cattle imported from countries in which the disease has existed within the last eighteen months, and it was rejected on a division by 220 to 160. Progress was then made with the Bill up to clause 44.

FESTIVAL OF THE FELLOWS OF THE COLLEGE OF SURGEONS.

On Thursday, July 1, after the election of the members of Council, the annual dinner of the Fellows of the College took place as usual, at the Albion Tavern, Aldersgate-street. Mr. Nunneley, of Leeds, in the chair, and upwards of one hundred Fellows were present on the occasion.

The usual loyal and patriotic toasts were drunk with marked enthusiasm.

Dr. Armstrong, Director-General of "The Medical Department of the Navy," acknowledged on behalf of that branch of the public service.

Dr. Mouat, C.B., responded for the "Medical Department of the Army." He repudiated the traditional distinction of combatant and non-combatant officers, he having had repeated occasion to do his duty, under fire of the enemy, in various parts of her Majesty's dominions. Alluding to the honours which the great Napoleon I. had showered on his Medical officers, Dr. Mouat regretted that the services of the Medical department of the army in this country were not equally recognised by the Government. The War Office had a novel mode of promoting the Medical officers in reward for efficient service—namely, by placing them on half-pay—and thereby practically ejecting them from the service. Having adverted to the success of Surgical practice in the army, although performed often under disadvantageous circumstances, he particularly noticed the success which had attended excision of the shoulder-joint in eight cases. (Cheers.)

Dr. Morris, of Spalding, after repeated calls, on rising to acknowledge for the "Volunteers," was received with rounds of applause.

The "Medical Council" and the "Medical Corporations" were then duly honoured. The Chairman observed that the Medical Council had that afternoon received a most important communication from the Government bearing on the subject of Medical education, and on the constitution of the Council as the representative body of the Profession. (Loud cheers.) Quackery could not—should not be put down by penal laws, but by elevating the standard of the Profession morally and intellectually, a far better remedy. (Hear, hear.)

Dr. Macnamara, President of the Royal College of Surgeons in Ireland, on the part of that corporation, could truly say that they had endeavoured to uphold the interests of Surgery, by raising the standard of preliminary education and of the practical study of Surgery, emulating in these respects the great example set them by the English College. Holding out the right hand of good fellowship, he would assure them that whenever any Fellow or Member of that College might visit Ireland, and do him the honour of knocking at his door, he will find that he has no stranger to meet. (Great applause.)

Mr. Solly, in responding for the Royal College of Surgeons of England, took occasion to acknowledge, in graceful terms, his thanks for the proud position in which, by the favour of the Fellows, he had that day again been placed. Having offered some apologetic remarks for any shortcomings in the reform of the College of Surgeons, he resumed his seat amid great applause.

Mr. Gay and Mr. Erichsen, both of whom were very warmly received, briefly acknowledged the honour conferred on them by their election as members of the Council.

"The Provincial Schools" followed, coupled with the name of Mr. Turner, of Manchester. He alluded, in feeling terms, to the memory of Mr. Hodgson, and his high character as a Surgeon.

"The Metropolitan Schools" were represented by Sir William Fergusson, who, on rising, was greeted with a prolonged burst of applause. He took occasion to expatiate on the high distinction of provincial Surgeons, and of their influence on the history of Surgery. Hey, of Leeds, and Park, of Liverpool, were names that would never be forgotten, for their labours had stamped a mark on Surgery which would be felt in its consequences to the end of time.

"The Health of the Chairman" was then honoured with three times three cheers and one cheer more.

Mr. Nunneley, in returning thanks, regretted that unavoidable circumstances had prevented the chair being occupied that day by one of the greatest Surgeons which the world had ever produced. He need only mention the name of Mr. Syme.

Mr. Clifton gave "The Stewards" and Mr. Wiblin, of Southampton, who briefly responded, and the Honorary Secretary, Mr. T. Carr Jackson, whose exertions had so largely contributed to the success of the meeting.

Great interest was taken in the election, and Fellows attended from the most distant provincial towns. The following we believe to be a correct list of the provincial Fellows who were present and voted:—Messrs. Adams, of Maidstone; Aldridge, Dorchester; Baker and West, Birmingham; Baker, Leamington; Balding, Rayston; Bartlet, Ipswich; Bartrum, Bath; Messrs. J. V. and W. Bell, Brown, and Hutchins, Rochester; Bleeck, Warminster; Bulley and May, of Reading; Burke, of Malta; Byass, Cuckfield; Cadge, Copeman, Crosse, Dalrymple, M.P., and Nichols, of Norwich; Carter, of Pewsey; Carter, Cattlin, Furner, Humphry, Oldham, Rugg, and Taafe, of Brighton; Cecly, Aylesbury; Cousins, Portsmouth; Dalton and Rumsey, of Cheltenham; Davies, Newport, Mon.; Duncan, Tunbridge Wells; Embleton, Newcastle-on-Tyne; Foster and Procter, of Bradford, Yorkshire; Foster, Huntingdon; Fox, Derby; Green, Bristol; Hall, Sheffield; Hammond and Humphry, Cambridge; Harris, Worthing; Heane, Cinderford; Hearne and Wiblin, Southampton; Hussey and Symonds, Oxford; Jones, Brackley; Jordan, Lund, and Turner, Manchester; Lush, Weymouth; McDougal, late Bishop of Labuan; Maurice, Marlborough; Morgan, Defynog, Brecon; Morris, Spalding; Mouat, New Zealand; Nankivell, Torquay; Nicholls, Chelmsford; Nunneley, Leeds; Paget, Leicester; Prall, West Malling; Shillitoe, Hitchin; Shipman, Grantham; Sleman, Tavistock; G. Hill Smith, Stevenage; T. H. Smith, St. Mary's Cray; Spooner, Blandford; Stone, West Lavington; Swain, Devonport; Taylor, Guildford; Thompson, Biggleswade; Thomson, Ross; White, Ryde; Winchester, of Maidenhead; Wood, of Shrewsbury; Wotton, of Great Malvern, etc.

GENERAL CORRESPONDENCE.

THE LATE ELECTION AT THE ROYAL COLLEGE OF SURGEONS.

Letter from Mr. Erasmus Wilson.

[To the Editor of the Medical Times and Gazette.]

Sir,—It having come to my knowledge that in several instances I was voted against at the late Council election of the College of Surgeons because I had offered to endow a Professorship of Dermatology in the College with a view to the study and investigation of an important branch of Surgical Medicine, and as I intend to present myself as a candidate for the Councilship, for the fifth time, at the next Council election, in right of my seniority as a Fellow of the College, I venture to explain briefly the circumstances under which my gift to the College was made, and the time at which it was offered. I need hardly say that my gift to the College, of itself, could not, as I understand the matter, raise an opposition to my claim; but the inference has been drawn, and has been spoken in so many words, that I intended to bribe the Fellows to vote for me by a donation to Medical science of £5000. It certainly never occurred to me to calculate the money value of a seat at the Council Board, although such a sum as that mentioned would have gone far to return me for Parliament had such been my ambition, nor can I conceive that, to the mind of a man of honour, such a suspicion could arise.

The facts are simply these. In the autumn of 1868 I first became acquainted with the remarkable models of diseases of the skin constructed by Baretta for the St. Louis Hospital Museum in Paris. I perceived at once how valuable these models would be to the students and Practitioners of Medicine of my own country, and my friend Dr. Bishop, of Paris, very kindly undertook to examine the models for me and obtain a list of all that had been made. Dr. Bishop's report was so entirely satisfactory that I gave an immediate order for a series of illustrations of the more common forms of these diseases, and on January 4, 1869, I received a large case from Paris containing twenty-seven models.

The most suitable mode of disposal of these models for the purposes which I had in view was the question to which it became necessary I should next address my attention. I desired that they should be placed within the reach of the whole Profession, whether Physician, Surgeon, apothecary, or student, and the best mode of effecting this object, as it appeared to me, was to place them in the University of London, and to endow a Professorship in conjunction with them, in that institution. I made this offer to the University through Dr. Carpenter, and I found, greatly to my regret, that the charter of the University prohibited the foundation of any Professorship in that institution.

It was then that I turned to the College of Surgeons, but not before I had ascertained that the Museum of the College of Physicians was not adapted for the display and preservation of the models, and that my conditions of access to every member of the Profession might not be acceptable to that body. In making my offer to the College of Surgeons, I was under the impression that, in case of its acceptance and of my appointment to the proposed chair, I should be disqualified from occupying a seat at the Council Board; but this consideration did not weigh with me for an instant. On the one side there was, as I believed, a public good, on the other a private desire—the latter I put away as unworthy of a thought by the side of the greater issue. Subsequently, however, to my decision and to my offer, I was informed that the holding of a Professorship in the College was no disqualification to the occupation of a seat at the Council Board—that Mr. Le Gros Clark and Mr. Hancock both held the double appointment of member of Council and College Professor, and therefore, and under these circumstances, I could see no objection, nothing dishonourable, and nothing undignified in claiming my right of candidateship to a vacancy in the Council of the College.

The large number of votes polled in my favour at the last election, and utterly without canvass, leads me to hope that my next candidature may not be unsuccessful, and that, besides the Hospitals and provinces, there may be elected on the Council a representative of the unattached portion of the Profession. I am, &c. Erasmus Wilson.

July 5.

MEDICAL NEWS.

Apothecaries' Hall.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received a Certificate to practise, on Thursday, July 1, 1869:—

Ashby, Alfred, Staines.
Hitchcock, Henry Knight, Devizes.
Lyne, Henry, Plymouth.

As Assistants in compounding and dispensing medicines:—

Cape, J. S., Wellington.
Michell, F. J., Falmouth.
Robson, J. C., Darlington.
Sequeira, E. C., Brazil, S.A.
Wilkinson, T., Bishop Auckland.

The following gentlemen also, on the same day, passed their First Examination:—

Madeley, E., King's College.
Smith, W. R., St. Bartholomew's Hospital.
Mitchell, W., Westminster Hospital.
Williams, J., University College.

At the Competitive Examination held in June for the Prizes in Botany annually given to Medical Students by the Society of Apothecaries, the successful candidates were:—(First) Ebenezer Geer Russell, of Guy's Hospital, a Gold Medal; (second) Alexander Wynter Blyth, of King's College, a Silver Medal and a Book.

NAVAL AND MILITARY APPOINTMENTS.

Admiralty.—The following appointments have been made:—Frederick M. Rayner, Staff-Surgeon, to the *Asia*; Dr. William L. Gordon, Staff-Surgeon, to the *Duke of Wellington*, for the *Revenge*; Francis M'Aree, Surgeon to the *Pembroke*; and John B. Nicoll and Richard S. P. Griffiths, Assistant-Surgeons, to the *Duke of Wellington*, for the *Revenge*.

War Office.—The following appointments have been made:—14th Foot: Staff Surgeon Randolph Webb, to be Surgeon, *vice* Surgeon-Major John Elliott Carte, M.B., C.B., appointed to the Staff. Rifle Brigade: Surgeon Henry Martyn Fraser, M.D., having completed twenty years' full-pay service, to be Surgeon-Major, under the provisions of the Royal Warrant of April 1, 1867. Medical Department: Surgeon-Major John Elliot Carte, M.B., C.B., from the 14th Foot, to be Staff Surgeon-Major, *vice* Staff Surgeon Randolph Webb, appointed to the 14th Foot.

BIRTHS.

Dowson.—On July 1, at 117, Park-street, W., the wife of Dr. Edward Dowson, of a son.

Moore.—On June 30, at the Royal Dockyard, Portsmouth, the wife of Dr. George Moore, Surgeon, Royal Navy, of a son.

Owens.—On June 28, at The Firs, East Farleigh, Kent, the wife of Dr. Owens, of a daughter.

Rolston.—On June 25, at 10, Clarendon-villas, Plumstead-common, the wife of P. W. Rolston, Surgeon, Royal Navy, of a son.

WILLIAMSON.—On June 29, at 44, Muswell-park, N., the wife of James Williamson, M.D., of a son.

MARRIAGES.

FINLAY—PATERSON.—On July 1, at Wardle-villa, near Edinburgh, William Finlay, F.R.C.P. Edin., to Catherine, daughter of the late Andrew Paterson, S.S.C., Edinburgh.

HILTON—HAWTHORNE.—On June 29, at St. Michaels-in-the-Hamlet, Liverpool, Thomas Hilton, Esq., of Wigan, to Rosa Elizabeth, daughter of the late George Stuart Hawthorne, M.D.

JONES—BENHAM.—On June 30, at the parish church of Westbury-on-Trym, Francis Ralph, eldest son of George Jones, Esq., of Stoke-villa, Stoke-upon-Trent, to Emily Ada, younger daughter of Dr. Benham, of Camden House, St. Michael's-hill, near Bristol.

RAYNER—COLES.—On July 1, at St. John's, Hackney, John Rayner, M.D., of Highbury New-park, to Frances S. Coles, only child of the late W. B. Coles, of Curry Rivel.

DEATHS.

BOLTON, JOHN, M.R.C.S., for many years Government Medical Officer for the District of Savane, at Souillac, Mauritius, on May 11, aged 45.

GODFREY, NATHANIEL, Surgeon, at Turvey, Beds, on July 4, in his 64th year.

PHILLIPS, PHILIP LOVELL, Esq., of Torville, Torquay, South Devon, at Exeter, on July 2.

RYAN, FRANCES, the beloved wife of William Ryan, M.D., and daughter of T. Driscoll, Esq., King's Counsel, at Dublin, on June 10.

WATSON, GEORGE HENRY, M.R.C.S.E., eldest son of the late George Henry Watson, Esq., of Charterhouse-square, London, at his residence, Hounslow, on June 3, aged 38, deeply regretted by his family and friends.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

BROADMOOR CRIMINAL LUNATIC ASYLUM, WOKINGHAM, BERKS.—Assistant Medical Officer; must be a single man, and be legally qualified. Applications and testimonials to the Superintendent on or before July 10.

DENTAL HOSPITAL OF LONDON, 32, SOHO-SQUARE, W.—Dental House-Surgeon and Assistant-Secretary. Applications and testimonials to the Honorary Secretary, on or before July 10.

DENTAL HOSPITAL OF LONDON, 32, SOHO-SQUARE, W.—Assistant-Dental Surgeon; must be a Licentiate in Dental Surgery of Royal College of Surgeons of England. Applications and testimonials to the Honorary Secretary, on or before July 10.

DORSET COUNTY LUNATIC ASYLUMS.—Assistant Medical Officer; must be duly qualified and be registered. Applications and testimonials to the Committee of Visitors of the Dorset Lunatic Asylums, on or before the 31st inst.

HAY UNION.—Medical Officer; must be legally qualified. The gentleman appointed will be required to reside in Hay. Applications and testimonials to Mr. C. Griffiths, Clerk to the Guardians, on or before August 4, election on August 5.

MIDDLESEX COUNTY LUNATIC ASYLUM, COLNEY-HATCH.—Assistant Medical Officer for the female department. Applications to be made on a printed form which may be obtained of Mr. J. S. Scaife, Clerk to the Visitors, on or before July 10. Election on July 13.

MIDDLESEX HOSPITAL MEDICAL COLLEGE.—The Lectureship on Materia Medica and Therapeutics will be vacant at the end of the present session. Applications to the Dean on or before the 14th inst.

NORTH LONDON CONSUMPTION HOSPITAL.—Visiting Physician; must be M.R.C.P., and reside within one mile of the office. Applications and testimonials to the Secretary, 216, Tottenham-court-road, on or before the 13th inst.

ROYAL GENERAL DISPENSARY, 25, BARTHOLOMEW-CLOSE.—Honorary Physician. Candidates will be required to attend at a meeting of the Medical Sub-committee on the 15th inst. Particulars of the duties can be obtained of Mr. Rowsell, offices of the Malta and Mediterranean Gas Company, 60, Gracechurch-street, E.C.

ROYAL SEA-BATHING INFIRMARY, MARGATE.—Resident Surgeon; must be legally qualified. Applications and testimonials to Mr. John Thompson, Secretary, 1, Queen-street, Cheapside, on or before July 23.

ROYAL SURREY COUNTY HOSPITAL.—Dispenser and Assistant-Secretary. Further information may be obtained of the House-Surgeon at the Hospital. Applications and testimonials to the Honorary Secretary, on or before July 19.

SHEFFIELD GENERAL INFIRMARY.—Assistant House-Surgeon; must be a Member of one of the Royal Colleges of Surgeons of the United Kingdom, and L.S.A. or L.R.C.P.L. Applications and testimonials to the Medical Staff of the Infirmary, care of the Secretary, on or before July 10.

SHEPTON MALLET UNION.—Medical Officer for the Third District of the Union. Candidates must be qualified according to the rules and regulations of the Poor-law Board. Applications and testimonials to G. M. Mackay, Clerk to the Guardians, Shepton Mallet, on or before July 12.

UNIVERSITY COLLEGE HOSPITAL.—Resident Medical Officer. Applications and testimonials to John Robson, Esq., Secretary to the Council of University College, on or before July 17.

UNIVERSITY COLLEGE.—The Professorship of Medical Jurisprudence will be vacant at the end of the present session. Further information may be obtained of the Secretary.

WESTMINSTER HOSPITAL.—Surgeon and Assistant-Surgeon. Candidates for either office must be F.R.S.C.E., not practising pharmacy or midwifery. Applications and testimonials to F. J. Wilson, Esq., Secretary, on or before July 20. Election on July 30.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Darlington Union.—Dr. Lumley has resigned the Haughton-le-Skerne District; area, 10,987; population 1628; salary £17 10s. per annum.

Torrington Union.—Mr. W. Risdon has resigned the First Dolton District; area 11,927; population 2240; salary £42 3s. 4d. per annum.

APPOINTMENTS.

Cleobury Mortimer Union.—George G. Bothwell, L.R.C.P. Edin., M.R.C.S.E., L.S.A., to the Second District.

Conway Union.—William M. Williams, L.R.C.P. Edin., M.R.C.S.E., to the Creuddyn District.

Hawarden Union.—William C. Watson, M.R.C.S.E., L.R.C.P., to the Second District.

Hollingbourn Union.—John Fitzpatrick, M.D. Aber., M.R.C.P. Lond., M.R.C.S.E., to the Fourth District.

Northallerton Union.—William B. Griffith, L.R.C.P. Edin., L.R.C.S. Edin., B.A., to the Osmotherley District.

St. Thomas Union.—Edward Mercer, M.R.C.S.E., L.S.A., to the Colaton Raleigh and Otterton Districts. John E. G. Coxwell, L.K. and Q. Coll. Phys. Ire., M.R.C.S.E., to the Heavitree District. John T. Langley, M.R.C.S.E., L.S.A., to the Withycombe Raleigh District.

Woodbridge Union.—Charles F. Covey, M.R.C.S.E., L.S.A., to the Seventh District.

DR. PROTHEROE SMITH has been elected a corresponding member of the Gynæcological Society of Boston, U.S.

PROFESSOR OWEN will distribute the prizes at Charing-cross Hospital School of Medicine on Monday, the 12th inst., at 4 p.m.

W. J. RICHARDS, L.R.C.P. Edin., of Redruth, has been thrown from his horse, and received some severe wounds in the head.

SIR R. MURCHISON was present at the last sitting of the French Academy of Sciences, and returned thanks for his nomination as foreign member in place of Michael Faraday.

THE Convalescent Hospital at Cookbridge, near Leeds, will be ready for the reception of patients on Friday, the 16th inst.

THE LATE DR. MANNING, OF RATHDRUM.—Upwards of £300 has already been subscribed towards a substantial testimonial to the widow and family of the deceased gentleman.

DR. TRENCH, the Medical Officer of Health for Liverpool, has declared the Workshops' Regulation Act to be "the most impracticable and unworkable piece of legislation that he ever got hold of."

THE Belfast Board of Guardians have increased the salary of Dr. Johnson from £120 to £150 per annum.

THE distribution of prizes at the London Hospital Medical College will take place on July 19 at 2 p.m. The Right Hon. J. Joachim Goschen, M.P., President of the Poor-law Board, will preside.

IT will be seen, on reference to our advertising columns, that arrangements have been made by the Council of the St. Andrews Medical Graduates' Association to afford the members an opportunity of spending a day at St. Alban's on the 20th instant, and dining there.

THE Social Science Association hold their annual meeting this year at Bristol, on September 30. The special subjects for discussion in the Health Section are the restraint of contagious disease, the cost of sanitary measures, and the treatment of dipsomaniacs.

THE pastor of Bohle, near Hagen, in Westphalia, has been working, or said to work, miraculous cures, and omnibuses and country carts have been conveying crowds of invalids from the nearest stations. From 200 to 500 persons visit the place daily; lodgings are hardly to be had for money, and the inns in the neighbourhood do a thriving trade.—*Guardian.*

AT Whitefield, William Hilton, aged 14, went to Dr. Birnie to have two teeth extracted, and immediately after the operation had been performed he fell back in a fit of epilepsy, from the shock to the system, and died.

A BUTCHER and sausage-maker of Little St. Andrew's-street, Seven Dials, was at Marlborough-street on Monday fined £20 for having meat on sale unfit for human food.

THE annual general meeting of the Metropolitan Association of Medical Officers of Health was held on Wednesday last, July 7, when the following officers were elected for the ensuing year:—*President:* Dr. Robert Druitt. *Vice-Presidents:* Dr. C. J. B. Aldis; Dr. George Buchanan; Dr. John W. Tripe. *Treasurer:* Dr. C. J. B. Aldis. *Secretaries:* Dr. J. Northcote Vinen; Dr. Thomas Stevenson. *General Purposes Committee:* Dr. E. Ballard; Dr. Henry Letheby; Dr. William Hardwicke; Dr. W. T. Iliff; John Liddle, Esq.; C. F. J. Lord, Esq.; Dr. W. T. G. Woodforde; Dr. J. J. Rygate.

ROYAL INSTITUTION OF GREAT BRITAIN.—At the general monthly meeting, Monday, July 5, 1869, George Busk, Esq., in the chair, William Vaughan Murray, Esq., Albert Lewis Newdigate, Esq., M.A., were elected Members of the Royal Institution.

Royal Victoria Hospital, Netley.—The staff and regimental Medical officers entertained the Mayor and other officials of the borough of Southampton at a banquet in the mess room of the Hospital, on Wednesday in last week.

A meeting of the Royal Sanitary Commission was held on Monday, July 5. Present:—The Right Hon. C. B. Adderley, M.P., in the chair; the Earl of Ducie, the Right Hon. Lord Robert Montagu, M.P., the Right. Hon. Russell Gurney, M.P., Q.C., Sir Thomas Watson, M.D., F.R.S., Lieutenant-Colonel Ewart, C.B., R.E., Mr. J. R. M'Lean, M.P., F.A.S., Mr. E. M. Richards, M.P., Mr. F. S. Powell, Mr. Benjamin Shaw, Dr. Acland, F.R.S., Professor Christison, M.D., Dr. Stokes, F.R.S., and the secretary, Mr. W. H. Birley.

Dr. William Jones Williams.—The House Committee of the North Riding Infirmary, Middlesborough-on-Tees, in notifying to the quarterly court of governors the resignation of Dr. Williams, the House-Surgeon, took occasion most cordially to "express their regret at losing one whose care for the patients, unwearied assiduity, and uniform courtesy and kindness had endeared him to many of those who had experienced his skill, and rendered him a much-valued co-worker with the committee.

The meeting of the British Medical Association will take place at Leeds on the 27th and three following days of the present month. Dr. Acland will resign the chair to Dr. Chadwick. The Addresses in Medicine, Surgery, and Midwifery, will be given by Sir W. Jenner, Mr. Nunneley, and Dr. Beatty, respectively. Dr. Gairdner, Mr. Hey, Dr. Arthur Farre, Dr. Hughes Bennett, and Dr. W. Farr, will preside in the sections of Medicine, Surgery, Midwifery, Physiology, and public Medicine respectively.

Cholera in Havannah.—From a statistical account of the municipal jurisdiction of Havannah published in the *Gaceta de Ciencias Medicas* of that city, we find that the number of persons attacked by cholera morbus from November, 1867, to November, 1868, amounted in all to 7259, of whom no less than 4215 died. The greatest number attacked in any single month was 2558, which occurred in the month of July, 1868.

Direct Representation of the Profession in the General Medical Council.—The Lord President of the Privy Council has consented to receive at the Privy Council Office, on Monday next, the 12th instant, at 3 p.m., a deputation from the Committee of the British Medical Association, appointed at the annual meeting held at Oxford in August, 1868, in order to obtain direct representation of the Profession in the General Medical Council. We are requested to state that the Committee will be glad of the support of such members of the Profession as may approve of the movement, and can make it convenient to attend. The committee will assemble at the residence of Dr. Sibson, 59, Brook-street, at 1 o'clock on that day, and Dr. Sibson will be happy to receive supporters of the deputation.

Royal College of Surgeons.—The annual election of officers of this institution took place on Thursday last, when Mr. Edward Cock, of Dean-street South, the senior Surgeon and lecturer on Clinical Surgery at Guy's Hospital, was elected President, in the vacancy occasioned by the retirement in the prescribed order of Mr. Richard Quain, F.R.S., and Mr. Samuel Solly, F.R.S., of Savile-row, the senior Surgeon and lecturer on Surgery at St. Thomas's Hospital, and Sir William Fergusson, Bart., F.R.S., of George-street, Hanover-square, Serjeant Surgeon to her Majesty the Queen, Surgeon and Professor of Surgery at King's College Hospital, were elected Vice-Presidents of the College. At this meeting of the Council Messrs. John Gay, of Finsbury-place South, senior Surgeon to the Great Northern Hospital, and Mr. J. E. Erichsen, of Cavendish-place, senior Surgeon and Professor of Clinical Surgery at University College Hospital, the recently elected members of the Council, were sworn in and took their seats. Mr. John Birkett, of Guy's Hospital, was elected Professor of Pathology and Surgery; Mr. W. H. Flower, F.R.S., Conservator of the Museum, Professor of Comparative Anatomy and Physiology; and Mr. J. W. Hulke, of the Middlesex Hospital, Lecturer on Anatomy and Physiology. The Examiners in Medicine, Drs. Peacock and Wilks, were re-elected; as also those in Midwifery—viz., Drs. Arthur Farre, Barnes, and Priestley.

Workhouse Medical Officers.—By the order of the Poor-law Board dated April 4, 1868, certain additional duties were prescribed for Medical Officers of Workhouses, amongst others that of reporting half-yearly to the board on several matters relating to the appliances for the treatment of the sick. The board have now issued the following circular as to a proposed modification of their order:—(*Copy.*)—"Poor-law Board. Whitehall, 29th June, 1869.—Sir,—The Poor-law Board have had under their consideration certain representations which have been made to them with respect to their General Order of the 4th April, 1868; and they have decided on rescinding Article 5 of the order, which requires the Workhouse Medical Officer to report to this board; and to require him in future to report specially to the guardians, on or about the 1st January and the 1st July in every year, upon the several matters set forth in the 'Statement' appended to the order. I am directed by the board to inform you that they will in a few days issue an order for effecting this modification of the existing order; and that in the meantime they wish the statement in respect of the 1st of July next to be addressed to the guardians, and not to the Poor-law Board.—I am, Sir, your obedient Servant, (signed) H. Fleming, Secretary. To the Workhouse Medical Officer." The report for the 1st inst. must therefore be sent to the guardians, instead of to the Poor-law Board. It must be borne in mind, however, that reports as to sudden and accidental deaths in the workhouse must, as heretofore, be sent to the Poor-law Board, within twenty-four hours of the receipt of information of their occurrence.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Mr. Cooper Forster, Mr. Bellamy, Mr. Murrant Baker, Mr. Rainey.—Thanks.

Does *Ishmael* want to buy or sell?

H. M. A.—We do not know of any such work in English.

A Smoker.—You might try Carrera, Princes-street, Leicester-square.

G. H. S.—We are always willing to attend to any suggestion of the kind; but sometimes one out of a multiplicity of names slips out of notice.

M.R.C.S. Salisbury.—The columns of the *Times* are frequently made the medium of publishing qualifications to which the decorated are not entitled. The person named is *not* a Member of the College. The Post-office Directory will in future only publish the names of Physicians and Surgeons, as such, whose names appear in the Register.

F.R.C.S. Exam.—It is evident that the article was written by our *sharp* contemporary *before* the election, and in the full expectation that Mr. Solly would not be re-elected. The prognostication was as incorrect (that gentleman heading the poll) as the other statement that "the number of examiners without seats in the Council had been increased to four." There are only three—viz., Messrs. Skey, Partridge, and Adams.

Disgust.—High profession often goes along with low practice. The *Record* newspaper, the organ of the *unco' guid* amongst the clergy, admits the advertisements of that firm of advertising quacks whose proceedings with regard to a sham galvanic belt excited so much disgust in Vice-Chancellor Malins's mind. What fills us with wonder is the reason why advertisements relating to the vilest misuse of the generative functions are inserted in a newspaper intended for the most pious of clergymen and other "professing" personages.

Students.—The case is related in full in Liston's "Operative Surgery."

A Patient.—The contract is binding; you must pay the fee to the Medical gentleman who is engaged to attend.

Inquirer.—Dr. Sims was President of the Committee of Licentiates of the College of Physicians, and Dr. Holland Secretary.

Governor of British Lying-in Hospital.—In due time we shall notice proceedings mentioned by our correspondent. It is to be hoped that the valuable institution will not be injured by the disagreements which have lately taken place.

A Licentiate of the Royal College of Physicians of England can recover at law for attendance and medicine supplied in a "Medical" case.

Dr. T.—The purchase-money should amount to two years' actual receipts from the practice.

University College.—Dr. Elliotson retired from the chair of Medicine in 1837. Dr. Cockle was elected to the office *pro tempore*. Dr. C. J. B. Williams was virtually successor of Dr. Elliotson, and was several years lecturer at the College.

B.—The objection to women practising Medicine, it is stated, dates back to 1421, when a petition was presented to King Henry V., that "no woman use the practyse of fisyk, under payne of long imprisonment."

A Disciple of John Hunter.—On the occasion in question the Hunterian Oration was not delivered at the College of Surgeons. Dr. Jordan Lynch, however, delivered an oration in that year at Exeter Hall. The address he delivered upon that occasion was brilliant and solid. This highly gifted member of our Profession died in the prime of life from fever contracted in the discharge of his duty as Medical officer of the West London Union. He was a contributor to the original *Medical Times*. He was an ardent reformer, and when it was proposed to found a College of General Practitioners,

he gave the scheme his strenuous and most powerful opposition. With the natural ardour and genius of his countrymen, he was the first, we believe, to discover that the establishment of such a college would lower its members in the estimation of the public. He denounced the plan on the ground that Surgeons in general practice would be deprived of their legitimate title of Surgeon, and placed at once in an "inferior grade." We must state, for the information of our correspondent, that the late gifted Albert Smith made his first appearance as a writer in the *Medical Times* of that day. He contributed a series of most amusing and able articles, entitled "Recollections of a Dissecting-room Porter." Mr. Smith was the son of a Surgeon in general practice at Chertsey, but left the Profession for a much more remunerative calling. By his writings and popular lectures he amassed a considerable fortune. He married a daughter of the late Robert Keeley, comedian. His brother Arthur was a dentist, and practised for some years at Percy-street, Bedford-square. Notwithstanding this secession from a Profession in which he was educated, Mr. Albert Smith always entertained and expressed a high opinion of its members.

Mental Unsoundness in Advanced Life.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—What can be done in a case like the following? An aged person, in respectable circumstances, living by herself, becomes somewhat deranged—fancies she is poor—denies herself food. She lives in a comfortable home, and it seems a needless cruelty to send her to a lunatic asylum. But what measures can be taken to get at her money, so that payment may be made for necessaries and nursing? I am, &c. Imperitus.

Berry Defence Fund.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The Committee of the above Fund will be obliged by your publication of the following (first) list of subscriptions. I am, &c.

Edward Sandwell, L.R.C.P. Ed. and M.R.C.S. Eng., Hon. Sec.

10, Charles-street, Soho, W., July 7.

N. H. Clifton, Esq., Islington, £1 1s.; W. Travers, Esq., Kensington, £1 1s.; R. B. Moore, Esq., Wolverhampton, £1 1s.; T. A. Turner, Esq., Chelsea, £1 1s.; D. E. Sandwell, Soho, £1 1s.; E. Child, Esq., New Malden, £1 1s.; Dr. Mackinley, Isleworth, £1 1s.; H. Woolcott, Esq., Charing-cross Hospital, £1 1s.; Dr. Skegg, St. Martin's-place, £1 1s.; Dr. S. S. White, Brixton, 10s. 6d.; W. Naughtin, Esq., Baker-street, 10s. 6d.; Dr. Farr, Waterloo-road, 10s. 6d.; J. F. Clarke, Esq., Gerrard-street, 10s.; R. Bayley, Esq., Kingston, 10s. 6d.; Rev. F. W. Russell, Charing-cross Hospital, 10s. 6d.; Dr. Langston, Broadway, Westminster, 10s.; W. G. Sutcliffe, Esq., Battersea, 10s. 6d.; E. A. Linnecar, Esq., 10s.; J. A. Hayden, Esq., Stepney, 10s. 6d.

COMMUNICATIONS have been received from—

Mr. J. Cooper Forster; Mr. Gaskoin; Dr. Heywood Smith; Dr. D. Mackintosh; Dr. Finucane; Mr. J. S. Cumming; Mr. J. Hutchinson; Dr. Dowson; Dr. Althaus; Mr. W. H. Olley; Mr. G. E. L. Pearse; A Smoker; Professor Quinlan; Professor Longmore; Dr. E. Sandwell; Dr. Paosser James; Mr. Stone; Mr. Burrows; Dr. Edward Waters; Dr. Lankester; Deltius; Ishmael; Dr. A. Henry; Dr. B. W. Richardson; Mr. T. Bryant; Mr. J. Fettes.

BOOKS RECEIVED—

Quarterly Journal of Microscopical Science, July—British and Foreign Medico-Chirurgical Review, July—Westminster Review, No. 71—Edinburgh Medical Journal, No. 169—Clark's Memoir of Dr. Conolly—Analisis de las Aguas Minerales de Azuage—Monthly Microscopical Journal, July—A Woman's Work in Water Cure and Sanitary Education—Dunn and Drysdale's Cases of Syphilis—Des Fistules Uréthrales chez l'Homme, par le Dr. Cocteau—New Sydenham Society's Biennial Retrospect of Medicine and Surgery, 1867-8.

NEWSPAPERS RECEIVED—

Journal of the Society of Arts—New York Medical Gazette—Birmingham Daily Gazette—Medical Press and Circular.

VITAL STATISTICS OF LONDON.

Week ending Saturday, July 3, 1869.

BIRTHS.

Births of Boys, 1046; Girls, 973; Total, 2019.
Average of 10 corresponding weeks, 1859-68, 1940·7.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	654	577	1231
Average of the ten years 1858-67	626·8	579·7	1206·5
Average corrected to increased population	...	...	1327
Deaths of people above 90	...	1	1

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-cough.	Typhus.	Diarrhœa.	Cholera.
West	463388	...	1	4	1	12	8	5	...
North	618210	2	2	14	1	26	8	...	...
Central	378058	...	2	8	...	4	5	7	...
East	571158	1	5	31	2	24	8	4	...
South	773175	1	12	18	...	24	11	4	...
Total	2803989	4	22	75	4	90	40	20	...

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	30·055 in.
Mean temperature	56·9
Highest point of thermometer	75·0
Lowest point of thermometer	42·6
Mean dew-point temperature	48·4
General direction of wind	N.E. & N.N.E.
Whole amount of rain in the week	0·00

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, July 3, 1869, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the year 1869.	Persons to an Acre. (1869.)	Births Registered during the week ending July 3.	Deaths. Corrected Average Weekly Number.	Deaths. Registered during the week ending July 3.	Temperature of Air (Fahr.). Highest, during the Week.	Temperature of Air (Fahr.). Lowest, during the Week.	Temperature of Air (Fahr.). Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3170754	40·7	2019	1462	1231	75·0	42·6	56·9	0·00	0
Bristol (City)	169423	36·1	102	76	*55	76·5	43·7	57·0	0·00	0
Birmingham (Boro')	360846	46·1	226	175	134	...	...	...	...	...
Liverpool (Boro')	509052	99·7	327	295	263	...	...	...	...	...
Manchester (City)	370892	82·7	245	210	*153	80·0	43·0	58·9	0·00	0
Salford (Borough)	119350	23·1	79	60	52	77·5	45·5	58·0	0·00	0
Sheffield (Borough)	239752	10·5	167	126	85	74·1	41·0	54·7	0·00	0
Bradford (Borough)	138522	21·0	92	71	53	72·1	47·4	56·6	0·00	0
Leeds (Borough)	253110	11·7	229	120	99	75·0	43·0	58·8	0·00	0
Hull (Borough)	126682	35·6	87	59	48	65·0	38·0	51·2	0·00	0
Newstl-on-Tyne, do.	130503	24·5	136	69	46	72·0	44·0	54·7	0·32	32
Edinburgh (City)	178002	40·2	122	86	108	72·7	43·0	59·3	0·00	0
Glasgow (City)	458937	90·6	402	268	286	74·8	46·7	60·1	0·00	0
Dublin (City and some suburbs)	320762	32·9	173	158	125	78·5	42·5	59·4	0·00	0
Total of 14 large Towns	6546587	35·5	4406	3244	2738	80·0	38·0	57·0	0·03	3
					Week ending June 26.		Week ending June 26.			
Vienna (City)	(1863) 560000	...	...	...	326	...	...	57·9	...	...

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 30·055 in. The barometrical reading increased from 30·00 in. at the beginning of the week to 30·15 in. on Monday, June 28.

The general direction of the wind was N.E. and N.N.E.

Note.—The population of Cities and Boroughs in 1869 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous.

* The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

APPOINTMENTS FOR THE WEEK.

July 10. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 1½ p.m.

12. Monday.

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 1½ p.m.; St. Peter's Hospital for Stone, 2½ p.m.

13. Tuesday.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.

14. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.

Epidemiological Society, 8 p.m. Meeting.

Westminster Hospital School of Medicine, 11 a.m. Mr. C. Carter Blake's Lectures on the Comparative Anatomy of Warm-blooded Vertebrata—Lecture VI.: The Class Mammalia (continued).

15. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

16. Friday.

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

CHOCOLAT-MENIER.

(Manufactured only in France.)

ANNUAL CONSUMPTION EXCEEDS 5,000,000 lb.

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See Pharmaceutical Journal of May 1, 1856.

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,, Burgoyne, Burbidges, & Co.	,, Evans, Sons, & Co.	,, Hodgkinsons, Stead, & Treacher	Messrs. Wright, W. V., & Co.
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GENERAL MEDICAL COUNCIL
OF
EDUCATION AND REGISTRATION.

TWELFTH ANNUAL SESSION,
HELD AT THE ROYAL COLLEGE OF PHYSICIANS.

SIXTH DAY.—WEDNESDAY, JULY 7.

THE roll having been called, and the minutes read and confirmed,

Dr. ALEXANDER WOOD called attention to a question which had been put by Sir John Gray in the House of Commons to the Home Secretary, and to the answer given by that functionary; and asked the President whether the Government had communicated with the Council before returning such answer.

The PRESIDENT replied in the negative.

Dr. ALEXANDER WOOD requested that this question and answer might be recorded on the minutes.

The PRESIDENT then stated that Mr. Ouvry had been consulted as to the possibility of removing Lima Abraham La'Mert's name from the Register during the present session, and had given his opinion that "the General Medical Council cannot, by any suspension of standing orders or otherwise, deal with Lima Abraham La'Mert's case this session."

Sir DOMINIC CORRIGAN, as a matter of personal explanation upon an issue of fact between himself and a member of the Council, called attention to the fact that the proportion of students rejected (as stated in the Army and Navy Returns) was 25 per cent. from the University of Edinburgh, 23 per cent. from Trinity College, and 6 per cent. from the Queen's University of Ireland.

Dr. ALEXANDER WOOD and several other members of the Council objected to these returns being brought forward in such an irregular manner.

Sir DOMINIC CORRIGAN said it was merely in consequence of an issue of fact which had arisen between himself and a member of the board. He had taken the returns for the last five years.

The PRESIDENT ruled that it would be irregular to refer to other bodies.

Sir DOMINIC CORRIGAN said that in reference to the navy he found no graduate from Queen's University had been rejected during the last five years. With regard to the army, the small number of 6 per cent. had been rejected.(a)

(a) Sir Dominic Corrigan has handed us for publication the following comparative tables, for which, as they have been extracted by himself from the Army and Navy Returns, he alone is responsible :—

ARMY.

EDINBURGH UNIVERSITY.

Holders of degrees in Medicine and Surgery.

	Total examined.	No. rejected.
1864 ...	16	2
1865 ...	6	2
1866 ...	3	2
1867 ...	3	1
1868 ...	0	0
	28	7

25 per cent. rejected.

TRINITY COLLEGE, DUBLIN.

1864 ...	12	3
1865 ...	28	10
1866 ...	10	0
1867 ...	6	0
1868 ...	4	3
	70	16

23 per cent. rejected.

QUEEN'S UNIVERSITY, IRELAND.

1864 ...	18	1
1865 ...	14	2
1866 ...	10	1
1867 ...	21	1
1868 ...	13	0
	76	5

6 per cent. rejected.

NAVY.

EDINBURGH UNIVERSITY.

	Total examined.	No. rejected.
1864 ...	6	2
1865 ...	1	0
1866 ...	1	0
1867 ...	2	2
1868 ...	2	0
	12	4

33 per cent. rejected.

TRINITY COLLEGE, DUBLIN.

1864 ...	0	0
1865 ...	0	0
1866 ...	1	0
1867 ...	2	0
1868 ...	2	0
	3	0

None rejected.

QUEEN'S UNIVERSITY, IRELAND.

1864 ...	1	0
1865 ...	0	0
1866 ...	2	0
1867 ...	5	0
1868 ...	15	0
	23	0

None rejected.

ADJOURNED DEBATE UPON DR. PARKES'S MOTION AND DR. STORRAR'S AMENDMENT WITH REFERENCE TO THE QUEEN'S UNIVERSITY.

Dr. EMBLETON called attention to a statement made by Sir Dominic Corrigan yesterday, from which it might be inferred that the University of Durham was not loyal to the Council with regard to preliminary examinations. He therefore explained the circumstances under which the recommendation of the Council had not been fulfilled, and added that there was every intention on the part of the Durham University to act loyally towards the Council.

The debate was continued by Dr. Paget, Mr. Hargrave, Dr. Thompson, and Dr. Andrew Wood, the latter suggesting that this was a favourable opportunity of trying what their powers were of appeal to the Privy Council, and he trusted the matter would not be allowed to drop.

The amendment was then put to the vote, and negatived, the numbers being as follows :—

Majority, 14.	*Minority*, 5.
Mr. Hawkins.	Dr. Bennett,
Mr. Cooper.	Dr. Paget.
Dr. Acland.	Dr. Storrar.
Dr. Embleton.	Dr. Alexander Wood.
Dr. Fleming.	Mr. Hargrave.
Dr. Macrobin.	
Dr. Thomson.	
Dr. A. Smith.	
Dr. Leet.	
Dr. Apjohn.	
Sir D. Corrigan, Bart.	
Dr. Parkes.	
Dr. Rumsey.	
Dr. Stokes.	

Declined to vote, 5—The President, Dr. Andrew Wood, Dr. Sharpey, Dr. Quain, and Dr. Christison.

Dr. Parkes's original motion was then put, and carried *nem. con.*

THE RECEPTION OF DR. BELL FLETCHER AND A DEPUTATION UPON THE SUBJECT OF THE AMENDMENT OF MEDICAL ACTS.

At 3 o'clock a deputation consisting of Dr. Bell Fletcher, Senior Physician to the General Hospital, Birmingham; Sampson Gamgee, Esq., F.R.S. Edinburgh, Surgeon to the Queen's Hospital, Birmingham; Arthur Oakes, Esq., M.R.C.S., L.R.C.P. Edinburgh; and D. C. S. Owen, Esq., M.R.C.S., were received by the Council, and presented the following memorial :—

The undersigned members of the Medical Profession respectfully submit to the General Council of Medical Education and Registration of the United Kingdom the necessity of obtaining an Act of Parliament to amend the Medical Act of 1858, and the Acts subsequently passed with a view to amend it.

The Act of 1858 affirms that "it is expedient that persons requiring Medical aid should be enabled to distinguish qualified from unqualified Practitioners." The experience of the past ten years has proved that the Act is practically inoperative as a guide to the public in distinguishing legally qualified members of the Medical Profession. A large number of men are practising Medicine and Surgery in different parts of the country, not only without any legal qualification, but without having undergone any regular course of Medical education. In some places men are practising under fictitious names, assuming the title of doctor, and obtaining considerable sums of money from weak persons by intimidation and extortion. The Medical Act of 1858 is practically inoperative in restraining these offenders.

It is capable of proof that some legally qualified men have lent their names to persons without qualification, to enable them to practise Medicine and Surgery without incurring liability to prosecution. Such a proceeding is regarded as a fraud on the public and the Profession; and it is suggested that in any future Bill greater powers be given to the General Medical Council to remove from the Register, and deprive of their Professional rights, qualified men who shall aid and abet illegal practitioners.

The present state of the law touching certificates of death greatly favours the successful practice of secret poisoning and infanticide. It is suggested that the certificate of a legally qualified member of the Medical Profession, in the absence of a coroner's order, shall be indispensable as a preliminary to every burial.

The Medical Act of 1858 purports to constitute the General Medical Council for the purpose of regulating Medical education and registration throughout the United Kingdom; but composed as the Council is, mainly, of the members of the Medical corporations who grant licences to practise, the control of the system of Medical education has proved to be very imperfect.

The undersigned are of opinion that the system of Medical education should be revised, so as to insure the possession of a thoroughly scientific and practical acquaintance with Medicine and Surgery on the part of persons applying for the legal qualification.

To this end, it is held to be necessary to substitute for the present system of examination, and for the many forms of licence to practise now granted, one high and uniform standard of examination, and one legal qualification.

The practical part of the course of Professional study stands in special need of improvement, and the undersigned would gladly see the regulations made stringent, to insure the attendance of students on a thorough course of practical study in Hospitals; but in the event of any student engaging in private practice on his own responsibility before he is legally qualified, it is suggested that he forfeit the year, or years, as a student during which he has so practised.

It is respectfully, but very earnestly, submitted that the influence and power for good of the General Medical Council would be greatly extended, with the Profession and the public, if provision were made in a new Act of Parliament for the representation on the Council of the general body of Practitioners of Medicine and Surgery, who are now, for the most part, deprived of any Professional franchise.

In any future Act of Parliament it is suggested that provision be made for instituting prosecutions under it by a public prosecutor or other public functionary, on behalf of the General Medical Council, instead of leaving the voluntary enforcement of the law to individuals.

The undersigned desire to obtain no privileges for the Profession without giving the public commensurate advantages, and they submit that an Act of Parliament so framed as to raise the standard of Professional efficiency, to protect life, and prevent the obtaining of money on false pretences, is an Act as much needed in the general interest of the community as for the welfare and honour of the Medical Profession.

Dr. Bell Fletcher said: Mr. President and Gentlemen, Mr. Gamgee, Mr. Oakes, and Mr. Owen, who accompany me as a deputation, have, with myself and others, performed the duty of drawing up and obtaining signatures to the memorial we have now attended your board to present. We vouch for the truth of the signatures, for all of which we have written vouchers. There are already upwards of 5200 names appended to this memorial, and we have reason to believe that in the course of a few days several thousands more will be added, as for some days we have received 500 assents on the average. The memorial is so explicit, and the signatures to it are so influential and numerous, that we feel no words can add to its importance. If, however, you should have any questions to address to us, or desire information explanatory of the objects of the memorial, we shall endeavour to comply with any request with which you may honour us.

The President: If you wish to enforce any particular part of this memorial by any explanation or remark, the Council are anxious to afford you an opportunity of doing so.

Dr. Bell Fletcher: I do not think it is necessary.

The President: It may possibly be that the Council may wish to put one or two questions to the deputation, which perhaps you will kindly answer Taking the memorial in the order in which it stands, it has been suggested to me that the first paragraph requires a little explanation. "The Medical Act of 1858 is practically inoperative as a guide to the public in distinguishing legally qualified members of the Medical Profession." Now, first, there is the Medical Register of this Council, affording a list of persons who have properly undergone examinations, such as are approved of by this Council, and the names of all properly qualified Practitioners are to be found on that list. I think, therefore, when it is said that the Act is inoperative in enabling the public to distinguish properly qualified members of the Profession, that requires a little explanation.

Dr. Bell Fletcher mentioned a case which recently occurred in Birmingham, in which the stipendiary magistrate, Mr. Kinnersley, said that a Practitioner having a qualification from some place in America was perfectly qualified to practise, and to style himself a Doctor in this country.

Mr. Gamgee explained that one great reason why the Medical Register failed was that registration was not compulsory, and the fact of a name not appearing on the Register was no evidence of the Practitioner not being a qualified man. Again, it could not be supposed that persons would purchase the Register for themselves so as to make the proper inquiries. It had also been found in the legal courts that in consequence of the numbers of the qualifications, and in consequence of the vagueness and uncertainty of the Act, stipendiary magistrates had failed to convict in cases where clearly the person was not qualified under the Register. In other cases in London, where Mr. Henry had granted a conviction, it had been quashed in the superior courts. Practically the memorial called attention to the fact that persons who practised by intimidation and extortion under false names could only be fined to such a small amount, and the prosecution was so much more expensive to the persons instituting it than to the accused, that a practical impunity to a system of intimidation and extortion throughout the country was the consequence.

The President asked for an explanation of the following clause in the memorial:—"To this end it is held to be necessary to substitute for the present system of examination, and for the many forms of licence to practise now granted, one high and uniform standard of examination and one legal qualification." Did the memorialists mean to suggest that all the high degrees of Medicine and Surgery should be done away with, and that all Medical Practitioners should simply have one qualification?

Mr. Gamgee: We would destroy nothing. We would take from no university its position or its privileges, nor would we deprive it of doing the good which it does. When we say "one high and uniform standard of examination and one legal qualification," we mean by "high" that no person shall gain admittance into the Profession with insufficient knowledge, which now we believe to be the case. By "uniform" we mean that it shall be a comprehensive qualification of a high standard, which shall require that a man shall know all his subjects, and under which it shall no longer be possible for a man to be admitted as a Surgeon who does not know the science of Medicine as far as a diligent student should know it. By a uniform standard and one legal qualification, we mean that there shall be only one entrance into the Profession, no matter how many fellowships and degrees may be gained in other ways.

Mr. Oakes made some remarks upon the imperfect state of education among graduates. It was found by many Practitioners that they could obtain unqualified assistants of a much more efficient character than gentlemen willing to act in that capacity who held degrees. He mentioned the case of a M.B. of the University of London who positively was not capable of recognising a case of measles.

In answer to a question referring to the paragraph of the memorial respecting certificates of death, Mr. Gamgee stated that it was customary, where there was no certificate from a Medical man, to put in the words "not certified." The memorialists were therefore of opinion that the system of registration itself required alteration, and that certainly the matter ought to be altered authoritatively by Parliament.

The President: Supposing a part of the country very sparsely inhabited, would you require a member of the Profession to go a distance of, say, five or six miles, in order to give a certificate of death, without payment? or, if payment is to be granted, where is such payment to come from?

Mr. Gamgee: We do not mean that he should go without payment; but while we affirm the principle, we leave the practical carrying out of it to the advisers of the Government.

The President: I am requested to ask you whether you are aware that the Sanitary Commissioners are now examing witnesses in order to ascertain how a more exact registration of deaths may be effected.

Dr. Bell Fletcher: No.

The President: Ought you not to communicate with the Commission upon this subject?

Dr. Bell Fletcher was understood to say that the matter should receive the attention of the deputation.

In reply to a question put by the President referring to the suggestion that the general body of Practitioners should be represented on the Council,

Mr. Gamgee said: We believe generally that the power for good of this Council with the public could not but be strengthened by an active alliance with the Profession. We submit that the bulk of the Medical Profession in this country is almost alone amongst the learned bodies of Europe in having no Professional franchise whatever. We point to the franchise of the older Universities and to that recently extended to the Scotch Universities, and we say that if the Professional men in this country had the franchise they would take a greater interest in the proceedings of this Council. You will find them a body of hardworking, well-meaning, well-thinking men, who would be well qualified to assist your endeavours for the advancement of the Medical Profession and the interests of the public, and we submit that it is difficult to point to a reason why we should continue without any franchise or representation. As to the means of carrying it out, we hold to the principle, but leave the practical part of it to your determination.

The President then dismissed the deputation with an assurance that every possible attention should be given to their suggestions. Many of them had been already anticipated, and committees were sitting upon several of the subjects mentioned in the memorial.

The deputation, having thanked the Council for the courteous reception which had been accorded to them, then withdrew.

The motion, notice of which was given by Mr. Cæsar Hawkins, for the returns from the Irish Branch Council of the names of all persons entered on the Register for qualifications obtained by examinations, for less than four years registration on the Students' Register, was withdrawn.

Dr. Storrar then made the usual motion of thanks to the Director-General of the Army Medical Department, to the

Director-General of the Navy Medical Department, and to the Right Honourable the Secretary of State for India, for their kindness in furnishing to the Council the returns of the examinations of candidates for their respective services.

Dr. Embleton then moved that the list of examining bodies whose examinations fulfil the conditions of the Medical Council as regards preliminary education be printed and sent to the licensing bodies.

The motion was seconded by Mr. Hargrave, and carried unanimously.

The President requested that Dr. Bennett should take the chair during his absence.

Consideration of the Report on State Medicine.

Dr. Acland said, if it had not come to his knowledge on a previous day incidentally that some influential persons, including the representative of one of the important bodies which sent a member to the Council, was strongly opposed to the granting of this qualification State Medicine in any sense whatever, it would have been hardly necessary to make an observation upon the subject. The recommendation of the committee was that, in any future amended Medical Bill, the Council should insert the requisite clauses for providing a qualification in State Medicine. It was simply a permissive measure, and therefore, of course, pressed hard upon no one. It was simply for the use of those who desired to avail themselves of it, and, that being so, it seemed enough to disarm all possible opposition to the measure. Within the last twenty or twenty-five years the subject called "State Medicine" had been very much discussed in various forms and under various aspects by different persons in this country—by jurists, and Medical jurists, and persons skilled in all departments bearing on the subject. It therefore appeared to be a question which it was the duty of the Council to endeavour to solve. At present the Council was not entrusted with the conduct of examinations, but was simply charged with the duty of seeing that any examinations or qualifications which may be held by any of the corporations or universities were such as were suitable to the wants of the country and adequate to their purposes. The committee was unanimously of opinion that the time had now arrived when the Council could not, without a dereliction of duty, refrain from offering to the licensing bodies the opportunity, if they desired, to certify to the possession of certain knowledge and skill in the matter of public Medicine, and the Council was willing to take steps to register their graduates in that department of science. If it was said that none of the licensing bodies would desire to institute such examinations, the practical answer was that, if no such examinations were held, no such qualifications would be granted; but until the Council knew that there would be none it was their duty to give the opportunity for such studies to be pursued and recognised. When the list of subjects was perused he had observed it had provoked a smile in one of his colleagues, especially when it ended in requiring a practical knowledge of certain portions of engineering science. But it must be remembered that opinions had to be expressed on all kinds of questions involving engineering skill by Medical men, whether they were competent or not to answer them. It was only within the last few days that he had had to give an opinion (or else he would have been obliged to refuse an opinion) as to the construction of drains and the disposal of sewage, and various questions of a purely architectural and engineering kind connected with Hospitals. Medical men were expected to possess a knowledge about these matters, and the Medical Council itself might at any time be put in the position of having to give a definite judgment on points of this nature. The letters and answers which the committee had received were deserving of the most serious attention. There were two analyses of them—one prepared under the superintendence of Dr. Stokes, and the other by Dr. Rumsey. Besides these, there was a commentary by Dr. Rumsey, who was, as all knew, one of the earliest and most systematic of comprehensive writers upon that matter, and who ought properly to have been the person to have taken up this question before the Council. With regard to the practical conclusion arrived at by the committee that it was desirable to insert such a permissive clause in any future Medical Acts Amendment Bill, he confessed himself again utterly at a loss to see what valid objection could be advanced. The committee did not think it desirable to point the attention of the Council in detail to the criticisms and opinions which had been given upon the matter, the mere canvassing of which must occupy a great length of time. Therefore it was that they had laboured at one point—namely, the bringing out of the exact question upon which the Council would give either an affirmative or a negative answer—whether or not they would make it possible (because nothing more was involved in the recommendation of the committee) for bodies who desired to grant this qualification to do so. In conclusion, then, he would move "That in any amended Medical Bill which may be prepared for Parliament by the Council, *it is desirable* that the requisite permissive clauses for providing a qualification in State Medicine be inserted."

Dr. Christison seconded the motion. He said the class of Medical officers which this motion contemplated would become an absolute necessity in the country. The question, therefore, was whether the demand which must presently arise can be met by the spontaneous studies of Medical men in the different divisions of the country. Immediate action on the part of the Council was therefore necessary; for unless the bodies were encouraged to come forward in the matter there was great danger that this important branch of Medical practice would be taken out of the hands of the Council altogether. There were at present great facilities for the appointment of such Practitioners by the universities; and he alluded especially to the University of Edinburgh, which already gave the very high degree of Doctor in Science, this qualification being based upon three branches of study, natural and physical science, mental science, and philology. He had no doubt the universities generally would act upon the suggestions of the committee.

Dr. Macrobin agreed with Dr. Christison that immediate action was necessary, and that the universities would act in the matter.

Dr. Andrew Wood said the Council was asked to act too hastily in the matter. The committee had only a few days after their appointment, last July, jumped to a conclusion on the subject, as was manifest from the circulars which were sent round by them. And if Dr. Alexander Wood had not objected to the communication from the College of Surgeons of Edinburgh being placed on the minutes they would have seen why that body objected to being forced into a conclusion upon a matter which had been evidently prejudged by the committee. He was not arguing that this step should not be taken at some future time; but he contended that the licensing bodies are not in a condition at this time to say they are prepared for the establishment of this new qualification. He had a very good witness at hand, whose evidence he would call in aid, and that was Dr. Maclagan's in his reply to the committee's questions upon this matter. It was a most logical statement, and earnestly put forward, and that gentleman, who had more practice perhaps in the particular branch of study to which this motion was directed than any man in England, warned the Council to be wary and cautious in educating a body of specialists, lest they should forget to educate the whole body of Medical men in this important branch of science. He trusted, therefore, that Dr. Acland would see that his duty was to give the Council an opportunity of examining this question in all its bearings, and above all to give an opportunity of consulting with the various licensing boards in the country, and taking their opinion upon it, and then, next session, a deliberate judgment might be formed. This was the course intended to be pursued by Committee on Education.

Dr. Alexander Wood again called attention to the words of the memorial which had proceeded from the body so ably represented by Dr. Andrew Wood. The Council had received two extraordinary communications during the present session—one to the effect that a committee was going to sit and watch its proceedings with a view to giving advice; and another was that of the Committee of the College of Surgeons disapproving of the appointment of a committee to investigate the subject of State Medicine.

Dr. Andrew Wood: No; what they objected to was the establishment of a special class of Practitioners in State Medicine in the manner and at the time suggested by the Council.

Dr. Alexander Wood had great respect for the representatives of licensing bodies; but he felt, like Sir Dominic Corrigan, that an official document—(a laugh)—and especially one emblazoned with a broad seal, was sooner to be believed than the mere statement of a representative. The truth was it was not for licensing bodies to lecture the Council upon its duties; it was the duty of the Council to lay down for the guidance of the licensing bodies what it considered to be for the good of the Medical education of the country, and it was because he felt that this was the true duty of the Council that he would support the resolution which had been so clearly put forward by Dr. Acland. He referred to the sorry figure so often cut by Medical men in the witness-box, and when face to face with some of the most astute minds in the country, whose object was to make them look as ridiculous as possible, and he attributed

this failure to the fact that Medical men were frequently expected to possess information upon all sorts of subjects connected with State Medicine with which they were wholly unacquainted. As an illustration of the low standard of technical knowledge upon this subject, he mentioned the fact that when, three weeks ago, he was asked the question by a committee of the House of Commons "Would you think it advisable to appoint the poor-law officers throughout Scotland to be officers of health?" he said he could not, in the present state of Medical education, recommend that, because there are very few of those Poor-law Medical officers who are educated in those special subjects which an officer of health ought to know. And when he was asked whom he would recommend for the appointments, he was obliged to answer that there were not, within his knowledge, a sufficient number of persons specially educated upon that subject to be officers of health; and when he gave that answer he had in view the efforts which the Medical Council were making, by the labours of their Committee on State Medicine, to remedy a state of things so derogatory to the character of the Medical Profession throughout the country, their aim and object being to establish a class of men upon whom the public could place some dependence in regard to questions of that kind.

Dr. Stokes said the Committee on State Medicine had been accused of precipitancy and presumption in the manner they had carried out their duties. He would point out to Dr. Andrew Wood the resolutions under which they were appointed. First, it directed them to consider what steps, "if any," should be taken to carry out the suggestions for the establishment of a special qualification for State Medicine, and that committee had done nothing more than their duty. He vindicated the committee from any dogmatism or attempt to direct the Council in the matter, and strongly supported Dr. Acland's motion.

Dr. Aquilla Smith, as a member of the committee, was quite taken by surprise at the course which the discussion had taken. He was altogether unprepared to enter into the consideration of such matters as Dr. Christison introduced respecting a most important branch of the subject—namely, as to what bodies the creation of these contemplated qualifications should be entrusted.

After some few remarks from Dr. Macrobin,

Dr. Storrar said the London University did not feel satisfied that the time had arrived for carrying out this measure, and that it should be rather an outgrowth at the top of Medical science, and not as a specialty. The gentlemen who had occupied themselves in the position of health officers had up to the present time studied not only pathology, general and special, but chemistry and physic—indeed, what is commonly called Medical jurisprudence. Within the last few years a Chair of Hygiene had been established at the London University, and a young and distinguished Oxford graduate had just been appointed thereto; but no one would say that the whole subject of the science of hygiene had been so drawn together as to put the matter on an intelligible basis, so as to form the foundation for a new degree. The University of London was thoroughly in advance upon this question, but without venturing to speak on its behalf, and speaking simply his own opinion, he entertained very considerable doubts as to whether he could point out a special curriculum of study for a degree in State Medicine apart from any other kind of qualification. It might come to that, but he thought the time had not yet arrived. With these reservations he would hold up his hand for the proposal, which would simply give the Council the power of registering such a qualification should it be established by any of the bodies.

Dr. Andrew Wood moved, as an amendment, "That the Council come to no decision in the present session as to the desirability of inserting in any amended Medical Bill permissive clauses for providing a qualification in State Medicine, but that the matter be delayed till next session; and that during the recess the report of the Committee on State Medicine, with the evidence appended, be sent down to the Licensing Bodies for their consideration."

Mr. Hargrave seconded the amendment.

Dr. Rumsey moved the adjournment of the debate.

The Council rose at the usual hour until the morrow, when, it was announced, the day would be devoted to committee business.

Seventh Day.—Thursday, July 8.

The Council met at 2 o'clock, and, after a short discussion upon the propriety of adjourning the debate on State Medicine, it was agreed that it should be postponed till Friday, and the present sitting devoted to committee business.

Dr. Andrew Wood then moved—"That certain communications from Dr. John Harley, Mr. Courtauld, Dr. Macloughlin, and Dr. Edwards Crisp be referred to a committee, which shall report as to their nature, and the answers which it sees proper to return to them."

The motion was seconded by Dr. Parkes, and carried unanimously.

The committee appointed for this purpose were Dr. Thomson, Dr. Aquilla Smith, Dr. Rumsey, and Mr. Cooper.

Standing orders were then suspended, and the Council adjourned to to-morrow, 2 o'clock, to enable committee business to be proceeded with.

Eighth Day.—Friday, July 9.

The Council met to-day at two o'clock, the President Dr. Burrows in the chair.

The adjourned consideration of the report of the Committee on State Medicine was resumed.

The motion of Dr. Acland, seconded by Dr. Christison, upon this report was as follows:—"That in any amended Medical Bill which may be prepared for Parliament by the Council, it is desirable that the requisite permissive clauses for registering a qualification in State Medicine be inserted."

To this the following amendment was moved by Dr. Andrew Wood, and seconded by Mr. Hargrave:—"That the Council come to no decision in the present session as to the desirability of inserting in any amended Medical Bill permissive clauses for registering a qualification in State Medicine, but that the matter be delayed till next session; and that during the recess the report of the Committee on State Medicine, with the evidence appended, be transmitted to the licensing bodies for their consideration."

Dr. Rumsey said he thought that much of the misconception which had arisen from defective information upon this subject might have been averted, had it been possible for the resolution passed last year to be carried out, viz.—"That the committee send in their report, so soon as it may be ready, to the Executive Committee, and that the Executive Committee have power to print and circulate the report among the members of the Council." If the committee had been able to place the appendix in the hands of the members earlier, a great portion of the debate might have been unnecessary. He believed the first report of the committee, which contained the resolutions passed last year, was never placed in the hands of members. Those resolutions, however, were referred to in substance by Dr. Acland in a letter which he addressed to various persons at home and abroad. In the second paragraph of that letter it was stated, "The committee have decided that such diplomas or certificates ought to be granted after due examination to persons who are already, or shall hereafter be, entered upon the Medical Register, and to no others." That was a very important resolution, and it had not been clearly understood by the Council. The whole of the resolutions were, however, read in detail by Dr. Stokes on Wednesday, and therefore he (Dr. Rumsey) trusted that full information as to what was done last year was now fully before the Council, and that it would be admitted that these resolutions showed that the Committee had made known the fact that there existed a demand for a qualification in State Medicine; that they felt bound to suggest a mode of meeting that demand; and that it would involve a course of study and preparation which it would be utterly in vain to include in the general minimum qualification now required for Medical Practitioners. The committee had seen plainly what he trusted the Council would admit—that, however much the education of all Practitioners might be improved by better elementary teaching and better methods of study in various subjects, there lay beyond all this a wide field of study to be cultivated, the cultivation of which should be verified by a special examination. He thought he was speaking for all his colleagues, the committee, when he said that these qualifications could not be imposed upon all Medical students without interfering with studies of paramount importance which must be pursued in the curriculum of four years. Now, it had been said that the committee had decided this question. He replied that they had only admitted a principle, and that they had not at all laid down any rules or formed any conclusion beyond. To postpone the preparation of the clauses to another session would be to lose a good opportunity. It would be esteemed by the Government as an admission that they felt themselves incompetent to undertake the matter. With respect to the

university question, he was pleased to have read that letter from Dr. Storrar on Wednesday. If he would refer to his (Dr. Rumsey's) work in 1865, "On the Necessity for Certificates and Qualifications," he would see how fully the effort which the London University had made in that direction was acknowledged; but that university had not proceeded to embody the various subjects in one special qualification. He could show several matters of great importance which the University of London did not require. The older universities in the United Kingdom were setting a most valuable and important example. If proof were required that there existed a public demand for this measure, he could produce evidence that could not fail to convince. He supposed no one would question the necessity of appointing public health officers if they knew the facts which were being produced before the Royal Sanitary Commission. Yet, when those who had advocated this question applied to Government to organise a sufficiently numerous staff of such officers, what were they told? The answer was—"It is true the thing ought to be done, but where are the men?" They said—"We cannot insist upon a general appointment of a specially qualified staff until we know that there are a sufficient number of persons so qualified in the kingdom to complete the organisation." This was the substance of the reply which he had heard again and again, and it had sometimes been expressed in terms which were perhaps terse enough, but not always very flattering to the Profession. Now, should they be said to lie longer under this imputation? Should they, by declining to aid in the preparation of a measure of this kind, afford the legislature an excuse for inaction? Should they repudiate what he ventured to call their public liabilities? Should they postpone this question from year to year until the Government took it into its own hands and set aside the Council in the matter? Dr. Rumsey then adverted to opinions of the Registrar-General expressed in his 27th Annual Report, and to a resolution passed at the Congress of the National Association for the Promotion of Social Science held at Birmingham. He asked, were the conditions and qualifications suggested to be judged of by the Government or recommended by this Council? Personally he was indifferent as to which of these alternatives was to be chosen, but he would say that it was a matter which very gravely and deeply affected the honour and position of the Council. The Council was being watched by persons of influence who would not fail to note what they might consider to be a dereliction of its duty. What were the authorities on the other side? There was, as they had heard, the College of Surgeons at Edinburgh and Dr. Maclagan, whom Dr. Wood quoted with very great delight. Now, considering that this report had only just been tabled and that the members of the Council had had very little opportunity—many of them none at all—to examine it, it gave him (Dr. Rumsey) a great idea of Dr. Wood's power that he had so readily discovered from this mass of evidence the only opinion on his side of the question. Dr. Wood said nothing about the recommendations of the twenty or thirty other gentlemen whose opinions were contained in the volume—gentlemen, some of whom were not a whit less distinguished than Dr. Maclagan, and all more or less in favour of the proposal. Not only had Dr. Maclagan's objections been answered categorically, but Dr. Maclagan had answered them himself by giving some very useful advice in the event of the Council pursuing a course which he strongly advised them not to pursue. In conclusion Dr. Rumsey expressed his belief that prompt action would redound greatly to the credit of the Council and increase its influence with the Government.

Mr. Hargrave said he thought they were going a little too rapidly. It had been found to be of very great advantage in Ireland to appoint a Professor of Hygiene to give lectures. These lectures were attended by large numbers, and a good deal of information was circulated. He would advise the Council not to be in a hurry, but wait and see what could be done next session.

Dr. Bennett said it would be impossible to take into consideration the whole of this very valuable report at this portion of the session. There was no doubt, he apprehended, in the mind of any one that special studies would be required, and that those studies were very extensive and varied. Were the Council now prepared, or not, to commit themselves to the very serious question of opening the door for the admission of new qualifications to be entered on the Medical Register? If once that was done, it was difficult to know where it would stop. There was a very strong disposition to force upon them special qualifications in reference to all sorts of things. He thought they ought to be as few as possible. He was not disposed to fling cold water upon any effort which could be made to encourage the study of State Medicine. On the contrary, he would encourage everything that should facilitate any gentleman in devoting his attention to the subject, and lead him to acquire information, but that was a very different question from seeking to add a qualification to the Register as it now stood. He did not see his way clearly in that direction, and therefore he must vote for the amendment of Dr. Andrew Wood.

Dr. Fleming said he had not time to look through the large mass of evidence which had been laid upon the table. In the multitude of counsellors there was safety, and in the multitude of opinions wisdom. Although he was strongly of opinion that something ought to be done, he was not disposed to support the motion of Dr. Acland.

Dr. Quain said he quite agreed that the Council were going a little too fast in this matter, and when people were going too fast they could not very often see where they were going to. A man might be very well qualified for a special duty without there being any indication in an official form of his qualification, but he understood that what was asked for was an express qualification in State Medicine—in fact, a Doctor of State Medicine. If it did not amount to that at present, it would come to it, and he protested against making additional special qualifications appear on the Register. If it was State Medicine to-day, to-morrow it would be Obstetric Medicine, and the day after it would be something else. The matter had been referred to a committee, and they were asked to report on the "steps proper to be adopted, if any, for granting diplomas." Now, in the report presented to the Council, full of information as it was, was there one single word to inform them what the proper steps were, if any, for granting these diplomas? The only opinion expressed by the committee was that the Council should insert the requisite clauses for providing a qualification in State Medicine in any amended bill which may hereafter be prepared for Parliament. This was going too fast, for it might well be said, "Do not, before a man has the means of being educated, secure a place for him on the Register." Therefore he was not prepared, until he had a fuller report and more definite information on the subject, to vote for the recognition of a new qualification. One paragraph in the report contradicted another—as, for example, on the subject of the duration of study, one opinion was that six months was required, and others were that two or three or four years were necessary. There was nothing at all to show what the qualification was to be, nor what the subjects were in which ordinary Medical Practitioners were so very deficient. It was said that there were sometimes a want of knowledge and loose notions, and one gentleman abused the Profession for flippancy of manner and giving hasty answers. Lord Chief Justice Bovill said they were too much in the habit of making themselves partisans, and another gentleman stated that Medical men exhibited a want of knowledge and a want of care, and, as a remedy, suggested the study of his own book. After commenting upon the various opinions contained in the appendix, and showing how they differed, Dr. Quain said the committee had favoured the Council with two recommendations. One was that to which he had already referred—viz., the insertion of clauses in any amended bill, and the other was to the effect that, as the Council would have the opportunity at some future period of discussing the documents now submitted to them, they recommended that the report and appendix should be forwarded to the licensing bodies and other persons interested in the question of State Medicine. He (Dr. Quain) cordially approved of this last recommendation, while he should certainly vote against the first. His opposition to the first was founded on the want of information. It struck him that when the committee were requested to state what were "the steps proper to be taken, if any, for granting diplomas or certificates of proficiency in State Medicine," etc., they should have made a more definite report on that point. He should be prepared, in case of Dr. Andrew Wood's motion being lost, to move another amendment.

Dr. Embleton said his impression was that the Council could not do much in the matter until ample time for studying it had been afforded. The licensing bodies had not yet had an opportunity of seeing the report at all, and therefore could not yet give any opinion upon it. Before the Council met again there would be plenty of time, and if there was an early session next year something might be got ready and brought before Parliament in very good time. He should therefore vote for the amendment.

Dr. A. Smith supported the motion.

Dr. Sharpey said it would be necessary for the licensing bodies to express themselves as to the form or shape of the qualification.

Mr. Cæsar Hawkins thought it would be an advantage that persons who were to be employed in special pursuits should have the special knowledge requisite, but he was not quite certain that the plan proposed by the committee could be adopted. As the necessity for knowledge in regard to State Medicine became more apparent a greater number of persons would apply themselves to the necessary subjects, and he thought there would be a sufficient number without the Council going out of its way to add this qualification. But then, on the other hand, he was impressed with the thought that, being a Medical subject to a certain extent, it would hardly be right for them to throw it over and say that it should not be added. One point, however, he was quite certain of, and that was that the motion, if accepted at all, must be altered by the insertion of the words "in addition to the general qualification." He understood that that was what was intended by the committee, but the motion did not express it. He thought they ought to guard themselves against any misconception on this point. He should wish to know more of the details of the scheme.

Dr. Thomson pointed out that there were several difficulties in the way of the committee coming to a conclusion as to what the precise proposition should be. He thought it would be very undesirable that the matter should be set aside by the amendment of Dr. Andrew Wood. It would be setting aside an opinion which he believed to be unanimous in favour of some such qualification being established. He would suggest that, rather than Dr. Andrew Wood's motion should be adopted in its present form, there should be a modification expressing merely the opinion of the Council as to the importance of improving the knowledge of State Medicine, and their favourable disposition towards the insertion of such a qualification in the Register. To that could be added the direction to send the report and appendix to the licensing bodies.

Dr. Acland then replied. He said the committee had every reason to be satisfied with the discussion which had taken place in a matter in which it was clear that the Council was very much divided. It would be a very great disappointment, after all the labour which the committee had undergone to lay the fullest information before the Council, if the matter should be thrown on one side. With regard to the opinions which had been forwarded in reply to the questions of the committee, he begged to say that if he read them it would be seen that the quotations which had been made by no means represented the opinions which were held by the different persons.

Dr. Quain said he made these quotations not as being against the proposal in regard to the qualification in State Medicine, but to show the variety of opinions that existed on the subject, and the necessity for further investigation.

Dr. Acland said it was evident that it was a difficult matter to deal with. The committee had done the best they could in the matter to arrive at a clear decision. There had hardly ever been a question raised of more vital consequence to the character of the Council than this. Therefore the committee were entirely justified in the course they had taken. With respect to the necessity of the matter, it was stated by Dr. Thomson that, whatever might have been the previous history, there had got to be in the public mind an idea that something ought to be done. That being so, it was stated that they proceeded in the wrong way. He did not know what the opinions of the Council might be as to their particular functions, but he knew this, that most of the gentlemen in the university with which he was connected were willing to abide by the decision of the Medical Council, and said, "We will do it directly if they wish it; it is for them to give us the one as to the course to be pursued." Well, supposing the Council had waited until all these different corporations and universities had spoken, they would have waited a long time, and would have had, no doubt, an equally diversified opinion as that now presented before them. He maintained that the committee had acted respectfully towards the Council and towards the corporations in presenting the matter in its present shape, and in recommending, as they had done in the last clause of the report, that the documents should be sent for the consideration of those bodies, and that in the meantime the Council should give them the assurance that, as far as the will and desire of the Council went, if they wished to institute qualifications and to have those qualifications registered, the Council would not be neglectful of its duty, but would give a kind of pledge to carry it out. He was struck with the different ways in which honest men viewed the intentions of their fellows if they did not quite agree with them. One gentleman had remarked upon the mystery that lay behind the italicised words "*it is desirable.*" With regard to the question of time, the committee discharged its duty towards the Council as quickly as it could; it had not had, perhaps, as much labour as that committee of which Professor Syme had been chairman, but at all events it had acted with all reasonable despatch. It would be seen, moreover, that the matter did not suffer in the slightest degree by the necessary delay which had taken place. According to Dr. Wood's proposition, what was it the Council were to answer? They were to say they could not make up their minds. Now, that would be eminently unsatisfactory. In case that amendment should be lost, then arose the question whether, by adding certain words or modifying the resolution, it could be put into a form in which it would be more acceptable to the Council.

The amendment of Dr. Andrew Wood was then put to the Council and lost, the numbers being—For 9, against 13.

The President then put the original motion, when

Dr. Quain moved another amendment—"That the Council, whilst expressing their entire approval of an improved education in State Medicine, and of a definite recognition of the attainment of individuals in the subject by certificates of special proficiency or otherwise, recommend that the report and appendix be forwarded to the licensing bodies, with a request that they would favour the Council with their opinions on the following points:—(1) The facilities that might be afforded for extending and improving the education of persons wishing to study the subjects comprised in this report. (2) As to the desirability of granting certificates of special proficiency in any or all of these subjects. (3) As to the desirability of granting a special degree or diploma in this subject." He said there was certainly no hurry for a decision in this matter. No Act of Parliament could be obtained—no Bill could be brought into Parliament—this session; there was no reason, therefore, for the Council committing themselves to a definite statement.

Dr. Rumsey said the omission to ask whether they should not be put on the Register was, in his opinion, a most fatal omission in this amendment. It cut away the ground from all those who were to move in the matter, for the object was to place in their hands the means of distinguishing those who were qualified and those who were not.

The President asked Dr. Acland to explain whether he meant the qualification of State Medicine to be entered in the Register as a sole and separate one. It was very important for the Council to understand that.

Dr. Acland said it was proposed to be an additional qualification for persons who had already had a qualification on the Register. The committee might be wrong, but that was their unanimous feeling.

Dr. Andrew Wood said he understood that no man was to be allowed to take this qualification of State Medicine until he had been registered as a Medical Practitioner. He took that for granted, and, taking it for granted, he would second Dr. Quain's amendment because it was going in the right direction. They would not be pledging themselves to the particular mode of recognising superior knowledge in regard to State Medicine, but the thing would be left open so that the licensing bodies might state what they thought of the matter. Instead of going to those bodies for indefinite information, they would be giving them categorical questions to which they would request categorical answers. This would bring out a very large amount of information. The Council would act judiciously if they took this course, because, although this question was very familiar to the members of the Committee on State Medicine, who had been devoting a great many months to it, it was not familiar to others, and certainly it was not familiar to the licensing bodies, who required to be correctly informed and who would be greatly benefited. They would not find fault with the Council for delaying the matter in this rational way, but they probably would have found fault if the Council had rashly given an opinion on a subject in regard to which they had not had an opportunity of consideration.

Dr. Stokes thought there had been abundant time to state plans and express opinions for or against the proposal of the committee. This was one of the greatest opportunities of connecting the Medical Profession with the general government which had ever been presented. ("Vote, vote.")

Dr. Quain's amendment was then put to the Council and negatived, the numbers being—For 9, against 13.

The President was again about to put the original motion, but

Dr. Thomson said he thought he might make a compromise, because there were several members who probably would object to vote for Dr. Acland's motion. He would do this entirely with the view of promoting the object which Dr. Acland, as chairman of the committee, had in view. "That the Council recognises the importance of improving the knowledge of licensed Medical Practitioners in State Medicine, and is favour-

able to the recognition of superior attainments in that department in the Medical Register. And with a view to obtaining the opinion of the various licensing bodies as to the mode in which these objects may be best accomplished, they resolve to send the report of the State Medicine Committee, and the evidence contained in it, to the several licensing bodies, with a request that the Council may be favoured with their opinions on the subject." Dr. Thomson explained that this amendment differed from that of Dr. Quain, because it contained a very important point which Dr. Quain had left out.

The amendment was seconded by Dr. Andrew Wood.

Dr. Acland said this amendment pledged the Council to what the opponents of the measure objected to—namely, the desirability of a recognition of superior attainments in the Medical Register, but it fell short of the original motion by not providing means for practical action. ("Vote, vote.")

The amendment was then put to the vote and negatived, the numbers being—For 9, against 11.

Mr. Cæsar Hawkins then moved that the following words be added to the original motion:—"In addition to the qualifications sanctioned by the Medical Act." ("Agreed, agreed.")

The amendment was put to the vote and carried.

The original motion as amended—"That in any amended Medical Bill which may be prepared for Parliament by the Council, it is desirable that the requisite permissive clauses for registering a qualification in State Medicine be inserted in addition to any of the qualifications sanctioned by the Medical Act"—was then put as a substantive motion and carried, the numbers being—For 13, against 2.

The President then rose and said: Last year the Council did me the honour of re-electing me as President. I accepted the compliment; but I informed you that I could not do so upon the usual terms—that is to say, of holding the office for five years. There has been some misapprehension on the point by some members of the Council. My intentions, when I accepted your compliment, though known perfectly to myself, were possibly expressed rather vaguely to you. I stated that I could not undertake to perform the duties for the usual period of service. I fully made up my mind to hold the office, in gratitude to this Council, until the commencement of the present session, or for as much longer as might suit the convenience of the Council. Since the commencement of this session I have intimated my intention of resigning, but various complimentary speeches have been made urging me not to resign my office, and to remain a little longer in the Presidential chair. However, having from the very first moment made up my mind as to the course I should pursue, I do not think there is anything which should induce me to deviate from it. I am averse, both for private and public reasons, from holding the position longer. The private reasons I have mentioned to various members of the committee who have kindly spoken to me on the subject. With respect to the public reasons which have actuated me, there are many members of the Council who know perfectly well what are my principles of action in a question of this kind. I do not think that when any man has had the good fortune to obtain such an honourable and distinguished post as I have occupied now for six years, he should continue to hold that office beyond a certain length of time, so as to lead any one to imagine that he holds it simply for personal glorification or personal interest. By your favour I have been raised to the distinguished post of President of the Medical Council; but I do not see why I, having reached that position, should in anywise stand in the way of other men, who are as good or better than myself, arriving at that distinction, and it is on that ground that I am averse to continuing to occupy the position which I have held hitherto with great pride. When I resigned the office last year I expressed deeply my thanks to the officials and members of the Council for the great aid they had given me; I renew these thanks again for the assistance rendered during the last year. But last year I felt there was an omission on my part, and before I leave you to-day I am anxious to supply that omission, and it is more particularly with reference to the public press, and especially the gentlemen who sit at that table as the reporters of that press. I cannot retire from this chair without expressing to them my admiration of the accuracy, the fidelity, and the impartiality of their reports. I cannot help also expressing my gratification at the extreme prudence, and tact, and circumspection with which the conductors of public journals have adverted to proceedings which have sometimes taken place in this Council. I have nothing more to say except that I hope that in leaving you I leave a fair name behind; and I trust you may condone and make allowance for any shortcomings which you may have observed in my performance of the duties which have devolved upon me—duties which have been on many occasions responsible and arduous, and sometimes even painful. I thank everybody for having supported me as President in my endeavours to conduct the public business and to maintain order. That has been done, I believe, without exception, even by those who differed from me in opinion. With these words I bid you farewell, and resign into your hands the honourable office which I have held so long, and I have no doubt, when you have had time and opportunity for conferring together, you will decide upon some one who will uphold the honour, and utility, and reputation of this public body. (Loud applause.)

Dr. Burrows then withdrew, all the members of the Council rising in token of their respect.

On the motion of Dr. Andrew Wood, seconded by Mr. Hargrave, it was agreed that Dr. Stokes be requested to take the chair.

The chair was then taken by Dr. Stokes.

Mr. Cæsar Hawkins moved "That the warmest thanks of this Council be given to the late President for the able and admirable manner in which he has so long conducted the business of the Council, for the kindness and impartiality which he has uniformly displayed towards the members of the Council, and the determination he has shown on all occasions to conduct their discussions with the view to the improvement of the education of the Medical Profession, and the welfare of the public; and that this motion be communicated to the late President."

This resolution was seconded by Dr. Christison, and carried by acclamation.

The Council then adjourned till 5 o'clock.

On resuming its sitting, Dr. Stokes in the chair, the reporters were requested to retire.

From the minutes it appeared that the Council then proceeded to elect a President in the room of Dr. Burrows, and that on the motion of Dr. A. Smith, seconded by Sir Dominic Corrigan, it was resolved that Dr. Paget be appointed President.

Dr. Paget then took the chair, and the proceedings were adjourned till the following day.

Ninth Day.—Saturday, July 10.

The Council met to-day at 1 o'clock.

The chair was taken by the newly elected President, Dr. Paget.

The first business on the programme was the election of the Executive Committee. A ballot having been taken, the President announced that the following members were elected:—

Dr. Bennett.
Mr. Hawkins.
Dr. Acland.
Dr. Andrew Wood.
Dr. A. Smith.
Dr. Sharpey.

Dr. Sharpey, Chairman of the Finance Committee, presented the following report:—

The Finance Committee beg leave to present, in the subjoined table, a statement of the estimated and actual income from ordinary sources, and of the estimated and actual expenditure, for the year 1868, also an estimate of the income and of the expenditure, so far as the committee are able to judge, for the year 1869.

In estimating the expenditure for 1869, as compared with that of 1868, the committee have made a deduction of the expense of visiting examinations, which has not been incurred this year, and have also had in view the saving that may probably be effected on the ordinary account for printing, in consequence of the adoption by the Council of the measures of economy recommended by the Executive Committee; but, on the other hand, they have had to allow for a considerable extra charge for printing and other expenses incurred by the two special Committees on Education and State Medicine appointed last year. The result is an estimated excess of expenditure over income of £375.

In last year's report it was stated that the sum remaining due to the Council on the 5th January, 1868, for advances on account of the *Pharmacopœia*, was £712. Since then, the receipts from the sale of the work, after deduction of all expenses, have produced £735 16s. Of this sum, about £500 will be required to defray the charges for a re-issue of 5000 copies of the *Pharmacopœia*, ordered by the Executive Committee, in consequence of the original impression of 20,000 copies being well nigh exhausted. The money balance in hand, together with what may be expected from the sale of the remaining stock and the whole of the new issue, after deducting various expenses, may be reckoned at upwards of £1500, which, after covering the outstanding debt due to the Council, will eventually yield a balance of £800.

W. Sharpey, Chairman.

	Estimated Income for the Year 1868.		*Actual Income for the Year 1868.*		*Estimated Income for the Year 1869.*	
Fees received by—	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Branch Council for England ...	2400 0 0		2492 15 0		2450 0 0	
,, Scotland ...	650 0 0		757 0 0		700 0 0	
,, Ireland ...	800 0 0		837 15 0		800 0 0	
		3850 0 0		4087 10 0		3950 0 0
Dividends received by—						
Branch Council for England ...	630 0 0		617 10 10		*670 0 0	
,, Scotland ...	80 0 0		67 6 10		65 0 0	
,, Ireland ...	60 0 0		62 7 4		60 0 0	
		770 0 0		747 5 0		795 0 0
Sale of Registers	... ...	300 0 0	... ...	284 9 6	... ...	280 0 0
Penalty	... ...	... ...	... ...	10 0 0		
		£4920 0 0		£5129 4 6		£5025 0 0

	Estimated Expenditure for the Year 1868.		*Actual Expenditure for the Year 1868.*		*Estimated Expenditure for the Year 1869.*	
Expenses of—	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
General Council		3400 0 0		4044 1 3		4300 0 0
Branch Council for England ...	800 0 0		622 9 7½		700 0 0	
,, Scotland ...	345 0 0		264 1 6		300 0 0	
,, Ireland ...	300 0 0		259 12 1		300 0 0	
		1445 0 0		1146 3 2½		1300 0 0
		4845 0 0	Total expenditure ...	5190 4 5½		5600 0 0
Balance in favour of Medical Council ...		75 0 0	Total income	5129 4 6	Estimated income ...	5025 0 0
		£4920 0 0	Excess of expenditure over income	£60 19 11½	Estimated excess of expenditure	£575 0 0

* The estimated increase on this item is in consequence of £2000 Three per Cent. Stock having been purchased during the year 1868.

Dr. Andrew Wood said he felt that the time had come when the Council must take some action in a most important matter. It would not do for them to go on year by year exceeding the income by the expenditure. It was calculated that there would be an excess of expenditure to the amount of £575. Now, if this were the case in regard to their private household accounts, they would certainly look about and see how they could economise and save themselves from getting into difficulties. There was another reason why he thought they should look very carefully into this question. He looked forward, and hoped he was rightly looking forward, to a very considerable expense being incurred during the coming year in the shape of the visitation of examinations. It was one of the charges which had been erroneously brought against them that they did not visit the examinations. He need hardly say that they had visited them, and he had no hesitation in asserting that they never spent their money better than for that purpose. He believed this course had been productive of greater results than any recommendations which had emanated from the Council. Another thing he might mention was this. They had now begun a new system, and it was a good system. He must, in justice to his friend Dr. Acland, say that when some years ago he proposed that there should be standing committees to work during the recess, he (Dr. Andrew Wood) was rather disposed to object to the proposal. He was now completely converted to Dr. Acland's way of thinking, and he had no hesitation in saying that the Council would be able to accomplish by the adoption of this plan a great deal more than it had done hitherto. Now it was clear that this important labour of the committee must be attended with additional expense, and he should be very sorry indeed to think that either the committee must be starved for want of funds, or that if they were not, and the money were laid out as it would require to be laid out, the Council would be running into debt. There was no way of economising, as it appeared to him, that was open to the Council but one, and that one the Council should now adopt. When he looked into the accounts he found that a very large proportion of the sum expended was for the fees for attendance at the meetings of the General Medical Council. For example, he found that last year, 1868, the fees paid to members for attending the General Medical Council amounted to £1412 5s. That was irrespective of what was paid for travelling expenses. Now a very good suggestion had been made by his friend Dr. Fleming, whose modesty prevented him from bringing it forward. They were all aware, and he (Dr. Andrew Wood) had long felt it, that a great deal had been said out of doors with regard to the expenses of the members of the Council in attending the meetings, and it was insinuated that the meetings were prolonged and that large fees were paid. Now he did not much regard these very ungracious insinuations, because he did not believe that there was a man sitting at the Council table who was influenced by any mercenary motives in coming to perform his duties. On the contrary, he held that, with the great mass of members, a very large pecuniary sacrifice was made. (Hear, hear.) At the same time he felt that the Council had many important objects to carry out, and in order that they might have the means, without which their efforts would be entirely unavailing, there should be some modification in the payment of fees. What extent it would be ultimately necessary to go to, he could not say, but in the meantime he would propose, what would show that the Council were anxious in every way to economise their expenses, that each member of the Council shall be allowed five guineas a day for seven days, or whatever number of days under seven, on which the Council might sit, and that, whatever the duration of the session, the sum paid to any member shall not exceed thirty-five guineas. Further, that when a member was absent without the permission of the President from any meeting after the seventh, he should forfeit the sum of three guineas for each day of such absence. He did not know whether this would be popular with the Council or not, but, at all events, there would be a very considerable annual saving. He did not believe there was any member of the Council who was not willing to make a great sacrifice. Two or three guineas more or less would really be no object to them, and it would be very satisfactory to be able to take away from those who carped at the Council the opportunity of doing so.

Dr. Quain said he had great pleasure in seconding the motion.

Dr. Parkes said he thought they ought to reduce the number of days to six. It should be understood, however, that the sum paid was really in the shape of an honorarium, and that the Council were not supposed to receive it as an adequate consideration.

Sir Dominic Corrigan rose to oppose the motion. He said, although Dr. Quain had seconded the motion, he was happy to find that as seconder he had not a word to say in its favour.

Dr. Quain said that remained to be seen.

Sir Dominic Corrigan said, of course Dr. Quain had the right to reserve anything that he might like to say, but he had not as yet said a word in favour of the motion; it remained, of course, to be seen whether he would find anything to say by-and-by. Now Dr. Parkes had gone farther than Dr. Andrew Wood, and he had suggested a smaller sum. That was just what one might expect when one was prepared to forfeit a portion of the fees. Now his (Sir Dominic Corrigan's) practice, and it was the practice of any gentleman who had a respect for his own character and the wants of the public, had been this—he either gave his advice gratuitously, or he charged something like a reasonable sum. He saw no step between reducing the fees to nothing and allowing them to remain as they were. He would not be a party to the step proposed. If it were the feeling of the Council that they could not afford to pay the members what was in fact a mere honorarium which they had paid, and to which the members had assented when they took their seats, he was anxious to go with the majority and give his time for nothing, but he would not accept a smaller sum. Were there no other ways of reducing the expenses? He contended there were. There was not an example before them of any board having been treated as they were by the Crown, that took seats at their board, and sent its representatives there, and yet left the Council without a roof to shelter it if it had not

been for the kindness of the College of Physicians. If the Crown sent its representatives, let the Crown pay its representatives. There was another way. Whom were they representatives of? There were representatives of London and other universities; let each pay the sum which their representative ought to be paid. He had no objection to go to his own university if he were backed up by a resolution of the Council, and say, "You must pay me; I will not go for nothing." If the Council desired him to do that, he would do it.

Dr. Alexander Wood said, if Sir Dominic Corrigan would move an amendment to the effect he had suggested, he would second it.

Sir Dominic Corrigan said he was not prepared to do that.

Dr. Alexander Wood said it would be in the recollection of those who were members of the Council originally that, when it came to discuss the question of fees, it was proposed that the fee for attendance at the Council should be ten guineas. He did not think there was a single gentleman at that table who would think ten guineas a day was too much for the labour and for the sacrifices made in leaving their homes and their own duties in order to attend this Council. But then the thing was this—that there was no fund to pay them adequately for their attendance; therefore it was proposed on that occasion that the Council should come to the resolution that, though ten guineas or fifteen guineas, or any sum they liked to name, was an adequate remuneration for attendance, yet, the funds not allowing them to take that, they would accept a composition. The reason was, that he felt satisfied that if it was said they were willing to come up to town for such small sums, it would affect their incomes in another way, and it would be said, "Oh! if you can go to London for five guineas, you can go elsewhere." Now, the proposition made by Dr. Andrew Wood was that they should reduce the sum which they received for attendance. He never could consent to the proposition in that shape if they were to reduce it this year in a paltry, peddling, mercantile spirit that would ruin their position in the Profession. His opinion was that to offer to the gentlemen sitting at that table thirty-five guineas for the labour they underwent was like an insult to them, and rather would he say that he would come there and attend to the high and honourable duties they were called to discharge entirely gratuitously than that they should be paid in that sort of way. He was told that they could not do it—that the Act said they should be paid such fees for attendance as they might determine and the Privy Council approve of.

The President said Dr. Alexander Wood was referring to section 12, where it was stated that the members of the Council should be paid such fees for attendance and such reasonable travelling expenses as should from time to time be allowed by consent of the Council, and approved of by the Commissioners of her Majesty's Treasury.

Dr. Alexander Wood said he saw nothing in that which compelled them to pay themselves, and he had no hesitation in saying that if they came to the resolution to discharge their duties gratuitously, her Majesty's Privy Council would not interfere and force the money upon them. He did not like—he thought it was a bad principle—to allude to remarks out of doors. Whatever people said of them, he felt sure that no mercenary spirit had ever actuated the Council. His own impression was that if they were obliged to pass to-day a self-denying ordinance, they should do it in a self-denying manner, and declare that they would discharge their duties without fee or reward, and he thought that a number of gentlemen who were very clamorous out of doors to get in and obtain seats at the Council table would very soon cease to be so violent.

Dr. Bennett said he had never listened to any discussion, since he had had the honour of sitting at the Council table, more calculated to injure the Profession at large than that to which he had just been listening. There had been comments out of doors on the general expenses of the Council, but never a single comment upon the sum awarded to themselves. However, whether that were so or not, he believed it to be desirable for the general credit of the Profession that they should not pass the resolution now proposed. He was one who would willingly attend there for nothing if it were necessary, but he would ask, what reason was there for it? He quite agreed that the paltry sum they received was not worthy of consideration on the part of the men who sat round that table, but there were many men who cared a good deal for the principle, and if any fee was awarded he maintained that the least possible sum was that which was now paid. But there was a much simpler way of reducing their expenditure than that. Let them shorten their speeches. They might have transacted all that had been done this year in about one-third of the time occupied. There was no excuse for the amount of speaking which went on. They were called upon to listen to orations on this, that, and the other subject. No one could get upon his legs without making a long speech. Let them endeavour to reform their own proceedings. During the discussion which had just been going on upon this subject, he had been calculating what the cost of it was, and it was considerable. On principle he should vote against the proposition, though he did not care one straw whether he received the fees or not.

Dr. Quain said he had been challenged by Sir Dominic Corrigan to say what could be said in support of this motion; and it amounted to the fact that the expenditure of the Council now considerably exceeded its income. This was the simple fact, which had to be met. They must either reduce their expenditure or reduce their usefulness in the visitation of examinations, etc. The motion was calculated to shorten the proceedings, and it was with that feeling alone that he seconded it. If the duration of the meetings were restricted to six days, naturally it would follow that there would be in the minds of those who talked the feeling that they must not absorb time which belonged to others and for other objects; and if this expedient did not answer, he would willingly vote for limiting the length of time appropriated to the speeches. If that were done, the meetings could be restricted to six days, and just as much business could be done in that time, so that the scale of payment could remain as it was, and they could not be charged, as one gentleman had suggested, with dealing with the matter in any mercantile or paltry spirit. Time was more valuable to many of them than money. This was the sole feeling with which he seconded the motion—viz., that he believed the inevitable result of the proposed plan would be to shorten the meetings, and to make them more useful. With regard to Sir Dominic's suggestion that fees should be paid by the Crown and by the corporations, he should have no objection to that; but if they asked the Crown to pay its representatives, and the various corporations to pay theirs, he believed it would confirm the feeling that the corporations had a very strong and very special interest in sending representatives whom they paid to support those interests, and for no other purpose.

Dr. Storrar said there was a great deal of work, which was done by the members of the Council, for which they received no reward at all. Sometimes a bundle of answers would be sent to him, and he had to spend hours on successive days, worrying his brains over good and bad answers, without getting anything for it. If the Council were just quietly to transact their business in a common-sense way and dispense with inflated addresses, a great deal of expense would be saved.

Dr. Rumsey said the main object of the motion of Dr. Andrew Wood was to reduce the expense. So far as that object was concerned, he for one would be most ready to concur in its advisability; but he thought a great deal would be gained in this direction if a resolution, which prevailed in some other bodies, could be adopted by this body, to the effect that a certain limit of time should be imposed upon those who brought forward motions, and those who spoke for or against them. If this were so, there would be no need to make a reduction of fees or impair in any way the honour and credit of the Council.

Dr. Christison thought the Council would bear him out in saying that his speeches were not the longest. He was ready to propose the following amendment:—"That the annual session of the Council be limited to six days, and that the powers of the Medical Act be extended, so as to allow any remaining business of the Council to be transacted afterwards by the Executive Committee." He knew this was the practice with other bodies quite as important as theirs. He had long felt that they might refer a good deal more business than they did to the Executive Committee, in order to save time and expense.

Dr. Thomson said he should be happy to second the amendment whenever it was the proper time to bring it forward. The accusation which he had always heard made against the Council was that they were remarkably slow in their proceedings, and by that it was meant that they showed very little work for the amount of time taken up by the meetings. With regard to the length of the speeches, it was not so much that they were extremely long speeches, but that there were so many speeches on topics that scarcely deserved a single remark. He should be happy to second any motion for limiting the duration of the sessions, and he quite agreed with the principle of throwing into the hands of the Executive Committee more power to arrange the business. It was in conse-

quence of a want of preparation that very much time was expended.

Dr. Alexander Wood, referring to the remark of Dr. Bennett that there had been no fault found with the amount of fees paid to the Council, drew his attention to a correspondence with the Treasury recorded in the minutes.

Dr. Stokes thought it would be very much better to serve gratuitously than to have to pare down the fees year by year. He was not one of those who supported the principle of gratuitous services, for this reason, that though the sum paid was a very trifling sum, still experience showed that it had an influence in insuring the attendance of members. This was seen in regard to large numbers of insurance boards. The one or two guineas was nothing, but the reception of those small fees was found by experience to produce a regular attendance. He was quite in favour of some improvement, if it could be made, in the mode of transacting the business of the Council. He thought a very short time would be sufficient for the sittings. He had never attended any board meeting which was so useful and businesslike as one in which it was proposed by the President and agreed that each speaker should be limited to five minutes.

Dr. A. Smith said allusion had been made by Dr. Andrew Wood to the want of funds, but there was no indication of it. He did not think it was fair to the Council to bring such an important motion forward at the end of the session without any notice. It was a motion that involved a great many important points. The fair way of dealing with it would be, first, to appoint a committee to take into consideration the whole question calmly and clearly. He hoped the Council would not allow it to be said that they were yielding to clamour. Let them meet the thing in a proper way, and not be taken by surprise.

Dr. Andrew Wood claimed his right to reply to what he regarded as most unwarrantable remarks. It had been said that to pass this motion would be yielding to clamour from without; he thought it was wise to listen to pressure from within. The pressure was this—that they would exceed their income by their expenditure to the extent of £575 this year, and he could not understand how there was anything very mean or very mercenary in a body like this, or in private individuals, when their expenditure exceeded their income, taking the only means that could bring them into a proper pecuniary position. The Council had just had some lectures on long speaking, and amongst others from Dr. Bennett. His (Dr. Andrew Wood's) recollection went to this—that Dr. Bennett had occupied no inconsiderable part of the time of the Council by his own speaking on various occasions. ("No, no.") He did not say that he had taken up too much time, because he always spoke to the point. Then Dr. Storrar told the Council of inflated speeches. When Dr. Storrar launched out upon his favourite hobbies in regard to education, he generally started with considerable inflation, though by the time he came to the end there was a considerable collapse. With regard to Dr. Thomson, he thought there was no member who was more careful to address the Council only upon necessary occasions; but if any one should tell him that in an assembly of British councillors they would be able to put a gag upon the expression of sentiment, he would reply that such a person did not understand the spirit of the British constitution. Of course they ought always to endeavour to make their speeches as short as possible, but they were not always able to give a short speech, nor would it be right to say that a man was to stop short in an argument because the clock indicated that the five minutes allotted to him had expired. He should like to know what rational association in this country did that. It would not lead to any saving of time, and the results could not be satisfactory. Passing from that point, there was a grand—he might almost say an inflated—proposal (for it had not been brought to the test) that members should come to the Council meetings for nothing. Why did not somebody propose that? But he contended that they ought not to come there for nothing, because the Act of Parliament had provided money for certain purposes, and one of these purposes was the payment of fees to the Council for attendance. It would not be fair (although they did not look upon the money as a remuneration) that they should be out of pocket for attending. But it was said it would be a mean and paltry thing to fix the fees at the sum he proposed. Why was it, then, that they allowed councillors of the General Medical Council to charge five guineas a day, and yet, when a man came from Ireland or Scotland to attend the Executive Committee at all times in the year, even in mid-winter, he was only allowed two guineas? He did not complain of this sum, but he mentioned it to show that they must not estimate the fee which he had proposed should be the limit as paltry on account of its smallness. There was another point he wished to refer to, and that was that the Council had a great object in saving money. How long were they to go on occupying lodgings? They met where they did by favour of a very distinguished body, which had kindly treated them in that way for eleven years, but he did not consider it was worthy of the Council to occupy other than its own premises. Therefore they ought to endeavour, by economy, not only to make their income meet the expenditure, but to lay by such a sum as should enable them at a future time to get a hall of their own in which they could hold their meetings.

Some members of the Council suggested that the portion of the resolution which regarded the infliction of a fine for non-attendance should be abandoned.

Dr. Andrew Wood said he could not consent to that. He would adopt the suggestion of Dr. Parkes as to the number of days, and his motion would be in the following form:—"That the members of Council be allowed five guineas a day for six days, or whatever number of days under six the Council may sit. That, whatever the duration of the session of the Council, the sum paid to each member shall not exceed thirty guineas. That when a member is absent without the permission of the President from any meeting after the sixth day he shall forfeit the sum of three guineas for each day that he may be so absent. That the travelling expenses and hotel expenses remain as at present."

Dr. Christison's amendment, which was seconded by Dr. Thomson, was first put to the vote. The numbers were—For 9, against 9.

The President declared that the amendment was not carried. It was such an important one that it would not be advisable for him to vote for it until the matter had received full consideration.

Dr. Fleming then moved the following amendment, which was seconded by Dr. Thomson:—"That it be remitted to the Executive and Finance Committees jointly to consider and to report on the best means of lessening the expenditure of the Council."

This was put to the meeting and carried. It was also put as a substantive motion, and carried.

Dr. Andrew Wood moved that the names of members who voted on Dr. Christison's amendment be taken down.

After some discussion as to this motion being made too late, Dr. Andrew Wood said he would withdraw it.

On the motion of Dr. Acland, seconded by Dr. Stokes, the standing orders were suspended to enable the Council to continue its sitting until 5.30 p.m. in consequence of the length of time occupied by the preceding subject.

The report of the Committee on Medical Education was brought up by Dr. Andrew Wood, Chairman. After setting out the resolution of the Council passed on June 26, 1868, whereby the committee consisting of Mr. Syme (chairman), Dr. Andrew Wood, Mr. Hawkins, Dr. Acland, Dr. Allen Thomson, Dr. A. Smith, Mr. Hargrave, Dr. Apjohn, Dr. Sharpey, Dr. Christison, and Dr. Parkes, was appointed to consider and report how the various subjects of Medical education which had been deemed requisite by the Council might be taught with most advantage, in what order they should be studied, and how the examinations on them ought to be arranged, the report stated that the committee had addressed a letter to various teachers, who they thought would give them the best information, in July, 1868. It continued:—

We have to express our thanks to the 131 gentlemen who have kindly complied with our request, and who have given us information of great value on the best modes of Medical education. Their names are given in Appendix No. 1, where all the replies are placed under the several headings. In a second appendix we have placed three documents. The first is a report from the Council of the Medical Teachers' Association of London; the second is one from the Association itself, based on the former report; the third document is an abstract of the systems of Medical education in North Germany, Austria, and France, by Dr. Beigel and the late Mr. Alexander Bruce, who drew up at our request an abstract giving a general view of the system of Medical education in those countries. The third appendix contains observations on Medical education, by Dr. Christison.

We will not occupy space by analysing this evidence, or by enumerating the defects in Medical education, which are noticed in many of the answers. There can be no doubt that during the last fifteen or twenty years very considerable progress has been made in the improvement both of Medical teaching and examinations. The licensing boards have shown a laudable anxiety to further this object; the Medical Council has not been remiss in urging it forward, and there has certainly been a great improvement in the knowledge of Practitioners throughout the country. It must be admitted, however, that there is room for improvement, and we trust the Council will find no difficulty in coming to an expression of opinion which will be satisfactory to the Profession, and will conduce to the benefit of the public at large.

The Council by its resolution appointing the Committee did not intend to inquire into, or in any way to consider, the higher Medical qualifications

given by the universities or corporations. The course of study, the method of examination, and the qualifications necessary to insure that the public should be supplied with a properly educated and trustworthy body of general Medical Practitioners, are the points we have had in view.

The substance of the recommendations of the committee was as follows:—

1st.—That the ten subjects deemed necessary by the Council be further sub-divided, for the purposes of teaching, as follows:—1. Physics. 2. Chemistry. 3. Medical Chemistry. 4. Anatomy. 5. General Anatomy. 6. Physiology. 7. Pharmacy. 8. Therapeutics. 9. Medicine. 10. Surgery. 11. Pathological Anatomy. 12. Midwifery. 13. Forensic Medicine. 14. Hygiene.

2nd.—That physics, chemistry, Medical chemistry, anatomy, general anatomy, physiology and pharmacy (and botany if included) be studied previously to passing the first Professional examination.

3rd.—That in the remaining period of the four years, the other subjects shall be studied—viz., therapeutics, Medicine, Surgery, pathological anatomy, midwifery, Forensic Medicine, and hygiene, and that the second or pass examination shall then take place.

4th.—That the exact order, number of lectures, and amount and kind of practical instruction be left to the schools, a guide being furnished to them by a definition of the area in each subject over which the examination will extend.

5th.—That the schools institute class examinations in all these subjects, and that the certificate of study shall attest that the student has undergone these examinations.

If the Council approve the policy sketched out in this report, and decide on carrying it into effect, we suggest that a small committee, consisting of about five members, shall be appointed, and shall receive full powers to enter during the recess into communication with the various licensing bodies with respect to the limits of examination; and that this committee shall present to the Council, at its meeting in 1870, a definite plan, showing the extent to which the licensing bodies propose to carry their examinations. This committee should also have power to enter into the other matters noted in the report, especially into the possibility of forming conjoint examining boards, before which every student shall appear to entitle him to receive a licence to practise. The Council will then be in a position next year to take definite action in the matter.

Andrew Wood, Chairman.

On the motion of Dr. Andrew Wood, seconded by Dr. Parkes, it was agreed "That this report be received and entered on the minutes, and that the appendices be added to the volumes of minutes of the Council."

It was then moved by Dr. Andrew Wood, and seconded by Dr. Parkes, "That the report of the Committee on Education be taken into consideration at the next session of Council, and that in the meantime the report, with the appendices, be submitted to the various licensing bodies for their consideration and remarks, with a request that their remarks be sent to the Registrar on or before December 1, 1869." Also, "That a committee of five members be appointed, to whom the comments of the licensing bodies on the report of the Committee on Education be referred, and shall have power to discuss with the licensing bodies the various points mooted in the report, and embody the results in a report to be sent to the Executive Committee at least one month before the next session of Council. The committee to consist of—

Dr. Parkes (Chairman), Dr. A. Smith,
Mr. Hawkins, Dr. Sharpey."
Dr. Andrew Wood,

These resolutions having been agreed to,

Dr. Parkes moved "That copies of the report and appendices of the committee of the Council on Professional education be sent to the Lord President of the Privy Council, to the Secretary of State of the Home Department, to the Medical Officer of the Privy Council, to the gentlemen who have replied to the circular letter of the committee, to the chief Medical and other journals, to the libraries of the chief Medical schools, and to the libraries of some of the general educational bodies; and that the Executive Committee have power to issue copies to such persons or institutions as they may deem fit, or to others, if so doing will aid the object the committee have had in view—viz., the improvement of Medical education, and provided that a supply of at least eighty copies be reserved for the future use of the Council."

Dr. Rumsey asked if there would be any objection to adding to Dr. Parkes's motion some provision which should enable the work to be published and purchased.

Dr. Andrew Wood said the objection was that it was not yet a report approved by the Council.

Sir D. Corrigan had no objection to copies being given away, but if a copy were sent to the Privy Council it would have to be accompanied by a letter something to this effect, "We beg to send you this report, but it has not our approbation." He would ask Dr. Parkes, under the circumstances, to withdraw his motion, it being understood that he or anybody else could get at the reports and send them out themselves.

The motion was then withdrawn.

The report of the Committee on Preliminary Examinations was read by Dr. Alexander Wood, the Chairman of the Committee. It was as follows:—

Report of the Committee on Preliminary Examination.

Your committee have considered the reports from the Branch Councils on the resolution passed by the General Council on July 4, 1868 (Minutes, vol. vi. p. 259), referred to them by the General Council on July 1, 1869, with the light of additional information.

It appears that the Branch Council for England, after a full review of the subject of preliminary general education and examination, and of the report on "general education and examination" adopted by the General Council on August 11, 1859 (Minutes, vol. i. p. 75), especially of the following paragraph of that report, viz., "That the examination on general education be eventually left entirely to the examining boards of national educational bodies recognised by the Medical Council," desire to adhere to the view thus expressed, and to divest at as early a period as possible all the Medical bodies of the duty of conducting preliminary examinations on general education. It further appears that the Branch Council for England have met with no difficulty in exercising the privilege of inspecting the examinations of national educational bodies. Your committee are of opinion that the examinations conducted in England exclusively by national educational bodies justify the confidence placed in them by the Branch Council for England, and they would be well pleased to see the duty of preliminary examination in Arts entirely transferred to these bodies.

The Branch Council for Scotland, on the other hand, desire that the General Council should direct the licensing bodies to establish a joint board of preliminary examination in arts, over which the Branch Council should have direct control. Your committee are of opinion that without greater legal powers than are at present possessed under the Medical Acts, it would not be competent for the General Council, or for a Branch Council, to require the establishment of such a joint board, but they consider the establishment of such a board by voluntary agreement to be highly desirable, and recommend the Branch Council to encourage its formation, provided the examinations are conducted by persons external to the licensing bodies or Faculties of Medicine, and free from all control beyond inspection by members of the General or Branch Council. It would nevertheless be satisfactory to your committee that these examinations should eventually be placed entirely in the hands of national educational bodies in Scotland.

The Branch Council for Ireland are of opinion that the institution of a board of preliminary examination in each division of the United Kingdom might be very desirable if the legal rights and privileges of the several licensing bodies permitted it. In this case your committee can only suggest, in the event of no available examinations being established in Ireland by national educational bodies, that recourse might be had to the institution of a joint board by voluntary agreement, subject to the same conditions as have been suggested for Scotland.

Your committee have examined the scheme for local examinations instituted by the University of Edinburgh which has been referred to them, and recommend that the "examination of (senior) candidates for honorary certificates" of that university be accepted as satisfactory evidence of general education, provided the pass certificates shall attest an examination on all the subjects required by the General Council.

Your committee have also examined the scheme for "voluntary examinations" instituted by Christ's College, Canterbury, New Zealand, which has been referred to them, and recommend that certificates of having passed the "voluntary examination" of Christ's College be also accepted as satisfactory evidence of general education, provided such certificates shall attest an examination on all the subjects required by the General Council.

Alexander Wood.

On the motion of Dr. Alexander Wood, seconded by Dr. Storrar, the report was agreed to be received and entered on the minutes.

Dr. Bennett then moved, and Dr. Storrar seconded, "That inasmuch as there are now, in England, national examining boards on subjects of preliminary education which are readily available by students throughout the kingdom, and whose certificates are in all respects deserving of the confidence of the Council, the time has arrived when the special preliminary examination in general knowledge instituted by the English Medical Corporations should cease to be recognised."

Sir D. Corrigan said the conclusion drawn from the preamble of this motion was extraordinary. The Council were to override the Acts of Parliament under which Apothecaries and Surgeons had rights which this resolution stepped in and proposed to abrogate. As the resolution originally stood on the notice paper, it would have extended to Ireland, but the word "English" was now introduced.

Dr. Andrew Wood moved, and Mr. Hargrave seconded, the following amendment:—"That the Council consider that it would be desirable that in any new amendment of the Medical Act, a clause should be inserted enabling the General Council or the Branch Council of any part of the kingdom to establish a board or boards for the examination of Medical students in general education." This amendment was negatived.

Thereupon Mr. Cæsar Hawkins moved another amendment—"That the attention of the several Medical corporations be drawn to the recommendation (No. 4 of the recommendations and opinions issued by the Medical Council), viz.: 'That the examination in general education be eventually left entirely to the examining boards of the national educational bodies recognised by the Medical Council,' and that their opinion be asked whether the time has not now arrived when this recommendation should be carried into effect." This was seconded by Dr. Acland and agreed to.

A communication from the Royal College of Physicians,

enclosing a form of licence, was read, and, on the motion of Dr. Bennett, seconded by Dr. Christison, was ordered to be entered on the minutes.

Tenth Day.—Monday, July 12. (Concluding Sitting.)

The Council reassembled at 1 o'clock, Dr. Paget, President, in the chair.

Dr. Christison drew attention to the fact that at the last sitting of the Council they had omitted to include the following certificates in the list of certificates qualifying for Medical study. He therefore moved—"That the 'examination of (senior) candidates for honorary certificates' under the local examinations of the University of Edinburgh, and the 'voluntary examinations' of Christ's Church, Canterbury, New Zealand, be added, according to the recommendation of the Committee of Council on Preliminary Examination in its report received on the 10th inst., to the examinations accepted by the Council as satisfactory evidence of general education prior to entrance on Medical study, provided that the pass certificates of these examinations attest an examination on all the subjects required by the Council."

The motion was seconded by Mr. Cæsar Hawkins, and agreed to.

The following report was then presented by the Committee on Amendment of the Medical Acts; and, upon the motion of Dr. Alexander Wood, seconded by Mr. Cooper, it was resolved that the report be received and entered on the minutes:—

Report of the Committee on the Amendment of the Medical Acts.

Committee.

Dr. Paget, Chairman.	Dr. Apjohn.
The President (Dr. Burrows).	Sir D. Corrigan, Bart.
Dr. Bennett.	Dr. Parkes.
Mr. Hawkins.	Dr. Quain.
Dr. Andrew Wood.	Dr. Christison.

The Committee on Amendment of the Medical Acts appointed July 1, 1869, in considering the subject remitted to them, have reviewed the various Medical Acts, and also the clauses of the Medical Acts Amendment Bill, agreed upon in former sessions of the Medical Council; and have paid particular attention to the suggestions in the communication from the Lord President of the Council, dated May 14, 1869, and to the several documents referred to them by the Medical Council in the course of its present session, viz:—Memorial from the Garioch and Northern Medical Association; letter from Dr. Prosser James; memorial from the Lothians' Medical Association; letter from Dr. Bulmer respecting Canadian Degrees; letter from Dr. Forster respecting Registration in the Channel Islands; memorial from Dr. Bell Fletcher, and numerous other members of the Medical Profession.

The amendments of the Medical Act, which have been already much discussed and agreed to by the Council in former sessions, consist of clauses which relate—To the qualification of members of Council; to regulations concerning the Register; to the registration of foreign and colonial qualifications; to additions to the list of qualifications; to the assumption of titles by unregistered persons, etc.

The committee recommend that all these clauses, except Clause XI., should be retained in their present form, in any Bill for amendment of the Medical Acts.

With respect to Clause XI., which is as follows, the committee are of opinion that it should be reconsidered:—

"XI. It shall be lawful for the General Council, by special orders, to dispense with such provisions of the Medical Acts, or with such part of any regulations made by authority of the said Acts, as to them shall seem fit, in favour of persons who shall make applications to be registered under the said Acts on foreign or colonial diplomas or degrees: provided such persons shall have resided in the United Kingdom for a period of not less than twelve months immediately previous to making application to be registered: provided the holders of those diplomas or degrees have a right to practise Medicine or Surgery in the countries where they have been granted; and provided the Council shall receive satisfactory evidence that those degrees or diplomas, or licences to practise, have been granted after a course of study and examinations such as to secure the possession by persons obtaining them of the requisite knowledge and skill for the practice of their Profession."

The Council are aware that the Secretaries of State in successive Governments have, on former occasions, pressed upon the Council the necessity of dispensing with, or greatly relaxing its regulations (by which those who obtain British qualifications are bound) in favour of persons holding foreign or colonial diplomas or degrees. The Council are aware that this condition appeared on former occasions as a *sine quâ non* to the consent of the Government to introduce any Bill for amending the Medical Acts.

The committee are of opinion that the object aimed at may be attained most simply and safely by a slight modification of Section 46 of the Medical Act of 1858. This section empowered the Council to dispense with its regulations in favour (*inter alios*) of "persons practising Medicine or Surgery within the United Kingdom on foreign or colonial diplomas or degrees, before the passing of this Act."

Adopting the form and provisions of the section now cited, the new clause would be as follows:—

XI. "It shall be lawful for the General Council, by special orders, to dispense with such provisions of the Medical Acts, or with such parts of any regulations made by the authority of the said Acts as to them shall seem fit, in favour of persons applying to have their names entered on the *Medical Register*, in virtue of foreign or colonial diplomas or degrees."

If this clause should become part of an amended Medical Act, it would then be the duty of the Council to consider how far and in what way its regulations should be relaxed in favour of any person or persons applying to be registered on foreign or colonial diplomas or degrees. The Council would have to consider what is due out of Professional comity to graduates of trustworthy and distinguished colonial and foreign universities, and at the same time not to forget the regard that is due to the rights and privileges of the holders of British diplomas and degrees, which have been obtained after courses of study and examinations supervised and approved by the Council.

The communication from the Lord President of Council invites the consideration of the Medical Council to two points; and on one of these an opinion is expressed that the Medical Act is defective. In this opinion your committee concur.

They agree with the Lord President in considering that the Act is seriously defective, in that it allows a minimum qualification in Surgery to be registered without any qualification in Medicine, and similarly a minimum qualification in Medicine without any qualification in Surgery. The Act indeed not only permits, but requires, the Medical Council to place upon the Register any applicant possessing one such single qualification. The Council has no option or discretion in regard to such applications, but is bound by the Act to comply with them.

The committee agree with the Lord President in regarding this state of things as open to serious objection, the more so as the number of persons thus practising both Medicine and Surgery on a simple qualification is undoubtedly very large.

It appears, however, from the analysis of titles alluded to in the Lord President's communications, that the number of such persons is decreasing at the rate of about sixty a year, although the total number of persons on the Register is increasing in much larger numbers.

The committee think that the Lord President should be made acquainted with what the Council have already done in endeavouring to remedy this defect in the Medical Act.

The Council have included both Medicine and Surgery in a list of subjects, which they have recommended to the licensing bodies as "subjects without a knowledge of which no candidate should be allowed to obtain a qualification entitling him to be registered."

But the committee doubt whether the Medical Act would enable the Council to enforce the recommendation on any one of the licensing bodies that might refuse to adopt it.

The Medical corporations and Universities have (chiefly within the last few years) made regulations which, by combining examinations of different bodies, or instituting separate examinations in both Medicine and Surgery, have done much towards insuring that persons shall not in future be placed upon the Register without an adequate knowledge of both subjects.

But the committee are of opinion that the only adequate remedy for this acknowledged defect would be for the Council to accept, under an amended Medical Act, such powers as would enable them in the future to refuse registration to any person, whatever his legal qualification may be, who has not passed sufficient examinations both in Medicine and Surgery.

On the other point on which the Lord President's letter invites the consideration of the Medical Council, his Lordship expresses no opinion.

This point, as stated in his Lordship's communication, is, "whether, if new legislation is to take place, it would be desirable to change in any respect the constitution of the Council."

In discussing this question the committee have fully considered the views and wishes expressed in the memorials and letters which have been received by the Medical Council from members of the Medical Profession.

In reporting on a matter of so much importance as this—whether any, and, if any, what change should be made in the constitution of the Council, the committee think it their duty not merely to lay before the Council the result of their deliberations, but to indicate also the principles and chief reasons by which they have been guided. There is one principle which is obvious and indisputable—viz., that the constitution of the Council should be such as may best fit it for the discharge of its duties, whatever these may be. In the Medical Act the Council is styled "The General Council of Medical Education and Registration." The duties imposed on the Council by the Act are four—viz., the supervision of Medical education, the registration of qualified Medical Practitioners, the publication of a national Pharmacopœia, and a certain judicial function by the exercise of which the name of any registered Practitioner "who shall be judged to have been guilty of infamous conduct in a Professional respect," may be erased from the Register.

With regard to two of these duties little need be said. The registration has been made in accordance with the Act, and with an accuracy which has never been questioned. A British Pharmacopœia has been published, which has been universally acknowledged to be one of the best in existence. In this work the task has been accomplished of reconciling the different views and varying practice of the three sister kingdoms. The new British Pharmacopœia is acknowledged in England to be an improvement on the old London Pharmacopœia; in Scotland it is preferred to the Edinburgh Pharmacopœia, and in Ireland to that of Dublin.

In regard, therefore, to those two duties of the Council, there is no reason (but rather the contrary) for proposing any change in its constitution.

With respect to its judicial function thus much must be said—that a Council elected by the suffrages of the Profession, as advocated in the memorials, would be entirely out of harmony with the constitution of other courts of justice in the United Kingdom, or indeed in any European State whatever. A Council which should be in any considerable part elected by popular suffrages would not be allowed by the Legislature to retain the judicial power which is exercised by the present Council.

With regard to the last and most important of the four duties of the Medical Council—viz., the supervision of Medical education—the Council would observe that the powers and means by which this supervision is to be exercised are defined in the Act, sections 18, 20, and 21. These are, in general terms, a power of requiring from the licensing bodies information as to the courses of study and examination to be gone through in order to obtain a qualification entitling a person to be registered, and a power of visiting the examinations, and, lastly, a power of representing to the Privy Council any serious defects in the course of study or examinations of any licensing body, and so depriving the said body of its privilege of granting qualifications until it shall have amended what was faulty or defective.

It is seen, therefore, that all the powers possessed by the Medical Council in respect to education, are exercised on or through the medium of the Medical corporations and universities, which confer the qualifications entitled to registration. Through supervision and visitation of examinations, and the communication of recommendations, a certain degree of control over the licensing bodies is conferred by the Act on the Medical Council.

Your committee are of opinion that these bodies, which are in a certain sense and degree governed by the Medical Council, are, for that very reason, entitled to be represented in the Council. This seems no more

than is required by justice. Experience has also shown its usefulness in facilitating the adoption by the licensing bodies of the views and recommendations of the Medical Council.

The committee would observe also that the universities and Medical corporations are all, in various ways, peculiarly conversant with education, and with the best methods of testing the acquirements of persons seeking to enter the Medical Profession, and are thus peculiarly qualified for choosing the fittest persons for discharging those (the most important) functions of the Council which concern Medical education and examinations.

The committee are of opinion that Crown nominees are a requisite element in any body which, like the Council, has not only occasionally to discharge judicial functions, but also to watch over and protect the interests of the Profession at large, and secure the welfare of the public.

The committee are therefore of opinion that the Council as constituted by the Medical Act is well and suitably constituted for performing the functions with which the Council was invested by that Act. The committee thinks it right to add their opinion that the Council, thus constituted, has, in discharging its duties, met with a degree of success which is large in proportion to the period of its existence, and in relation to the work that had to be done, and the difficulties that had to be overcome. The variety in the views and practice as to Medical education and examination which prevailed in the three divisions of the United Kingdom before the establishment of the Council has of necessity added greatly to its labours.

The committee have very fully discussed certain suggestions contained in the memorials which have been received by the Council. One of these is, that in any amended Act the control of the Council over the licensing bodies should be strengthened and enlarged. If such additional powers were conferred on the Council, the committee are of opinion that this would be an additional reason for maintaining the representation of these bodies in the Council as at present.

Another suggestion is for the extension of the powers and functions of the Council over a variety of objects relating rather to Professional practice than to education. At present the Council has no powers in such matters. Its powers are defined in the Medical Act, and, as already mentioned, are confined chiefly to Medical education. The Council has no power to control the relations either between members of the Profession or between them and the Government, nor has it any means of regulating or interfering with in any way the remuneration of the Profession, whether for private or public services. It may be a question whether it would be advantageous for the Profession that such power should be vested in the Council, whatever the constitution of the Council might be.

But the committee are (unanimously) of opinion that, if the Legislature should think proper to invest the Council with such extended powers and fresh duties, the members of the Profession at large, who would in that case be brought more within the sphere of action of the Council, should have a more direct influence than they have at present in the election of its members. In expressing this opinion, the committee are fully aware of the many inconveniences that would be incurred, and the many difficulties that would have to be surmounted in any plan for representing the Profession in the Council otherwise than as it is now represented, whether by the plan suggested in the memorial presented in the last session from the Committee of Council of the British Medical Association or by the plan alluded to in some of the documents referred to this committee, or by any other measure.

The committee observe that the Lothians' Medical Association complain "that the funds by which the whole machinery of the Medical Act, including the General Council (is carried on), are derived . . from a tax imposed upon each graduate or licentiate in Medicine and Surgery registered under the Medical Act," and "that such taxation, without commensurate representation of the body of Practitioners, is an act of injustice to the great body of registered Medical Practitioners throughout the country."

The committee would remark that there can be no difference of opinion as to the principle that liability to taxation entitles to representation in the taxing body. But they would further remark that the fee paid once for all by Medical Practitioners for entering their names on the Register cannot, in the ordinary sense of the words, be called a tax, and that the Council possesses no power whatever of taxing the registered Practitioners.

In the numerously signed memorial from Dr. Bell Fletcher and other members of the Medical Profession it is suggested that "in any future Act of Parliament provision be made for instituting prosecutions under it by a public prosecutor or other public functionary on behalf of the General Medical Council, instead of leaving the voluntary enforcement of the law to individuals." The committee are of opinion that this is a suggestion to which the attention of the Government should be drawn.

The committee recommend that the letter of Dr. Forster respecting registration in the Channel Islands be remitted to the Executive Committee, with instructions to institute further inquiries on the subject, and, if they think proper, make a suitable representation to the Secretary of State for the Home Department or other Government authority.

The President explained that the appendix referred to was the draft of the Medical Acts Amendment Bill drawn up by the Council two years ago.

Mr. Cæsar Hawkins moved, and Dr. Storrar seconded, the adoption of the last paragraph of the report.

Carried unanimously.

Dr. Bennett proposed the following resolution, which, he said, was in the precise terms in which it appeared in the report:—"It shall be lawful for the General Council, by special orders, to dispense with such provisions of the Medical Acts, or with such parts of any regulations made by the authority of the said Acts as to them shall seem fit, in favour of persons applying to have their names entered on the Medical Register in virtue of foreign or colonial diplomas or degrees."

The motion was seconded by Dr. Christison.

Sir D. Corrigan moved the following amendment:—"That it appears desirable, before any further attempt is made to introduce amendments of the Medical Acts, that a Royal Commission of Inquiry should issue to take evidence from such members of the Medical Council, and such other persons as the Commission may see fit to examine, with a view of furnishing a report to serve as the basis for legislation."

In support of the amendment Sir Dominic said that it might at first sight seem odd that he should raise a discussion and propose an amendment on what seemed a very simple resolution, but he wished to give expression to his opposition to the course which was being pursued by the Council in dealing piecemeal with the amendments of the Medical Acts. In relation to those amendments there were three ways of proceeding. One was the appointment by Parliament of a select committee to examine witnesses previously to passing a Bill. The second mode was the issue of a Royal Commission consisting, as in all similar commissions, of men selected by the Crown for their intimate knowledge of the subject in hand. The remaining mode of procedure was that which was now proposed by this Council, which was to furnish the Lord President of the Privy Council with the draft or groundwork of a Bill for introduction into Parliament. The third mode of proceeding, he (Sir Dominic) believed, was certain to end in disaster. From having sat on the committee, he could say that they were divided on almost every clause of the report, so that the report now came before the General Council not as that of a committee who took a united view of the subject, but as the report of a committee who were divided on certainly the most essential clauses; and he would venture to say that when resolutions embodying the various clauses of the report were submitted to the Council, every such resolution would meet with discussion and division. If the Council agreed on the draft of a bill, it would be opposed by the various licensing bodies, who would be at variance with the Council; and certain members of the House of Commons, influenced by the universities and corporations, would oppose the Bill from political or personal considerations; and thus the Minister who had charge of the Bill would find a strong opposition against him without his having the least idea of what was right or what was wrong, and the result would be either the throwing out of the Bill or the passing, from considerations of personal prejudice or political or private interest, an Act which would have no reference to the merits of the subject with which it dealt. The course which he proposed was that a Royal Commission should be appointed for the purpose of inquiring into all the topics connected with the Medical Acts, that the views which had received the support of the majority of the Council should be laid before the commission, and that evidence should be given not only by individual members of the Council, but by the Profession outside, with which the Council were at variance. There was no disguising the fact that the Council and the Profession outside were two opposing bodies. The members of the commission would be perfectly impartial men, and they would draw up a report in accordance with the evidence. It had been objected to this plan that great delay would ensue from it; but nobody could think that an amendment Bill could be introduced into Parliament until next session, and between that time and the present there would be ample opportunity for a commission to sit and prepare a report. There was often delay occasioned by the reference of a Bill to a Parliamentary committee; but a royal commission of inquiry was rapid in its action compared with such a tribunal. A strong reason for the appointment of a royal commission was that it would be able, as Mr. Simon, the officer of the Privy Council said, to "cover all the ground" where amendments to the Medical Acts were needed. The present report of the committee did not cover all the ground; but Mr. Simon in his letter said, "Considering that the Act has at present been more than ten years in operation, the Lord President presumes that a fair judgment can now be formed on its success and merits as a whole, and he thinks that a judgment of this more comprehensive sort must be the basis of any amended Bill to be introduced on the part of the Government." One paragraph of the report was as follows:—

> With respect to its judicial function thus much must be said—that a Council elected by the suffrages of the Profession, as advocated in the memorials, would be entirely out of harmony with the constitution of other courts of justice in the United Kingdom, or indeed in any European state whatever. A Council which should be in any considerable part elected by popular suffrages would not be allowed by the Legislature to retain the judicial power which is exercised by the present Council.

He (Sir D. Corrigan) must confess with regard to that reason that he did not understand it. The House of Commons was elected by popular suffrages, and the House of Commons exercised the highest judicial functions in the realm; and yet the Council were told in this report that a Council elected even partly by popular suffrages would not be allowed by the Legislature to retain judicial power. It was not very easy to understand what popular suffrage meant; but it was clear that there was no popular suffrage in the Medical Profession at all, nor could there be. The deputies of some of the bodies which were represented on the Council were elected by six or eight electors,

and others of the members of the Council were elected by six or eight hundred voters. He now came to the reasons which were given in the report for continuing the Council in its present state.

With regard to the last and most important of the four duties of the Medical Council—viz. the supervision of Medical education—the Council would observe that the powers and means by which this supervision is to be exercised are defined in the Act, sections 18, 20, and 21. These are, in general terms, a power of requiring from the licensing bodies information as to the courses of study and examination to be gone through in order to obtain a qualification entitling a person to be registered, and a power of visiting the examinations, and lastly a power of representing to the Privy Council any serious defects in the course of study or examinations of any licensing body, and so depriving the said body of its privilege of granting qualifications until it shall have amended what was faulty or defective.

The reason given was this :—

Your committee are of opinion that these bodies, which are in a certain sense and degree governed by the Medical Council, are, for that very reason, entitled to be represented in the Council. This seems no more than is required by justice.

Hence the reason was that, inasmuch as the licensing bodies might be called to the board of this Council to answer for their omission or their bad examinations, it was only required by justice that the men that were to be tried, or the bodies that were to be tried, should have their own representatives to try them. That seemed a most extraordinary kind of argument, and he sincerely hoped that such a line of argument would not prevail.

The President said that the question before the meeting was as to the 11th clause of the draft of the Bill for amending the Medical Acts. It was not within the scope of the amendment to criticise particular parts of the report, for the report was not yet before the Council.

Sir D. Corrigan said that he would bow to the decision of the President, but it was desirable that, if a royal commission of inquiry were appointed, all matters relating to the Medical Act should come before it. The answer to the outery which had been raised amongst the members of the Profession in consequence of their having to pay a tax to the Government, and being entirely without representation, had been that the sum of money which they had to pay for registration was not a tax, because it was paid only once in a life. A tax, however, was, according to the meaning of the words, an impost, and this charge was an impost on the Profession. He believed it was impossible for the Council to come to an agreement on the admission of foreign degrees, and this rendered a royal commission the more necessary, and brought him to the very clause which was proposed in the motion before the meeting, and against which he should vote, whether his own amendment were lost or carried. To that clause he must give a decided negative. It was known that in every part of Germany, and in every petty kingdom extending from Denmark to he knew not how far southwards, the licensing bodies would give diplomas on any terms, and they could send us no satisfactory evidence that the gentlemen holding the diplomas had been fully examined. Those diplomas would be brought here backed with certificates from the English Consul recommending the bearer for practice in this country. But on not one of those diplomas would those men be admitted by the State authorities to practise in their own countries. Yet the Council were called upon by the proposed resolution to admit those foreign diplomas, which did not entitle a man even in Bavaria or Hanover, or in any part of Prussia or Austria, to prescribe for the merest pauper. The Council were called upon to exercise their benevolence, and let those men into the Profession. And the reason given for the admission of those men was that the Council had to "consider what is due out of Professional comity to graduates of trustworthy and distinguished colonial and foreign universities." Now, it was very well to hold out the right hand of fellowship, but how were British Medical men treated if they went on the Continent and attempted to practise? They were hauled up and fined, and even within the last year men who had been in practice in England for ten years had been fined for practising in France. Before English Practitioners could be allowed to practise in France they must go and be examined before the Medical Faculty at Lyons, Strasbourg, or Paris. He would like to be an advocate of good fellowship, but what the clause proposed was reciprocity all on one side. The Council now had the power of making representations to the Privy Council in case they considered that the examination of any licensing body was insufficient. The clause which conferred the power was as follows :—"In case it appear to the General Council that the course of study and examination to be gone through, in order to obtain any such qualification from any college or body, are not such as to secure the possession by persons obtaining such qualifications of the requisite knowledge and skill for the efficient practice of their Profession, it shall be lawful for such General Council to represent the same to her Majesty's most honourable Privy Council." The proportions of candidates issuing from the various licensing bodies, and who were successful at the Army Board examination, varied considerably. One licensing body had, in one instance, only 3 per cent. of rejections, while another body had had 33 per cent. of rejections before the same board; but in no case had any representation been made to the Privy Council of the examination of a licensing body being insufficient, though it might let loose on the public large numbers of persons who could not bear the test of the Army Board examination. The attempt to unite licensing bodies in one system of examination seemed perfectly useless. They could not agree upon the simple question of when the Medical session should commence. His recommendation, therefore, was that there should be instituted an examination such as was practised in Germany, and which might be called a State examination. A body of State examiners might sit in London, Dublin, and Edinburgh, and to them should be committed the charge of examining all men who had passed the examinations of the various licensing bodies. The State examiners should be appointed by this Council with the approbation, if desirable, of the Privy Council. He would not prevent men from practising who had not passed the State examination, but he would disqualify them for appointments in connexion with Hospitals, Dispensaries, Poor-law institutions, and emigrant ships. The effect of such a measure on the schools of Medicine and the licensing bodies would be to raise the standard of education and examination, and the various schools of Medicine would endeavour so to train their students that they would attain a high position when they went before the State examiners. He (Sir D. Corrigan) had now expressed his views on the general subject, and it only remained for him to again recommend his amendment to the adoption of the Council.

Dr. Aquilla Smith seconded the amendment. They must eventually have come to a royal commission of inquiry.

Dr. Andrew Wood said they had endeavoured to frame what they thought to be an equitable method of carrying out the wishes of the Crown. Commissioners had been sent over by the Emperor of the French, deputed to go through the various parts of England, Scotland, and Ireland, with a view of ascertaining what their system of education and examination was, in order that the French Government might devise some means of instituting a reciprocal registration in the two countries. The present proposal of the committee was not a proposal to register all foreign diplomas or degrees. The clause was neither more nor less than an enabling clause, and would enable the Council to consider each claim separately and deal with it according to its merits.

Dr. Alexander Wood said that he should support the amendment, for if the question of Medical reform were dealt with by the Imperial Parliament in the form proposed by the Committee, the Medical Council would be put in the false position of resisting what would be regarded by many as the legitimate demands of the Profession at large.

The amendment was negatived, and the original motion was carried by a majority of 10.

Dr. Christison moved "That it is desirable that in the amendment of the Medical Acts the General Council should receive powers to enable them in the future to refuse registration to any person, whatever his legal qualification may be, who has not passed sufficient examinations both in Medicine and Surgery." He did not think it needful to say anything in recommendation of the resolution.

Dr. Bennett seconded the motion. He said that if the Council carried this clause, they would have done one very important piece of business this session. It was very desirable to let the Government know that they were all agreed as to the imperative necessity of such a provision.

In reply to Dr. A. Smith, the President said that the clause would have the effect of enabling the Council to refuse registration to any person as a Physician unless he had passed an examination in both Surgery and Medicine. The object of the motion was not to require a Physician to take out a qualification as a Surgeon, or to require a Surgeon to take out a qualification as a Physician, but it was merely to guarantee that both branches had been properly studied.

Mr. Cooper was understood to support the resolution.

Dr. Alexander Wood said that as the motion stood it was not clear that the Council would not require everybody to possess the double qualification before being registered.

After some discussion, the following resolution was suggested by Dr. Alexander Wood, and accepted by the mover and

seconder in substitution of their own form:—"That in the opinion of this Council it is desirable that power be given to the Medical Council to refuse registration to any one who has not been sufficiently examined in both Medicine and Surgery."

Dr. Andrew Wood proposed the following amendment, which, he said, would carry out what he knew to be the intention of the Privy Council:—"That it is desirable that power be given to the Medical Council to refuse registration to any person who has not both a legal qualification in Medicine and a legal qualification in Surgery."

Dr. Embleton seconded the amendment.

Mr. Cæsar Hawkins said that it would seem that the Council were going to put themselves at once under the power of the Privy Council. He saw no reason why all the powers of the College of Physicians and of the several universities should be taken away from them, and why all persons should be compelled to have a double qualification. It was perfectly right to provide that all persons should be examined in both branches, but he most strongly objected to every person being required to have a double qualification. (Hear, hear.)

Sir D. Corrigan said that the double qualification system would be impracticable.

A vote was then taken. The numbers were:—

For the amendment, 6; against, 8.
For the original motion, 11; against, 7.

The latter was therefore carried.

Dr. Bennett moved "That having carefully considered the objects of the Medical Act of 1858, and the constitution of the Council appointed under that Act to carry out its objects, the Council are of opinion that, for the purposes of the existing Act, the present Council is essentially well constituted." He said that on this subject every member must have already formed an opinion, and he was sure it would be a needless expenditure of time to urge any argument in support of the resolution.

The motion was seconded by Dr. Christison, and upon a vote being taken the numbers were—For, 9; against, 5. The resolution was therefore carried.

Dr. Bennett next moved "That the Council are of opinion that if the Legislature should think proper to invest the Council with extensive powers and fresh duties, by which the Profession at large would be brought more under the direct influence of the Council, then in that case the Profession at large should have more direct influence in the appointment of members of Council." The committee, of course, refrained from saying to what extent this more direct influence should be carried, and still further did they refrain from saying anything more about the mode in which the influence should be brought to bear, or how the members of the Council should be elected. It would be impossible to give a rational opinion on such points until they knew to what extent the Legislature was likely to modify the existing Act of Parliament, and what were likely to be the powers conferred upon the Council by any new Act. He thought that the Government would see that it was a very reasonable suggestion on the part of the Council, and if they were invested by any future Act with new powers over the Profession, the Profession themselves should have a voice in the appointment of the Council to an extent which they had not now, although he was one of those who considered that the Profession had now a very decided voice in the appointment of the members of the Council.

Dr. Apjohn seconded the motion.

Dr. Alexander Wood wished to enter his protest as an individual against this mode of legislating.

Sir D. Corrigan said that he should not vote on this resolution, for if he were to vote for it he should be voting for what appeared to him to be an illusory promise to the Profession, and if he were to vote against it, it would appear as if he were voting against the further representation of the Profession. He did not wish to appear to be doing that, for at present the members of the Council were chiefly appointed by bodies which did not represent the Profession. The representative of the University of Dublin was chosen by only eight electors; the representative of the University of London was sent by the Senate of that body; he (Sir D. Corrigan) himself, as representing the Queen's University, was elected by the Senate, and there might not be on that Senate a single Medical man. He, therefore, could not claim to represent the Profession. The same remark applied to the representative of the Apothecaries' Hall in Dublin. It was true that the shareholders of these corporations were a most respectable body of men, but they were not the Profession. He considered the motion unnecessary, for he did not expect that further powers would be granted to the Council. Did anybody in his senses believe that they would get more extended powers than they had? He was sure they would not, and therefore it was unnecessary to provide for what would happen in case they did. They might as well put into the resolution that if the sky fell they should catch larks. When a vote was taken on the resolution he should be neutral.

Dr. Andrew Wood then moved an amendment showing—"That it is expedient that in the Medical Council there should be represented all the licensing boards, whether universities or corporations, and that the Crown should also nominate a certain proportion of the members; but that it is also expedient that there should be a certain proportion of members sent by the direct votes of registered Practitioners residing in the United Kingdom. That the registered Practitioners, as contributing the funds by which the expenses of working the Medical Act are defrayed, seem well entitled to direct representation; and that the addition of members so elected would widen the basis of the Council, extend its influence, awaken public interest in its transactions, and gain for it the confidence of the Profession." He said that he thought that the President would consider this amendment entirely *ad rem*. He did not think it unworthy of the Council to take this matter into consideration. The amendment further proposed that eight elected members should be added, and went on to an extraordinary length. It drew forth a rebuke from the President, Sir D. Corrigan, and Dr. Christison, Dr. Aquilla Smith, Mr. Hawkins, and Dr. Thomson, and, as Dr. Andrew Wood refused to withdraw it, the President declined to accept it.

The original motion was then carried.

The following motion was proposed by Dr. Storrar, and seconded by Dr. Aquilla Smith:—"That in any future Act provision should be made for instituting prosecutions by a public prosecutor, or other authorised functionary, instead of leaving the enforcement of the law to the voluntary action of individuals of the public."

The motion was supported by Dr. Christison, and agreed to.

Moved by Dr. Bennett, and seconded by Mr. Harorave—"That the report of the committee be adopted."

Upon a show of hands being taken, there appeared, as counted by the President, 8 for and 7 against the motion. At the instance of a member of the Council, the names were taken down, and it was then found that there were eight votes on each side. A discussion then ensued as to whether the first or second vote decided the question. It was urged by the opponents of the resolution that the voting was not complete until the names were recorded, and that the written record of the votes must be accepted as decisive. The President ultimately adopted this view, and declared that the motion was not carried.

Moved by Sir D. Corrigan and seconded by Dr. Aquilla Smith—"That the President be requested to write to the Lord President of the Council to the effect that, on the receipt of his lordship's communication of May 14, it was referred to a committee of the General Council appointed to consider the amendments of the Medical Acts, that the enclosed was the report submitted to the Council by the said committee, but not as a whole adopted."

The motion was carried unanimously.

Dr. Bennett moved—"That the President and Executive Committee shall be authorised (if it shall appear necessary) to confer with the Government on the subjects referred to in the Lord President's communication, and report the results of any such conference to this Council at their next meeting."

The motion was seconded by Sir D. Corrigan, and agreed to.

The Committee on Communications from Dr. John Harley, Mr. Courtauld, Dr. Macloughlin, and Dr. Edwards Crisp, were of opinion that it does not fall within the province of the Council to interfere in the matters referred to in any of the letters.

The following is an abstract of the report of Committee on the Registration of Medical Students:—

The number of students registered during the year 1868 is as follows:—

In England	483
„ Scotland	266
„ Ireland	175
Total . . .	924

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TABLE FOR 1868.

Licensing Bodies.	Qualifications.	No. Passed.			No. Rejected.		
		1st Exam.	2nd Exam.	3rd Exam.	1st Exam.	2nd Exam.	3rd Exam.
R. Coll. Phys. London	Membership	...	...	20	...	1	1
	Licence	4	...	82	2	...	13
R. Coll. Surg. England	Fellowship	63	31	...	8	1	...
(1st Exam. only)	Membership	403	341	...	123	63	...
Soc. Apothecaries, London	Licence in Midwifery ...	...	...	26	...	...	7
University of Oxford	Licence	203	198	78	36	25	...
	M.B.	1	3	...	...	...	...
	M.D.	...	...	...	...	...	...
,, Cambridge ...	M.B.	9	11	4	6	3	1
	M.C.	2	...	...	...	...	...
,, Durham ...	M.B.	...	2	...	...	...	...
	L.M.	1	1	...	...	...	...
	M.C.	...	1	...	...	...	...
,, London	M.B.	Prelim. Scientific for Med. Students	1st M.B.	2nd M.B.	Prelim. Scientific for Med. Students	1st M.B.	2nd M.B.
		*54	31	21	45	13	2
R. Coll. Phys. Edinburgh	Licence	67	219	...	45	80	...
R. Coll. Surg. Edinburgh	Licence	4	40	...	4	6	...
R. Coll. Phys. and R. Coll. Surg., Edinburgh	Licence in Med. and Surg.	52	74	...	35	33	...
R. Coll. Phys. Edin. and Fac. Phys. Surg. Glasg.	Licence in Med. and Surg.	10	18	...	6	13	...
Fac. Phys. Surg. Glasgow	Licence	31	36	...	10	18	...
University of Aberdeen	M.B.	39	44	41	11	13	4
	M.B.	Passed in all three Exams. ...		50	Rejected in all three Exams. ...		9
	M.C.	Ditto...		41	Ditto		9
,, Edinburgh ...	M.D.	Under New Stat., in all three Exams.		11	Ditto		...
		Under Old Stat., ditto		12	Ditto		4
	M.B.	55	51	38	21	15	6
,, Glasgow... ...	M.D.	1	3	...	1	...	...
	M.C.	...	...	...	...	...	...
,, St. Andrews	M.D.	...	...	9	...	...	...
K. and Q. Coll. Phys. Ireland	Licence in Medicine ...	1	100	...	...	12	...
	Ditto in Midwifery ...	...	76	...	...	10	...
R. Coll. Surg. ,,	Licence in Surgery ...	149	106	...	21	10	...
	Fellowship	4	4	...	1	1	...
	Licence in Midwifery ...	5	5	...	...	...	...
Apothecaries' Hall, ,, ...	Licence	17	25	...	5	8	...
University of Dublin	M.B.	13	...	44	38	...	...
	M.C.	...	...	25	...	...	3
Queen's Univ. Ireland	M.D.	66	49	...	40	18	...
	M.C.	...	22	...	...	17	...
Totals...	... ...	...	...	502	458	360	59

* Four of this number were examined in Physiology only, and six passed the 1st M.B. without Physiology.

The committee have received from the representatives of the undernamed bodies the following observations, in reply to inquiries whether they require that any examination in general education shall be really preliminary to the commencement of Medical education.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—In the regulations of this body respecting education, "candidates are required to have passed, within the period specified, an examination in general education held by some of the qualifying bodies, or by some one of the national educational bodies approved by the college." It does not clearly appear from the published regulations what "the period specified" exactly means, but for some years past it has rarely occurred that any candidate has presented himself for examination who had not already obtained a Surgical qualification or a degree in Medicine.

THE ROYAL COLLEGE OF SURGEONS.—With the Royal College of Surgeons in Ireland the rule is absolute to require candidates to pass a preliminary examination before commencing Medical study.

THE APOTHECARIES' HALL IN IRELAND.—The Apothecaries' Hall requires in all cases the preliminary examination to be passed before Medical study is begun.

UNIVERSITY OF DUBLIN.—The great bulk of the Medical class in Trinity College is composed of students in arts, and these are, as respects preliminary education, entirely in accordance with the regulations of the Medical Council, for they have necessarily passed the entrance examination, which is one of the examinations in preliminary studies recognised by the Council. A clause, indeed, in the School of Physic Act is understood to secure to extra students—*i.e.*, to persons not students in arts—the privilege of joining the Medical school and pursuing in it their Medical studies, and a few students avail themselves of such privilege. Such students, however, cannot get a degree or even a licence in Medicine from the Dublin University, and they are not included in the list which it forwards to the Branch Council with a view to registration. Nevertheless, the names of these students are found on the Register, so that, though their attainments in general education are not tested by the University, they must have satisfied the Registrar of the Irish Branch Council that they have passed a preliminary education in Arts conducted by some other institution.

QUEEN'S UNIVERSITY IN IRELAND.—No communication as to this body has yet been received. D. EMBLETON, M.D., Chairman.

On the motion of Dr. ALEXANDER WOOD, seconded by Dr. FLEMING, it was resolved that the report be received and entered on the minutes.

Moved by Dr. ALEXANDER WOOD, seconded by Mr. HARGRAVE, and resolved—"That it be remitted to the Branch Council for England to investigate, according to the standing orders, the charges against Lima Abraham La'Mert, which led the Royal College of Surgeons of England, and the Royal College of Physicians of Edinburgh, to deprive him of his licence from these bodies respectively. That in the event of the Branch Council for England coming to the conclusion that these charges can be substantiated, and involve infamous conduct in a Professional respect, the Branch Council shall report the same to the Executive Committee. That the Council, by Clause IX. of the Medical Act, delegate to the Executive Committee their powers of summoning Lima Abraham La'Mert to appear before them, and of striking his name off the Register if they see cause."

Moved by Dr. ALEXANDER WOOD, seconded by Dr. EMBLETON, and carried unanimously—"That the report of the committee on the rearrangement of the recommendations and opinions of the Council on registration, education, and examination, be received and entered on the minutes, and that copies of the recommendations be printed and sent as usual to the licensing bodies. That the following be included in the list of examinations which are considered sufficient evidence of preliminary examination in arts:—'Examination of (senior) candidates for honorary certificates under the local examinations of the University of Edinburgh; voluntary examinations of Christ's College, Canterbury, New Zealand.'"

After some formal business and the usual votes of thanks, the Council broke up.

ERRATUM IN THE REPORT OF THE MEDICAL COUNCIL.

LETTER FROM MR. T. MEREDITH.

[To the Editor of the Medical Times and Gazette.]

SIR,—In the hurry of writing out the lengthy reports which I furnished to you of the Medical Council, I made the unfortunate error of substituting Mr. Bernard's name for that of Mr. Evan Thomas. I am fain to hope that few would be misled who read the whole of that part of the report, because, taken with the context—that "Mr. Bernard's name had been erroneously erased from the Register in consequence of a mistaken obituary notice"—the mistake is obviously clerical. Nevertheless, I feel that even this may have been felt by yourself and Mr. Bernard, and I offer my most sincere apologies. Trusting that these will be accepted by Mr. Bernard and yourself, I am, &c. THOMAS MEREDITH,

Shorthand Writer, 87, Chancery-lane.

Midland Circuit, Warwick.

ORIGINAL COMMUNICATIONS.

CLINICAL SURGERY.—No. IV.

ON HIP DISEASE.

By THOMAS BRYANT, F.R.C.S.,
Assistant-Surgeon to Guy's Hospital.

CASES OF ARTICULAR OSTITIS OF THE HIP-JOINT ARRESTED BY TREATMENT IN ITS FIRST STAGE—RECOVERY WITH SOUND JOINT.

PART I.

THE following cases have been taken from my note-book without any special reference to the clinical symptoms by which the disease was characterised, or to the treatment which was followed. They are given as types of the ordinary run of examples of so-called hip disease in its early stages. They form a group of cases which will readily be recognised by all who have had much experience in joint affections, and, to my own mind, are good examples of "articular ostitis;" for they present clinical features which are very distinct from others, which will follow, of synovial disease. In all, recovery took place by treatment, the disease not having passed in any beyond the first stage of ostitis. In none of the cases was the joint, as a joint, affected. In the succeeding series I shall give other cases of more advanced disease, and indicate the treatment that is required, with its results.

Case 1.—*Hip Disease after Scarlet Fever—Articular Ostitis—Recovery.*

Tom C., aged 4, came under my care at Guy's Hospital on February 15, 1866, for some disease of the right hip. It had appeared after scarlet fever one year previously, coming on with pain in the knee and a marked limp. These symptoms had existed with slight intermissions of severity ever since. When he came under care the thigh was partially flexed upon the pelvis, and rotated outwards. There was spasm of the flexor muscles of the hip and of the adductors, but no swelling could be made out about the hip-joint, and no thickening. The head of the femur could be made to rotate smoothly in the acetabulum, although the attempt excited spasm of the muscles. The child's health was bad. Tonics were given, and fomentations to the hip ordered, walking and standing being interdicted. In three months the symptoms had much improved, and by October 5, or in eight months, all had disappeared. The joint could be moved freely without pain or muscular spasm, and firm pressure over the trochanter could be endured without suffering. On December 6 the child was still well, with complete movement of the limb.

Case 2.—*Hip Disease—Articular Ostitis—Recovery with good Joint.*

James C., aged 5, came under my care at Guy's Hospital, on July 30, 1866, for disease of the right hip-joint. It had appeared as a direct result of a fall received two months previously, limping and pain on the outer side of the thigh being the prominent symptoms. When he came under my care, these symptoms existed. The foot was straight. There was no thickening about the neck of the femur, or of parts about the joint, but pain was readily produced by pressing the trochanter against the acetabulum; the head of the bone, however, moved smoothly in the pelvic cup. Rest, fomentations, and tonics were given, and by September 23, or in two months, all the symptoms had much improved. There was less pain in the part, and more freedom of movement allowed without exciting spasm of the muscles. By November 3 all signs of disease had disappeared, and by December 10 the child was allowed to use the limb with care. On January 4, 1867, the child could move the limb freely without pain or inconvenience, and in April the report states the child was still well.

Case 3.—*Early Hip Disease—Articular Ostitis—Recovery.*

Ann F., aged 9, was brought to me at Guy's Hospital on October 5, 1862, for some affection of the hip. She had been observed to limp when walking for about one month, and had complained of pain in her knee. When I saw her, the pelvis was tilted up on the sound side, giving the appearance of lengthening of the affected limb. The thigh was fixed by spasm of the muscles generally, no special group being involved. Pain was produced on making firm pressure over the trochanter. There was no swelling about the joint, but increase of heat. The child was directed to desist from walking or even standing. Fomentations were ordered, and tonics given. On November 10, all these symptoms had considerably improved. There was less pain and rigidity of muscles, and rotation of the limb was allowed. In another month the symptoms had disappeared; she was not, however, allowed to walk on the limb for several months. A good recovery followed.

Case 4.—*Early Hip Disease—Articular Ostitis—Recovery.*

Catherine H., aged 3, came under my care at Guy's Hospital on April 12, 1866, for some disease of her hip-joint. It had existed for eight or nine weeks, and had appeared without any known cause. It came on with pain in the front of the knee, and lameness. The symptoms had existed up to the time of my seeing her.

When seen, the affected limb appeared longer than its fellow from the tilting of the pelvis upwards on the sound side. There was some spasm of the muscles of the hip on any attempt being made to move the joint. But there was no swelling. Firm pressure over the trochanter caused pain. Rest, fomentations, and tonics were prescribed, and in one month all the symptoms had improved. By June 5 the hip-joint could be moved freely without exciting spasm of the muscles of the part, and by July 3 the report states that the child was nearly well. On August 10 she was pronounced to be cured, and on October 5 to be still well.

Case 5.—*Early Hip Disease—Articular Ostitis—Spasm of Adductor Muscles—Recovery.*

Ellen N., aged 3, was brought to me at Guy's Hospital on April 20, 1862, with some disease of the right hip-joint. It had existed for seven weeks, and had followed a fall. Pain in the hip and limping followed the injury, and she had been unable to move the limb since. When I saw the child she was evidently in pain, and dreaded any attempt being made to move the limb. She supported it with the foot of the sound side, and kept it partially flexed upon the pelvis; it was also adducted to an extreme degree. Any attempt to move the joint caused pain and severe spasm of the adductor muscles. Pressure over the trochanter increased the suffering. There was no swelling. Fomentations to the hip were ordered, and cod-liver oil with iron given, rest in bed being enforced.

By May 26 all the symptoms had much improved, but the spasm of the adductors on movement was very marked; it was, however, less in degree. By June 6 this spasm had disappeared, and movement of the joint was allowed. In another three months the child was well.

Case 6.—*Early Hip Disease—Articular Ostitis—Recovery.*

Edward M., aged 6, came under my care at Guy's Hospital on June 2, 1862, with hip disease on the left side. Symptoms had existed three months, and had appeared without any known cause. The child had never rested. Pain in the joint and limping were the prominent symptoms, which were put down as "growing pains." When I saw the child the pelvis was tilted upwards on the sound side, and the left thigh was flexed on the abdomen. These muscles were also put into a state of spasm on any attempt being made to move the limb, but the adductors were not similarly affected. There was no swelling about the joint, but firm pressure over the trochanter caused pain. Fomentations to the part were ordered, with directions that the child should neither stand nor walk, and tonics given.

On June 30 all spasm of the muscles had disappeared, and the movements of the joint were more free. There was also less heat, and pressure over the trochanter could be tolerated.

By July 30 all signs of mischief had disappeared, and by October he was perfectly well, with a sound joint.

Case 7.—*Early Hip Disease—Articular Ostitis—Recovery.*

Sarah T., aged 7, came under my care at Guy's Hospital on July 1, 1861, for disease of her right hip-joint. It had come on about one year previously with pain, which had been regarded as "growing pains," and occasional limping. No advice had, however, been obtained. This had continued up to the time I saw her. The child limped seriously, and complained of pain at all times. This pain was increased by walking, or by pressing the head of the bone against the acetabulum. There was some spasm of the muscles on attempting to flex or rotate the limb, but the head of the bone could be felt to move smoothly in its pelvic cup. The pelvis was tilted up on the sound side. There was no swelling about the joint. The child was ordered to abstain from standing or walking. Fomentations were to be applied to the joint two or three times a day. Tonics were given, with good living.

In one month, or on July 29, the report states that the symptoms had much improved. There was much less pain experienced on moving the joint.

On October 28, or three months subsequently, all symptoms had subsided. In another six the report states the child can walk well, all signs of disease having disappeared.

Case 8.—*Early Hip Disease—Articular Ostitis—Recovery.*

Kate C., aged 4½, was brought to me at Guy's Hospital on April 18, 1864, for some affection of the hip. The child had been observed to limp for five or six months, and to complain of pain in the part at times. When seen the limb was apparently elongated from tilting of the pelvis on the sound side, and the head of the femur could be moved smoothly and without pain in the acetabulum. There was not any swelling about the joint, but any pressure over the trochanter or of the femur against the pelvis caused pain. There was also spasm of the muscles of the hip on any movement being made. The child was ordered to be kept off its legs, and tonics were given; fomentations were ordered to the part. On May 23 the child was no better, and had for the last three days complained of pain in its knee. On June 30 all these symptoms had subsided, the limb being moved readily without causing spasm of the muscles, and the bones pressed against one another without causing pain.

In three months, the child, remaining well, was allowed to walk. No relapse took place, and a good recovery followed.

Case 9.—*Early Hip Disease—Articular Ostitis—Recovery.*

Jane C., aged 3, came under my care at Guy's Hospital on March 1, 1867, with symptoms of hip disease on the right side, following immediately upon a fall some six months previously. Pain in the part and limping followed the accident. When seen it was evident that disease existed, for the child limped dreadfully. She complained of pain in the part, and there was much spasm of the muscles of the hip on attempting to move the joint. The limb looked longer from the tilting of the pelvis on the sound side. There was no thickening about the joint, although firm pressure of the bones caused suffering.

Rest, fomentation, and tonics were prescribed, and by June 25, or in about three months, all the symptoms had disappeared. The child was watched for three months more, when it was pronounced cured, no return of the symptoms having appeared.

Case 10.—*Early Disease of Hip-joint—Articular Ostitis—Recovery.*

Tom C., aged 10, came under my care at Guy's Hospital on June 2, 1861, for some disease about the left hip. It had appeared without any known cause, one year before, by pain and limping; but after rest and medicine the symptoms disappeared. The symptoms, however, reappeared after a few weeks' exercise, and had for six months steadily increased. When I saw the boy, there was apparent elongation of the affected limb from tilting of the pelvis on the sound side, but no other external indication of disease. There was no swelling or thickening about the joint. The boy walked with the characteristic limp of hip affection, and exercise caused pain; firm pressure, also, over the trochanter or against the limb produced suffering. There was some spasm of the muscles of the joint on making an attempt to move the part. Standing and walking were forbidden; fomentations were ordered, and tonics given, such as cod-liver oil and iodide of iron. In one month all the symptoms were improved, and in three all had disappeared. In six months he was pronounced well.

Case 11.—*Early Hip Disease—Articular Ostitis after Injury—Recovery.*

Alice J., aged 12, came under my care at Guy's Hospital on July 30, 1861, for some affection of the hip. It had come on five months previously after a fall upon the part. Limping speedily appeared after the accident, and pain in the inner side of the thigh. When I saw her, the leg was apparently elongated, but this appearance was due to the tilting of the pelvis upwards on the sound side, the child having walked since the accident. There was spasm of the muscles about the hip, and pain on pressing the bones firmly together, but no swelling of the joint. The disease was clearly in the bone. The child was forbidden to stand or walk on the limb, but was allowed to move it. Fomentations were also ordered to the part, and tonic medicine given. By October 8, or four months after treatment, all symptoms had subsided, and a convalescence was declared. Directions were given, however, that nothing like fatigue should be allowed. This child was well one year afterwards. Both limbs were alike in all respects.

Case 12.—*Early Hip Disease—Articular Ostitis—Recovery.*

Sydney C., aged 9, was brought to me from Croydon on March 27, 1867, for some affection of his right hip. It had appeared without any distinct cause with pain, limping soon making its appearance. When I saw the child the right leg was apparently longer than the left, this elongation being due to a tilting of the pelvis on the sound side. Movements of the right femur were free and painless, no swelling or enlargement of the joint existing. Pain was, however, at once produced by pressing the head of the femur against the acetabulum. Directions were given for the boy to be kept off his legs, and fomentations to be applied. Tonic medicine was also ordered. By April 15 the pain was less, and limping also scarcely perceptible. On May 2 all symptoms had disappeared, and six months afterwards the child was well.

Case 13.—*Early Hip Disease—Articular Ostitis—Recovery.*

Frederick H., aged 5, came under my care on March 13, 1867, for supposed hip disease. It had been coming on for four months, after a fall. Pain in the part of an aching character was the earliest symptom, with limping after exercise, and these symptoms had persisted. When seen, the thigh, to all appearance, looked like the other. There was no shortening or apparent elongation, and no swelling. The head of the bone rotated smoothly in the acetabulum without increase of pain. The child limped perceptibly on walking, and firm pressure of the head of the bone against the acetabulum either through the foot or trochanter caused distress. The case appeared to be one of early inflammation of the bone—probably the femur—the joint being sound. Orders were given that the child should be kept off its legs, and that the joint should be bathed with warm water twice a day. Tonics were also given. In three months all symptoms had disappeared, and a good recovery ensued.

I propose now to quote one other case of articular ostitis of the neck of the femur, which recovered as well as any of the cases I have just quoted, but in it some arrest of growth subsequently took place in the neck of the bone, probably from disease in the epiphysial cartilage of the neck through which growth takes place.

Case 14.—*Articular Ostitis—Recovery with a Movable Joint—Subsequent Arrest of Growth in Thigh.*

Mary H., aged 5, came under my care at Guy's Hospital on Jan. 8, 1866, for some affection of her right hip. It had come on six months previously with pain and limping, but no swelling had been seen. The pain was of an aching character, and was worse at night. There was no history of a fall or injury. When I saw her the leg was apparently longer than the sound one from the tilting of the pelvis. The position of the foot was natural. The head of the femur could be made to rotate freely in the acetabulum, but the attempt excited spasm of the muscles about the joint—it excited no pain. Pressure upon the trochanter major, however, caused suffering. The neck of the femur was clearly enlarged; the soft parts were natural. Rest and hot fomentations were ordered, tonics being given. In six months the child was pronounced to be well; in another three, no relapse having taken place, she was allowed to walk. This child then disappeared from view, but reappeared on April 29, 1869, more than two years after she had been under my care, for some slight lameness, the mother stating that it had been gradually growing worse as the child grew. The cause of this lameness was tolerably clear, for on examination the right thigh was found to be one inch shorter than the left. The pelvis was straight, or rather could be brought so. The trochanter major was half an inch nearer the anterior superior spinous process of the ilium than on the sound side, and was evidently higher up than natural. The head of the bone rotated smoothly and naturally in the acetabulum. The leg was quite natural.

Drawing illustrating the arrest of growth in the right femur after ostitis.

Remarks.—It was evident that in this case the femur had not grown in proportion with the growth of the sound limb. The disease which had existed

in the bone about its neck had clearly caused some arrest in the growth of the bone, and shortening of the neck and consequent approximation of the trochanter to the middle line of the body and its higher relative position. The epiphysial cartilage had probably been likewise destroyed, preventing growth. The drawing of the case, taken with the child standing, well illustrates these points. The obliquity of the pelvis and shortening of the right thigh are well seen.

Remarks—Brief Analysis of the Cases.—If we look at these cases as a whole, it will be difficult to arrive at any other conclusion than that they are all examples of one affection, and to my own mind that affection is articular ostitis. The inflammation had never proceeded beyond its earliest stage in any of the instances, and was fortunately arrested by treatment in every case. In their clinical characters they are also very much alike. They all occurred in children. In some the cause was unknown, in others there was a distinct history of a fall; in one it followed a fever. In all it had existed only a few months; in three only had twelve months passed. In all pain existed of an aching character. This was fixed, in the majority of cases, in the hip; in several it was also felt in the knee, and in one in the outside of the thigh. In all there was marked limping on any attempt to walk, and apparent elongation of the limb from the tilting upwards of the pelvis on the sound side. In some of the cases the position of the limb was natural; in some flexed more or less; in one flexed and rotated outwards; and in others flexed and adducted. In all attempts at movement excited spasm of some one or more of the groups of muscles around the joint, in some the flexors acting the more powerfully, in one the adductors. In no single example was there any very perceptible enlargement or swelling about the joint, and in all pain was excited by the interarticular pressure test. These symptoms clinically may be accepted as true indications of articular ostitis of the bones of the hip joint. In the treatment of these cases it will be observed that neither splints nor weights were employed. They were not required; for the joint, as a joint, in each case was sound, and its natural movements, as far as the patient felt disposed, did no harm, but rather good, by keeping the muscles in health. The one practical point which was uniformly enforced was the prevention of any interarticular pressure upon the bones. No standing was allowed under any pretence, and no walking. Fomentations to the part were ordered, and tonics given. These principles of treatment ought always to be observed.

(*To be continued.*)

A CONTRIBUTION TO THE THEORY OF DIATHESIS.

By DAVID J. BRAKENRIDGE, M.D., F.R.C.P.E.,
Physician to the New Town Dispensary, Edinburgh.

(*Concluded from Vol. I.* 1869, *page* 654.)

5. *The wider the range of the education, the more vigorous will be the health, and the greater the range of circumstances over which it may be preserved.*

Were the constitution limited to one constant unvarying set of influences, health would be incompatible with the slightest deviation from this. The provisions of nature secure a considerable variety in this respect. In the rotation of the seasons we have a constant succession of changes which check the tendency of the body to fall into a too narrow series of habitual activities. The width of education thus afforded renders it possible to move with comfort and safety to considerably distant localities at seasons when their climate approaches in character to one or other of the seasons in the native climate. Thus we may indulge in a change to colder places during their summer if it is not colder than our winter, and to warmer places during their winter if it is not warmer than our summer.

It is evident that the extent of this capacity for change must be regulated by the range of conditions to which the body has been accustomed, being greater or less according to the variability or equability of the developing climate. The development brought about by any one locality must, however, be, at the best, very limited compared with man's capacity. Doubtless the craving for change which man feels with regard to many things is not without its physiological importance.

Such deep-seated yearnings as the love of travel, and the great inventions to which, for its satisfaction, it stimulates him, hint that this local development, even where the balance of functional power is best preserved, by no means represents the highest state which he is capable of attaining. He possesses, in a rudimentary condition it may be, but none the less truly, powers which, were they all fully educated, might render him cosmopolitan. Greatly increased rapidity of locomotion is already doing much to extend the range of his physiological education, and, in addition, the blending of different races which is thus favoured, and the consequent intermarriages of those possessing constitutions widely different, will hasten the higher development of the whole race. For when we have the organs which in the one parent are highly trained, uneducated in the other, and *vice versâ*, it is reasonable to suppose that the positive, and not the negative, properties of each parent will have the greater tendency to be transmitted to the offspring; hence it will possess somewhat of the special powers and capacities of both. Thus the offspring of aboriginal and European parents in Hindustan is said to "inherit from the native parent a certain adaptation to the climate, and from the European a higher development of brain" ("Combe's Constitution of Man," p. 194.) Many examples might be adduced to show that mixed races of men surpass in vigour and in the tendency to multiply the parent-races from which they have sprung. It must to a considerable extent be regarded as the explanation of the high vigour of the Anglo-Saxon race that in it there are blended together so many constitutions, originally very differently educated, and consequently possessing widely different powers.

6. *While this habitual condition of the body is the only one compatible with health in the circumstances under the operation of which it has been developed, under altered circumstances it becomes the predisposing cause of disease, and is thus manifested as a diathesis.*

That very perfecting of the animal mechanism which secures its most efficient working under a given set of conditions, becomes, when these conditions are greatly altered, the source of derangement. For if unexpected demands are made upon the weak organs, and these are still further increased, as is the case in many instances, by the continued, although no longer necessary, activity of those organs which habitually work well, it is not surprising that deranged function, congestion, or inflammation should be the result. For the sake of illustration, we may assume that in cold climates, while the kidneys, lungs, and organs connected with fat digestion are well developed and educated by activity, the skin, liver, etc., are deficient in functional activity and consequent development, this arrangement being necessary for the generation and conservation of a sufficient amount of heat. Let such a constitution be transplanted to a hot climate, where the demands are exactly the reverse, and what must be the consequence? The liver, skin, and bowels, comparatively untrained and weak organs, are suddenly called upon to act energetically to keep down the heat of the body, and functional or structural disease is the result. Hence that very condition of the organs which was so suitable for the maintenance of health under former circumstances is here diathetically predisposed to diseases of the liver, skin, and bowels. What we have thus assumed to be the maladies most likely to affect those going from a cold to a hot climate are shown by the writings of the highest authorities to be the disorders which actually result from such a change. The converse of the foregoing has also been amply verified by experience in the case of natives of warm climates who have changed to cold ones. In these the lungs, kidneys, and digestive organs are most likely to suffer, and particularly from those tubercular disorders which result from the non-digestion of fats. These examples I have merely sketched for the purpose of illustrating my proposition. It is impossible, in so narrow limits, to discuss fully and exhaustively these and the numerous other constitutional modifications which depend on an equally great variety of influences. Suffice it for the present that I make my meaning clear. It is, I think, evident that while a diathesis becomes manifest as such only under circumstances which elicit its proneness to certain diseased actions, it is formed under very different conditions. The diathesis, where its essential constitution has been built up, is a salutary relation of the body to surrounding agencies—a healthy response of its organs to all the demands made upon them. It is only when it is transplanted to an altered set of influences, that inconvenience from it begins to be experienced.

Diathesis will manifest itself variously, according to the direction in which the change is made. A predisposition to quite different diseases, for example, will arise in the European, according as he moves northward or southward. It is well known that those whose ancestors have for generations been healthy inhabitants of a particular district, whose own health has previously been good, and who have inherited no apparent

predisposition to disease, invariably discover, on making their first great change of climate, that they have weak points of which they were until then ignorant. Nor is a great change necessary. A hundred miles—often much less—may bring the traveller into a climate sufficiently new to be trying. It is the common experience of those coming from not distant counties to reside in the Scottish metropolis, that several years elapse before the constitution becomes adapted to its severe spring seasons.

So numerous and various, however, are the diatheses which we encounter on every hand, that any attempt to unravel the tangled web may well appear, at first sight, to be quite hopeless. Only by tracing out thread after thread can we do it successfully. By taking a diathesis, and thoroughly analysing its strength and its weakness, noting the diseases from which it is free, and those to which it is prone, and then ascertaining which changes of climate or of other conditions give rise to similar manifestations, we shall gradually arrive at such a knowledge of its probable causes and nature as may prove a useful guide to us in our treatment.

7. *The conditions under which a diathesis is developed being the opposite of those under which the diseases depending on the diathesis are generated, the means employed for the treatment of the latter will be the opposite of those necessary for the alteration of the former.*

The cure or removal of diathetic weakness resolves itself very much into the question of acclimatisation; for climate must be regarded as the chief cause of constitutional modification. It is, of course, quite unnecessary to attempt the removal of a condition of the body which is highly beneficial under certain circumstances, unless those circumstances are to be altered. In the latter case a right anticipation of the effects likely to be produced by any particular change may be of the greatest importance. Many might thus be deterred from exposing their bodies to risks of which they would otherwise be ignorant. Even in cases where great changes must be undertaken, to be forewarned is to a great extent to be forearmed. Much may be done to ward off danger, through a previous knowledge of the directions in which it is likely to assail. We have already seen that all organs of the body are capable of a certain amount of education. In this process the work must be gradually increased as the power to accomplish it increases. Great and sudden augmentation of effort will prove disastrous. Hence it is not surprising that, where extreme changes of climate have been at once attempted, acclimatisation has been pronounced impossible. The history of many a colony, and the high mortality among European troops sent at once to tropical stations, testify to the fact that without constant new arrivals a race thus transplanted would soon die out. The sacrifice of human life brought about by such sudden transitions is so great that it is of the utmost importance to understand how it is caused, and how alone acclimatisation can be safely accomplished. In the adult great changes must in all cases be regarded as unsafe. High prospects in a foreign land are, however, often held out to the youths of a family, and it may be the duty of the parents to train them up so as to be able to avail themselves of these advantages. Analogy leads me to believe that, by a careful and gradual special education of the organs commenced in early life, much might be accomplished in this direction. We have seen that an internal organ, such as the lungs or liver, does undergo a development proportioned to its exercise, and it is probable that, by a carefully graduated scale of exercises, its functional powers might be developed as readily as those of the muscles or the organs of special sensation. Mr. Darwin speaks of "an innate wide flexibility of constitution" as being "common to most animals," upon which "adaptation to any special climate can be readily grafted," which is, in reality, this readiness of the organs of the body to become educated so as to respond to new or increased demand. Such training, however, to be successful must be gradual. During their earlier years the children should be cautiously moved through intermediate climates towards that in which they are ultimately to reside, a few years being spent at each in turn of a number of places by degrees approaching in climate to their final destination. Thus acclimatisation might, to some extent, be effected in one generation. Such a plan may appear quite impracticable; but I fear there is no royal road over so great a difficulty. Again, the serious sacrifice of life resulting from the system of garrisoning our foreign stations with recruits fresh from home demands the deepest consideration. If our tropical colonies are to be garrisoned by English troops, they should have a permanent army, consisting of men whose constitutions have, in early life, by a gradual removal from home through intermediate colonies, become educated and modified to suit the new conditions. Or the recruits should be taken from acclimatised families in some of the intermediate colonies approaching to the one alluded to in climate, these again being recruited from those still nearer home. Thus, a constant current of Anglo-Saxon blood, bearing with it English vigour, ideas, and customs, would be maintained, passing safely and profitably to the most distant British possessions. It must, however, be borne in mind that acquired organic power cannot be so perfect as that which has, for many generations, been inherited.

In the next place, the actual diseases which specially merit the name of diathetic are those connected with the organs and functions which, in the particular form of the constitution, are habitually weak. In most cases these disorders result from unusual augmentation of function, caused by change of circumstances, and rest to the overworked organs is clearly indicated. This will be best obtained under the influence of conditions which make small demands upon their activity, and those under which the constitution has been formed are most likely to meet this requirement. While this is to be remembered in all cases, it is most clearly indicated when organic or functional disturbance has followed recent change of locality in a person not previously so affected. Here it is highly probable that an alteration in the surrounding influences is the cause, and it is evidently our duty to advise a return, if possible, to the native air until the disturbance subsides, and then to direct our treatment to the careful cultivation of those weak points which have manifested themselves. By judicious management much may be done to mitigate the risks of change. This is, however, impossible, unless the nature of those risks be understood. I would here again reiterate my belief that, in cases of partial loss of an organ, when the remainder is healthy and sufficient in amount to ward off immediate danger, we may hold out considerable hope of gradual recovery to the patient. The grounds upon which we venture to anticipate such a result will make us careful to see that such a gradual process of recovery is favoured. The reason why such recoveries are so few is apparent. Undue haste, arising from ignorance of the principles upon which they are to be effected, often frustrates the possibility of such a happy result. If we are to succeed, both we and our patient must be content to keep up our efforts and our hopes for months and years instead of days and weeks.

What we often attempt with medicines is to educate organs—sometimes to perform their own functions better, sometimes to take up the functions of other organs which have ceased to be able to perform them. We do the former when we stimulate a sluggish liver into its proper activity. We do the latter when, in the case of organic disease of the kidneys, we administer purgatives. Our treatment here is evidently an effort to teach the bowels to excrete those substances which have been wont to pass off by the kidneys. It is a practical application of the law of community of function, which Dr. Carpenter thus describes:—

"As in the simplest or most homogeneous beings the entire surface participates equally in the act of imbibition, so, in the most heterogeneous, every part of the surface retains some capacity for it; since, even in the highest plants and animals, the common external integument admits of the passage of fluid into the interior of the system, especially when the supply afforded by the usual channels is deficient. In the same manner we find that whilst, in the lowest animals, the functions of excretion are equally performed by the entire surface, there is, in the highest, a complex apparatus of glandular organs, to each of which some special division of that function is assigned; but as all these glands have the same elementary structure, and differ only in the peculiar adaptation of each to separate a particular constituent of the blood, it is in conformity with the law just stated that either the general surface of the skin or some of the special secreting organs should be able to take on, in some degree, the function of any gland whose duty is suspended; and observation and experiment fully bear out this result." ("Comparative Physiology," p. 131.)

In conclusion I venture to offer the following suggestions regarding climate, which plays so important a part in relation to health and disease. In change of climate we have undoubtedly the most powerful remedial agent of which we can avail ourselves in the prevention and treatment of disease. As it has, however, never been rightly studied, we at present know so little of its connexion with, and effects on, morbid action, that the prevailing opinions on those subjects are most conflicting. If it is ever to be employed successfully, it must first be studied systematically, as other established remedies have been. It is not enough, although of great importance, to

know the physical characters of particular climates, such as their moisture or dryness, equability of temperature, protection from certain winds, etc. Until the effects of definite changes upon particular diseases are carefully tested and settled by experiment, we shall not be in a position to avail ourselves with anything like confidence of this means of cure. Nor is there any insuperable obstacle to such an investigation. Had we, in our large Hospitals, wards set apart for the purpose, and an understanding established between the principal Hospitals over the world, definite knowledge on this important subject would rapidly accumulate. Such an inquiry would throw much light upon the great question of diathesis and disease, and change of air would soon occupy the important place to which it is entitled in the treatment of disease. The expense of such an undertaking would not be great. A single ward at each selected locality would be sufficient for a commencement; and patients, willing, for the great benefit to be derived from such a change, to pay at least their travelling expenses, would always, I believe, be found in more than sufficient numbers. It would not, moreover, be unreasonable to expect from the wealthier members of society some support towards an enterprise from which they themselves would ultimately be the chief gainers.

CASE OF

DISLOCATION OF THE PATELLA ON ITS VERTICAL AXIS SUCCESSFULLY TREATED.

By CAREY PEARCE COOMBS, M.B. Lond.

E. H., aged 30, a strongly made country woman, was sitting on a heap of hay with her legs slightly bent, and resting on the heels. A young man came and sat himself violently down on her extended legs, and caused her great pain in the left knee, where she felt something give way. When I saw her, an hour or two after the accident, the leg was kept straight, and the least attempt to bend the knee gave her pain. There was a prominent ridge running vertically in front of the knee joint, produced by the outer edge of the patella, which might be felt under the skin, the bone being firmly fixed in the fossa between the condyles.

Flexion of the leg was of no use in attempting to reduce the dislocation, so I resorted to violent extension in this way:—She was on a mattress on the floor, and I knelt by her side on one knee, resting her left heel on my other knee. I then made strong pressure on the lower part of the thigh with one hand, while with the other I pulled the edge of the patella outwards, when the bone slipped at once into its place.

The case is recorded on account of the rarity of the accident and the failure of the method recommended for its cure. The crucial ligaments must have yielded to allow the leg to be extended beyond the straight line (if the expression is allowable), but they probably had been much strained in the accident. No swelling followed the injury, and on the third day the knee had recovered so far as to allow the patient to use it in walking.

Castle Carey.

TREPHINING.—Baron Larrey, on presenting to the Académie des Sciences a copy of the memoir he has recently published in the *Mémoires de la Société de Chirurgie*, observes:—"The analysis of more than 160 cases of traumatic lesions of the head, a portion of which have occurred in my father's and my own practice, enables me to come to the following conclusion—viz., valuable as is the operation of trephining in the practice of Surgery, it still should be reserved for well-defined cases and precise indications, and not undertaken with precipitation and in doubtful conditions, under the penalty of aggravating the accidents and hastening a fatal termination, while the prompt and rational application of other therapeutical resources will, in the great majority of circumstances, second the marvellous efforts of nature for the cure of the most redoubtable injuries. I may also remark, as I have done many times on other questions, that such treatment, which is essentially active, substituted for the removal of a portion of the cranium, constitutes in these cases true conservative Surgery (which is not to be confounded with expectation), to which I have devoted all my efforts during my career of thirty years."—*Union Méd.*, July 10.

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Medical Times and Gazette.

SATURDAY, JULY 17, 1869.

GENERAL MEDICAL COUNCIL.

AT the end of our last week's review of the proceedings in Council, we informed our readers that the debate on the mode in which the Council should deal with the conduct of the Queen's University in Ireland, in respect of preliminary examination, had ended on Wednesday in their accepting Dr. Parkes's resolution on it rather than Dr. Storrar's amendment. But the matter deserves a little fuller notice than we were then able to afford it. The Queen's University steadily persists in refusing to comply with the Council's recommendation that the preliminary examination be always passed before Professional education begins; and year after year the Council wastes time in gentle remonstrances with the university, and mild requests for an explanation of its conduct. This year the subject cropped up again as usual, and, as usual, a most polite and gentle remonstrance was, by Dr. Parkes's resolution, proposed to be again sent to the university, notifying to it that nearly all, if not all, the other licensing bodies had accepted and acted on the Council's recommendation, suggesting that it should do so also, and most courteously requesting that, if it still refused compliance, it would, at any rate, state its reasons for its refusal. Dr. Storrar, thinking that the Council should not for ever go on merely making polite requests which were disregarded, proposed an amendment adding a hint that the Council possesses the power of summoning recalcitrant licensing bodies before the Privy Council. This can hardly be said to be a very strong step to take after years of patient waiting, but it was too strong for the Council. Sir Dominic Corrigan, as the representative of the University, made a long speech utterly defying the Council, daring them to bring the University before the Privy Council, and threatening them with disembodiment if they took such a step; and the Council yielded, and rejected Dr. Storrar's amendment, only five of them voting for it, and five declining to vote either for or against it. At first glance this may perhaps seem rather weak on the part of the Council, but after all, when one considers how entirely devoted the Irish are, as a nation, to the worship of "moral suasion"—see among other examples their mode of convincing landlords—one should not be surprised that the majority of the Council objected to the employment of any ruder force against an Irish licensing body. But we would venture to suggest that the Council might have made their work more perfect by passing a standing order "that the Registrar should address to the Queen's University in Ireland a delicate remonstrance on its conduct with regard to prelimi-

nary examinations once in every year, till it may see fit to amend its ways in that respect." Some such resolution would save some trouble and much time.

On Wednesday afternoon the Council received a deputation of members of the Profession from Birmingham to present an important memorial on Medical legislation. The deputation, consisting of Dr. Bell Fletcher and Messrs. Sampson Gamgee, Arthur Oakes, and D. C. L. Owen, stated that the memorial had been signed by 5200 members of the Medical Profession, and that they believed "that in the course of a few days several thousand more signatures would be added," as for some days it had received 500 assents on the average a day. The memorial will be found at full length in our report of the proceedings of the Council. It is an ably drawn-up document, and, supported as it is by such a large number of the Profession, it well deserves the very full consideration and attention which the President, in the name of the Council, promised that it shall receive. The deputation were content with presenting the memorial, considering that no addition or explanation was necessary. The President of the Council, however, asked for some further information as to the exact meaning of some of the clauses, and remarked that "there had not been that explanation of some of the points which it was thought likely would be given." The memorialists have been satisfied with stating the principles which they think should govern any alterations and amendments of the Medical Act, leaving to the wisdom of the Council the details and modes of carrying out the principles stated; and these principles will most probably command very general assent. The memorial was, like many other documents on the same subject, referred to the Committee on the Amendment of the Medical Acts.

The report of the Committee on State Medicine then came on for consideration, and Drs. Acland and Christison moved a resolution that, in any amended Medical Bill prepared by the Council, "it is *desirable* that the requisite permissive clause for registering a qualification in State Medicine be inserted." To this, Dr. Andrew Wood and Mr. Hargrave proposed an amendment, to the effect that the subject should be delayed till next session, and in the meantime the report, with the evidence appended, should be transmitted to the licensing bodies for their consideration. The debate was then adjourned till the Friday, and occupied a great part of that day. The amendment above mentioned was negatived, and two other amendments to much the same effect, only directly acknowledging the importance of an improved education in State Medicine, were successively moved and rejected. Mr. Cæsar Hawkins then proposed, and Dr. Stokes seconded, the following amendment:—"That the following words be added to the original motion: 'In addition to any of the qualifications sanctioned by the Medical Act.'" This was carried, and the original motion with the added words was then agreed to.

The whole debate was a very important and able one, but we confess that our sympathies are with Dr. Andrew Wood, Dr. Quain, and other members of the Council, who urged that at least further time for consideration was desirable before coming to a decision on such a matter. We feel extremely averse to the holding out of any temptation to a multiplication of Medical qualifications, and we do not see that a clear and strong case has yet been made out in favour of this special new qualification. We think that the idea of making Medical men experts in all the subjects marked out by the committee to be included in State Medicine is entirely Utopian, and it appears to us that Dr. Acland was not so happy as usual when he instanced, as an argument in his favour, the necessity sometimes to Medical men of a practical knowledge of portions of engineering science. We are quite sure that when such questions are brought to Medical men they had infinitely better be referred to regularly educated engineers, just as the most eminent German witnesses called by the committee recommend that, even when there are State Physicians, chemical examinations for the detection of poison should not be intrusted to them, but be referred to professional chemists, or to Government professors of toxicology or chemistry. We believe that the deficiency dwelt on by the committee will be, in a great measure, supplied when all the desired improvements in the general and Professional education of Medical men shall have been attained, and we venture to think that the accomplishment of this is quite work enough for the Council at present. When the typical Medical Practitioner has been constructed, the "edifice may be crowned," if it shall seem desirable, by a qualification in State Medicine, but till then we would not hold out any temptation for the formation of such a qualification. It might possibly, however, be not undesirable to insert in an amended Medical Act a general clause giving the Council power to admit on the Register any new qualification that might appear to them to be demanded.

After the termination of the State Medicine debate, the President rose and addressed the Council, and concluded with "resigning into their hands the honourable office which he had held so long." He reminded them that when he had accepted the compliment they last year paid him by re-electing him, he had informed them "that he could not do so upon the usual terms—that is to say, of holding the office for five years;" and he observed that he had intended resigning office at the commencement of the present session, but that various complimentary speeches had induced him to remain a little longer in the Presidential chair; he was averse, however, both for private and public reasons, from holding the position any longer, though he had hitherto held it with great pride. He renewed his warm thanks "to the officials and members of the Council for the great aid they had given him," and he added some words which we cannot deny ourselves the gratification of reproducing at length here. He remarked, "Last year I felt there was an omission on my part, and before I leave you today I am anxious to supply that omission, and it is more particularly with reference to the public press, and especially the gentlemen who sit at that table as the reporters of that press. I cannot retire from this chair without expressing to them my admiration of the accuracy, the fidelity, and the impartiality of their reports. I cannot help also expressing my gratification at the extreme prudence, and tact, and circumspection with which the conductors of public journals have adverted to proceedings which have sometimes taken place in this Council." We beg leave to offer Dr. Burrows our very hearty thanks for these expressions. We regard them as a very valuable and most grateful testimony to the way in which the Medical press has succeeded in discharging duties of not always the easiest kind.

After the late President had retired, the Council carried, "by acclamation," a resolution expressing its warmest thanks "for the able and admirable manner in which he had so long conducted the business of the Council, for the kindness and impartiality which he had so uniformly displayed towards the members of the Council, and the determination he had shown on all occasions to conduct their discussions with the view to the improvement of the education of the Medical Profession and the welfare of the public."

This vote of thanks to Dr. Burrows will also be carried by acclamation by the Profession at large, and the most warmly and heartily by those members of it who have the most closely and narrowly followed the proceedings in Council during the years of his presidency. The ruler and president over such a body as the Medical Council needs to possess, if he is to be equal to the position, not only great soundness and readiness of judgment, but equal tact and discretion, and he must be not only courteous and impartial, but also firm and decided, and all through the term of his presidency Dr. Burrows has more than well filled his office; he has adorned it, and has left his successors an example which it will be nobly difficult to equal.

Dr. Paget, representative of the University of Cambridge in the Medical Council, has been unanimously elected President of

the Council; and this fact is such a perfect testimony to his fellow councillors having observed him to possess the qualities that high office demands, that any remarks of ours on his election would be out of place.

On Saturday, the ninth day of session, the first business was the reception of the report of the Finance Committee. From this report it appears that the total expenditure of the Council for the year 1868 was £5190 and some odd shillings and pence, being one halfpenny less than £61 above their total income for the year; while for the year 1869 it is estimated that their expenses will exceed their income by the not small sum of £575. This was regarded, and rightly, by some of the members as anything but a satisfactory state of things, and one demanding some decided effort on the part of the Council to lessen the expenditure. As the best way of attaining such end, Drs. Andrew Wood and Quain proposed "That the members of Council be allowed five guineas a day for six days, or whatever number of days under six the Council may sit;" that, whatever the length of the session, no member should be paid for more than six days; and that any member absent, without the leave of the President, from any meeting after the sixth day, should forfeit three guineas for each day of absence. Travelling and hotel expenses to remain as at present. Drs. Christison and Thomson moved, as an amendment to this, "That the annual session be limited to six days; and that the powers of the Executive Committee be extended in the Medical Acts Amendment Bill, so as to allow any remaining business of the Council to be transacted afterwards by the Executive Committee." This was rejected by the casting vote of the President. A second amendment—"That it be remitted to the Executive and Finance Committees jointly to consider and to report on the best means of lessening the expenditure of the Council"—was then put, carried, and agreed to as a substantive motion. The discussion was long, and therefore expensive, and at times it was decidedly warm and amusing. Dr. Thomson observed that, "with regard to the length of the speeches, it was not so much that they were extremely long speeches, but that there were so many speeches on topics that scarcely deserved a single remark." Dr. Stokes "thought a very short time would be sufficient for the sittings. He had never attended any board meeting which was so useful and business-like as one in which it was proposed by the President and agreed that each speaker should be limited to five minutes." And Dr. Storrar said that, "if the Council were just quietly to transact their business in a common-sense way, and dispense with inflated addresses, a great deal of expense would be saved." To which remarks Dr. Andrew Wood feelingly replied that, "if any one should tell him that in an assembly of British councillors they would be able to put a gag upon the expression of sentiment, he would reply that such a person did not understand the spirit of the British constitution. . . . It would not be right to say that a man was to stop short in an argument because the clock indicated that the five minutes allotted to him had expired. He should like to know what rational association in this country did that:" while as for Dr. Storrar's remark about inflated speeches, "when Dr. Storrar launched out upon his favourite hobbies in regard to education, he generally started with considerable inflation, though by the time he came to the end there was considerable collapse."

Some of the members of Council are able to go on day after day doing good work with only rare or brief indulgence in speech-making, but Dr. Andrew Wood is not of this kind. He is a very able and willing worker, but his temperament, like the British Constitution, demands unbounded freedom of speech. If funds run short, he is ready to sit in Council and go on debating any number of days for nothing; but put restraints on speaking! never—better liberty even verging on licence than the faintest shadow of a gag on the British Councillor.

The report of the Committee on Medical Education was then received, and it was agreed that it "should be taken into consideration at the next session of Council, and that in the meantime the report, with the appendices, be submitted to the various licensing bodies for their consideration and remarks, with a request that their remarks be sent to the Registrar on or before December 1, 1869;" and a committee of five members was appointed to receive the comments of the licensing bodies, discuss with them the various points raised, and report the results to the Executive Committee at least one month before the next session of the Council. We cannot now discuss this very important report, but must be content to assert that it recommends compulsory class examinations in the Medical schools, a primary examination at the end of the second winter session, and a pass examination at the end of the fourth year; that the exact order, number of lectures, and amount and kind of practical instruction be left to the schools; and that a conjoint examining board be formed for each division of the kingdom, "before which every person who desires a licence to practise should appear, and by which he should be examined on all subjects."

The report of the Committee on Preliminary Examination was also received, and it was agreed that "the attention of the several Medical corporations be drawn to the recommendation 'that the examination in general education be eventually left entirely to the examining boards of the national educational bodies recognised by the Medical Council,' and that their opinion be asked whether the time has not now arrived when this recommendation should be carried into effect."

On Monday, the tenth day of session, the Council received the report of the Committee on Amendment of the Medical Acts. It is quite impossible now to even mention all the important points in this report; it will require full consideration on a future occasion. Though received, it was not adopted by the Council as a whole, though some parts of it were agreed to, and a resolution was come to to send it to the Lord President of the Council, with the information that it had not as a whole been adopted by the Medical Council. A large amount of time was taken up by a discussion excited by a proposal of Sir D. Corrigan's to refer the whole question to a Royal Commission of Inquiry—a candid confession of utter incompetence on the part of the Council to deal with it. The confession-resolution was, however, not accepted. The Council did agree with the committee that, after very careful consideration of the objects and purposes of the existing Medical Acts, they are of opinion that "the present Council is essentially well constituted." In another clause they add that, should the Legislature see fit to enlarge and extend the powers and functions of the Council so as to bring the Profession at large more directly under their influence, then they thought "the Profession at large should have more direct influence in the appointment of the members of Council;" and this clause also the Council agreed to. More about the report we cannot now give.

The rest of the day's work does not demand much notice. Reports were received from the Committee on Returns from the Licensing Bodies of Professional Examinations; the Committee appointed to Rearrange the Recommendations and Opinions of the Medical Council on Education, Examinations, and Registration; and the Pharmacopœia Committee. The latter committee was reappointed, and a renewal of powers, etc., granted to the Executive Committee. All the usual votes of thanks were of course passed; and the Council, feeling it was not dignified to depend on charity year after year for lodgings, and that they never could hope to save money enough to buy a house themselves, instructed the Executive Committee to apply to Government "for suitable apartments for the use of the Council." The Councillors then rose and (as was said of an Eastern sage) went to their own place.

MADAME LA PHARMACIENNE.—A *pharmacie* has just been opened at Montpellier by Madame Deumergue, Bachelor in Science, this being the first establishment of the kind in France under the direction of a lady.

ON THE TEACHING OF OPERATIVE SURGERY.

Our readers are aware that we are devoting our attention to an inquiry into the means of procuring a proper supply of material for dissection and Operative Surgery, and we fear that, until this want is remedied, we can do but little more than offer some few suggestions with regard to the existing mode of obtaining instruction in Operative Surgery. At the present time the greater part of our students pass through their curriculum without ever performing for themselves operations on the dead body, and all the practical instruction they obtain is from the cases they see on the operating day in the theatre, and chance remarks made by their anatomical teachers; and they therefore get no more than a general idea of the several steps of the operation, and of the proper method of using the instruments.

Setting aside what is termed "style," the requisite freedom of finger, wrist, and arm cannot be effectively taught merely in dissecting, which in most instances is a process of laborious "picking," although we think that every teacher of practical anatomy should inculcate as much as possible that the student should dissect as though he were operating, which is likely to prevent his subsequent operations from being more like dissections.

Practically, the teaching of Operative Surgery lies in the hands of some few known instructors who have made themselves a name in this branch, and, of course, for private instruction, the student is at liberty to choose his own teacher. But every school should have its teacher of practical Surgery, an appointment which should not be the *sinecure* we know it to be in some Hospitals; and the course which figures so invitingly in the prospectuses should be carried out to the letter.

A public course should be given in the summer session for the senior students, in which the teacher should go through, surgically and anatomically, the operations, explaining the why and the wherefore of every step and the proper handling of the instruments, making the pupils take it in turn to assist him. By this means they will also be taught their proper places in the operating theatre, and perchance give spectators a view of what is going on—another point dreadfully neglected in our theatres. We all remember the humorous sketch shown in Sir Wm. Fergusson's college lectures, and we can vouch for its correctness. Every one should be shown what his place is in these demonstrations, who are to hold the instruments, where they are to stand, how the vessels should be tied, and where they are. The body or bodies for such a public course should be provided for either from the funds of the school or by a subscription amongst the class.

We cannot consider the course sufficient in itself. What further instruction the pupil requires he must, as things are at present, obtain either privately or abroad.

We are induced to make these few hints because we know this subject to be most irregularly carried out in our schools, and because the examinations at our examining boards have fortunately become of such a practical nature that a more intimate knowledge of Surgical processes is needed. The great point, however, is a better supply of material, although even with our present scarcity these matters might be greatly improved.

THE WEEK.

TOPICS OF THE DAY.

The deputation from the British Medical Association, who had an interview with the Lord President of the Privy Council, Earl De Grey and Ripon, on the subject of the direct representation of the Profession in the Medical Council, undoubtedly included some of the most highly esteemed of our provincial *confrères*, but, in spite of the advertisements which were circulated to induce them to attend, the Medical men of London were distinguished by their absence. The deputation, however, obtained the assistance of a fair sprinkling of members of Parliament; and, as may be supposed, the importance and political weight of the Association which the deputation represented lost nothing from the oratory of Dr. Waters and Dr. Sibson, who did the principal talking on the occasion. The proposition urged on the Government by Dr. Sibson was the one agreed on at the Dublin meeting of the Association—viz., that eight members should be added to the General Medical Council as it at present exists, that the new eight should be elected by the Profession, four for England, two for Scotland, and two for Ireland—and the great reason Dr. Sibson alleged for this change is the imperfect condition of Medical education; but how this is to be benefited by the addition of eight popular representatives to the already large Medical Council, it seems difficult to understand. We have not the slightest objection to giving the Medical Profession a new franchise, but we do object to an increase in the number of the Council, and we must honestly confess that we have no faith in direct representation producing the results that are expected from it. We thoroughly agree with Dr. Sibson and the gentlemen he represented, that the standard of preliminary education and examination might in many instances be raised with great advantage to the Profession, that the number of separate examinations by different boards which the student is required to pass might with benefit be lessened, and that every student should be subjected to a clinical test before being let loose on the public. But how these objects are to be gained by adding eight talkers to the Medical Council, we cannot see. Why the establishment of a conjoint examining board in each of the three kingdoms should be more likely to follow the direct representation of the Profession by a small minority in the General Council, we cannot conceive. It is simply a *non sequitur*. Desirable as these improvements in education and examination are, they cannot be obtained without an Act of Parliament. Direct representation also cannot be obtained without an Act of Parliament. Do Dr. Sibson and the British Medical Association contemplate two Acts of Parliament or one? The idea of two Acts may be disposed of by referring to the last eight years' experience. If one Act only is to be obtained, an increase of the Medical Council in order to improve Medical education would be simply superfluous. It would be to send for the engine after the fire is put out. We quite agree with Dr. Sibson that it is not at all desirable that the examining boards of the Medical Profession should be appointed by the Executive Government, for the members would be inevitably chosen by the responsible Medical adviser of the Government, but we doubt whether this assertion of principle is likely to favour at the Privy Council Office the cause which the deputation represented.

The weekly returns of deaths in Paris are now furnished by the French authorities to the office of the English Registrar-General in time to be incorporated with the weekly returns for London and the thirteen other large towns of the United Kingdom, so that at a glance the death-rate for the same week in the populations of the two foremost cities in the world can be read. The returns for Berlin and Vienna which have already appeared in the Registrar-General's reports have not been for the current week, and have therefore lacked some of the value and interest which will be given by the Paris returns. It is satisfactory to know that a regular system of international sanitary statistics has been thus begun, and it cannot be doubted that it is destined to be, as facilities for intercommunication are increased, co-extensive with civilisation. Why, for instance, should we not have the weekly number of deaths in New York and St. Petersburg by telegraph to compare with our own? The Paris weekly bulletin is a single sheet, containing the population, the deaths from the various epidemic diseases, and the total mortality. At present the severity of epidemic disease appears, on the whole, greater in London. Last week we lost 29 from measles against 12 in Paris, and 85 from scarlatina against 5 in Paris.

Eighty-four of the "London charities" are to receive £400 apiece on account of the bequest made to the "hospices" of London and Paris by Lord H. Seymour. This award is in accordance with the decree of the Master of the Rolls. £33,600 will be thus expended. We hope we shall not be deemed cynical if we suggest the query of how much pecuniary injury this bequest will do to the Medical Profession, and how much benefit it has done to the legal.

A majority of twenty-nine peers threw out the Life Peerages Bill on the third reading. We have seen this result described as unexpected, but considering the tone of the debates on the Bill, the coldness with which the measure was received out of doors, and last—perhaps not least—the taunts which the picture of the House of Lords endeavouring to liberalise itself drew from a leading member of the Ministry, we can scarcely be surprised at the result. Friends and foes must acknowledge that the House of Lords has vindicated its claim to be the first debating club in Europe in the recent debates, and we can scarcely wonder that a body which has achieved so signal a triumph is unwilling in a political crisis to renounce its privileges, or tamper with its constitution. We can, however, only look upon the introduction of life peerages as a measure postponed. Now that a Bill has been carried to the third reading in the upper House, and found favour with many leading men on both sides, it is not likely that its principle will be buried with it. Earl Russell's measure had been reduced to very small dimensions before it received the *coup de grâce*. Had it gone to the Lower House, it is impossible to say what shape it might have taken. The exclusion of the Irish Bishops must leave some vacant seats which it is at least likely the Ministry might have been glad to fill with life peers of a different order.

Mr. Justice Brett has recently shown a flaw in the provisions of the Act which permits the Secretary of State to send criminal lunatics to any asylum without public trial, 27th and 28th of Victoria, cap. 29, sect. 2. This section provides that—

"If any person imprisoned under a charge of any offence shall appear to be insane, it shall be lawful for two justices and two Physicians to inquire as to the insanity of such person, and upon their certificate that such person is insane, the Secretary of State may direct by warrant that such person shall be removed to a lunatic asylum, and every person so removed shall remain in confinement in such asylum until it shall be duly certified to the said Secretary of State by two Physicians or Surgeons, etc., that such person is sane; the Secretary may then issue his warrant that such person may be removed to any prison to be dealt with according to law."

In the case of Bridget Hart, who was charged at the Warwick Assizes with the murder of Mary Ann Ackland, both the accused and her victim were lunatics in confinement at the time the murder was committed. Hart was committed to gaol by the magistrates on the charge of murder, but was removed to the County Lunatic Asylum on the warrant of a Secretary of State. Since then she has so far recovered that the Medical attendants of the asylum were enabled to give the following certificate, which it will be noticed did not absolutely certify sanity:—

"We hereby certify that we have seen and examined Bridget Hart, now confined in the lunatic asylum of the county of Warwick at Hatton, in the said county, and we found that she answered questions rationally, and appeared perfectly to understand the same, from which we consider her fit to be removed to the county gaol, and to take her trial at the assizes now being holden.

"Given under our hands the 9th day of July, 1869.

"Robert Jolly, M.D., F.R.C.S.

"Wm. Hopkins, L.R.C. Phys. and M.R.C.S.E."

On the counsel for the prosecution, Mr. E. Bennett, presenting this certificate, and asking for an order to bring up the accused to plead, Mr. Justice Brett is reported to have said that—

"He did not feel at all certain that he could make such an order. If the prisoner were in gaol, he could make an order to have her brought up here to plead; but the question was whether, now the accused was in a lunatic asylum, under the authority of the Secretary of State, he could make the order.

"Mr. Bennett said that he could find no authority either way upon the matter.

"His Lordship said it had been a great mistake to remove the accused under the warrant of the Secretary of State before she had been tried. The greatest inconvenience might arise, because a person might be in a lunatic asylum under the Act, and the Medical men might not be able to give a certificate to the effect that the person is sane, and yet such person might be sane enough to take her trial or to plead. Under the circumstances he thought he could not make any order, and the better course would be that those who had procured the warrant of the Secretary of State had better forward the Medical certificate to him, and he would judge whether or not it was one upon which he could act."

The squabble between the Poor-law Board and the *ex-officio* and the newly-elected guardians of St. Pancras is a curious little episode in the history of pauper administration and local government. We retain our opinion that the outlay to be met by the ratepayers of St. Pancras for new buildings was both extravagant and unjust, and we therefore can sympathise, to a certain extent, with the ratepayers, who appointed the new guardians for the express purpose of retrenchment. The inquest which we noticed last week, in which the censure of the coroner's jury was recorded, unwarrantably as it seemed, against Mr. Harley for dismissing a patient too soon from the asylum, appears to have been, in fact, an attack by the party represented by the *ex-officio* guardians on the policy of the new guardians. The latter, however, are quickly making reprisals. The guardians have received a letter from the Poor-law Board, in which Mr. Harley is charged, on the report of Dr. Markham, with having dismissed several patients suffering from serious illness or debility from the Workhouse Infirmary, amongst them Mary Allen, on whom the inquest was held. In answer to this, by a majority of eleven to five, the guardians have sent a defiant missive to the Poor-law Board, in which they assert that Dr. Markham has been "whipped up" for a specific purpose on this occasion, and inquire whether he had personally made himself acquainted with the cases mentioned. They have suspended the master of the workhouse for a month, because they believe him to be in league with the opposite side; and as they consider Dr. Ellis, the resident Medical officer, also a partisan, because he accepted an invitation to dine with Mr. Wyatt, the chairman of the late Board, they have determined, by a majority of eight to four, to apply to St. Luke's Infirmary, where Dr. Ellis was previously employed, to know why he was dismissed from that establishment. Of course nothing can be worse in taste, or more likely to discredit local government, than such proceedings as these. The Poor-law Board have announced that they intend to institute an inquiry into the cases of the patients dismissed the Infirmary by Mr. Harley. We think that the whole history from beginning to end shows the rottenness of the present system of poor relief.

Mr. Moore has been appointed the joint Lecturer on Surgery at the Middlesex Hospital, in place of Mr. Shaw, who has retired.

Dr. Silver has been elected to the Chair of Physiology at the Charing-cross Hospital School, in place of Dr. T. Claye Shaw, who has resigned. Dr. Julius Pollock succeeds Dr. Silver in the Chair of Forensic Medicine. The Chair of Botany and the Chair of Midwifery are, we hear, vacant.

A miscreant named Fowkes, described as a newspaper agent, has been sentenced, at the Warwick assizes, to ten years' penal servitude for the felony of attempting to produce abortion on the person of a young woman named Susannah Bromfield. The seducer of the girl, one Bailey, who took her to Fowkes for the purpose, has been sentenced to five years' imprisonment. The counsel for the defence tried to make the girl an accomplice or consenting party, and urged that it was necessary that

corroborative evidence should be produced before a conviction could take place. The only corroboration that could be offered was the testimony of the police, who found medicines, books, and instruments on Fowkes's premises, and who proved that when Fowkes was apprehended he asked, in Bailey's presence, whether, if Bailey married the girl, the prosecution would be stopped. We are glad that the judge, in summing up, completely disposed of this plea—first, by directing that, to make the girl an accomplice, she must have known that an instrument was to be used on the first occasion of her going to Fowkes's shop; and that, even if the jury considered her an accomplice, the evidence of the police, and the admission implied in Fowkes's question to the police, were sufficient to support her story. We are very glad that the judge (Mr. Justice Brett) took this decided line. In too many of these cases some legal quibble has produced an acquittal, when the evidence of guilt to ordinary persons was quite clear. If the judges show themselves determined to uproot, in spite of legal difficulties, what we fear is an increasing crime, they will deserve the thanks of the community.

Dr. Patrick Heron Watson is understood to be a candidate for the chair of Clinical Surgery in the University of Edinburgh. Dr. Watson's antecedents are such as fully justify his claims to the chair. He began his Professional career by serving in the Crimea, and has since uninterruptedly been teaching and practising the highest departments of Surgery at Edinburgh.

DR. LIVINGSTONE.

H. A. Churchill, Esq., C.B., H.M.'s Consul and political agent at Zanzibar, has just arrived in this country on Medical certificate. We are happy to hear that Mr. Churchill speaks with confidence as to the safety of Dr. Livingstone, from whom he has had letters of a date more recent than that of his reported murder. It is Mr. Churchill's opinion that Dr. Livingstone, having heard of the discovery of the northern portion of Lake Albert Nyanza by Sir S. Baker, has directed his route in search of the southern boundary of that lake, and that in the course of a few months it is probable that further news will be heard from Dr. Livingstone himself.

SUPERANNUATION TO CORONERS.

At a recent meeting of the Marylebone Vestry a resolution was carried, "That Mr. Thomas Chambers, M.P., be requested to oppose as much of the 'County Coroners' Bill' as provides for the granting of superannuation allowances to coroners ceasing to hold offices." A resolution was also carried asking for the co-operation of other vestries and district boards.

PROFESSOR OWEN AT CHARING-CROSS HOSPITAL.

On Monday last Professor Owen, who had kindly consented to give away the prizes to the successful candidates in the Charing-cross Hospital School of Medicine, presided on the occasion, and exhibited that graceful eloquence which makes him at once one of the wisest and most pleasant of men. There was no lengthy and elaborate address, but the kind remarks made to each successful competitor could not fail to enhance the value of the gift from his hands. He alluded to the great variety of researches which might be pursued by Medical men; to the time when he, as a Medical student at Edinburgh, studying under Barclay, Jamieson, and Hope, first selected the career which he has so ardently pursued. He also spoke of the enthusiasm which filled Hope when he announced the discoveries of Sir Humphry Davy—those first fruits of chemical science which have since been so fully yielded in that department of knowledge. He alluded to the faint sketch of palæontology which Jamieson used to give, and which was his own first introduction to that science and that line of research. At the conclusion of the meeting the Professor was saluted with a hearty round of applause.

RATING OF HOSPITALS.

Dr. Gibbon moved, at the last meeting of the Marylebone Vestry, "That a petition be presented to the House of Commons praying them not to pass a Bill at present before their honourable House, exempting Hospitals, Infirmaries, and Dispensaries from liability to rating." A long and animated discussion followed. It was contended, on one side, that all property should pay its share to the parish funds, and that many so-called charities were useless, and did not relieve the rates by the assistance they afforded to the poor; on the other hand, it was contended that they did relieve the rates, that it was an act of justice to relieve such charities from rating, etc. Dr. Gibbon's resolution was carried by 19 to 16.

ROYAL IRISH ACADEMY.

The closing meeting for the session 1868-69, which had been adjourned from the 28th ult. in consequence of the death of the Rev. James Henthorn Todd, D.D., Senior Fellow, Trinity College, Dublin, ex-President of the Society, was held last Monday evening. Dr. Robert McDonnell, in the unavoidable absence of J. M. Purser, M.D., read Part I. of that gentleman's Report on Cohnheim's Researches on Suppuration. In this most interesting communication the author stated that he had been able to verify all Professor Cohnheim's observations relative to the passage of the white blood cells from the interior of vessels supplying an inflamed surface into the surrounding tissues. Dr. Purser's experiments were made chiefly on the mesentery of the frog, but he also experimented on young rabbits for the purpose of comparing the course of events in warm- and cold-blooded animals. This he found to be, in all important respects, the same in the two classes. The paper was illustrated by drawings representing the so-called amœboid movements of white blood corpuscles, as also the pavement epithelium and "stomata" of blood-vessels. The importance of the subject, when viewed in connexion with Axel Key's recent investigations on pneumonia and renal disease, cannot well be over-estimated.

REGISTRATION OF DISEASE.

The committee representing the St. Andrews Medical Graduates' Association, the Medical Society of London, the Metropolitan Association of Medical Officers of Health, and the Poor-law Medical Officers' Association, with Dr. Richardson as chairman, have issued a "memorandum on the advantages to be derived from a registration of disease, and the mode in which such a record may be obtained." After commenting on the expediency of having returns of sickness in addition to returns of deaths, they go on to say:—

"It is manifestly impossible, however desirable it might be, to obtain reports of all the cases of sickness as they occur in the United Kingdom.

"Most diseases, especially diseases depending on preventible causes, strike hardest the poorer classes of the community, and a record of the diseases attacking them would be a very sufficient gauge of the proportionate frequency and of the actual character of the diseases afflicting the entire population.

"A very large number of the poor are recipients of public aid at the hands of the Poor-law Medical officers. They are visited at their own homes, or at the workhouse in the immediate neighbourhood, so that notice of the occurrence of disease amongst them would almost invariably come from the actual place where it had been incurred.

"There are about 3200 Poor-law Medical officers in the United Kingdom, attending annually, as nearly as can be computed, 3,000,000 cases of disease.

"Weekly or fortnightly, the 3200 Poor-law Medical officers furnish their respective boards of guardians with a return, under several heads, of all the cases of sickness at the time under their care.

"These valuable returns serve now for a mere local purpose; but the information they contain would, if collected and tabulated, furnish the data necessary for a knowledge of the distribution of disease generally, the character of diseases special

to localities and occupations, and the presence and spread of epidemics.

"By the action and authority of the Poor-law Board, a registration of disease, based on these returns, may be effected."

The committee have prepared specimens of a district Medical relief book and of a workhouse Medical relief book, containing the columns of the present form of district Medical officers' returns rearranged and added to, so as to consist of two parts separated by perforations. one part (A) containing all the information necessary for the board of guardians, the other part (B) containing the particulars needed for the registration of disease.

"Part (B) should be sent weekly or fortnightly by the several boards of guardians to the General Register Office, where they should be tabulated and classified. The weekly meteorological reports, obtained from the different stations of the United Kingdom, being sent to the same office, and the geological survey of the country being completed, the Registrar-General would be able, by periodical publication of the classified returns, to furnish the central health authorities and the public with accurate information concerning the dependence of disease on climatic conditions, such as moisture, cold, and soil; concerning the dependence of disease on bad hygienic conditions, such as overcrowding, defective sewerage, and dirt; concerning the special diseases of artisans, such as workers in lead, grinders, and miners; concerning local prevalence of disease, such as cancer, stone, and consumption; and concerning the earliest appearance of epidemics, such as cholera, diphtheria, and typhus. The existence or the great prevalence of these and suchlike diseases being known, immediate steps could be taken to ascertain their causes, and to remove them where possible; and measures could be adopted, without loss of valuable time, to prevent the spread of infectious disorders to uninfected districts.

"The comparatively small expenditure required for this great national object would be abundantly repaid in the increased power which would be obtained for the prevention of disease, and the consequent improvement in the general health and welfare of the community."

FROM ABROAD.—THE MEDICAL PROFESSION IN THE UNITED STATES —A QUADRILATERAL DISCUSSION AT THE ACADÉMIE.

A RECENT number of the *New York Medical Record* (June 15) contains an interesting letter from Professor Gross, whom so many of us have recently had the pleasure of seeing in this country, in reply to some severe strictures of the editor on the inferior position of Medical science in the United States as compared with Europe. In Surgery, at all events, he maintains that it heads the world, and this his adversary does not deny as far as manual dexterity, ingenuity of contrivance, invention of instruments, and successful results are concerned; but when we come to the scientific and scholarly cultivation of this, and still more of the Medical branch of the Profession, he maintains that woful deficiency exists. The Professor does his best to show that many of the statements are exaggerated or erroneous, and to some extent he succeeds; but he has an opponent to deal with who, while able and acute, is endowed with the courage necessary for the enunciation of unpalatable statements, and an amount of information to base them upon that must command attention. That an editor of a Medical journal can use language so incisive and make statements so damaging to the consideration of the body amongst which he must hope for readers, speaks highly for their willingness to have the malady laid bare as a necessary preparation for its removal. How thoroughly he goes to the bottom of matters may be judged of from a comment on an opinion expressed by Professor Gross that such statements must injure the Profession in the eyes of Europe:—

"We regret that he lends countenance to our national feeling of conceit. Individuals, like nations, cannot create, but must *earn*, their reputations. In private intercourse unwarranted conceit always makes enemies and despisers, while genuine achievements, united with a dignified and independent self-confidence, in the long run, command respect, and by a law as sure as gravitation. Europe has despised America not so much because of her youth and ignorance as because of her disagreeable over-estimate of her achievements."

If, however, the critic's statement be correct that a leading reason why the Profession of Medicine is in so inferior a position in the United States is that all the best men turn to divinity or law as the object of their attention, the remedy may not be very readily found.

"We must admit," he says, "that our Medical schools, as a rule, contain the leavings of all other professions. They are, it is true, always redeemed by some noble exceptions. Enter any Medical college you choose, and you will find on the average less culture, knowledge, and genius than among any other body of young men that are gathered together for any educational purpose whatever. This is a plain fact, often spoken in private; and it is our right and duty, in our efforts for reform, to look it squarely in the face, and boldly express it in public. . . . . Every year our leading colleges send forth each about one hundred students. How are these distributed among the professions? In precisely the same way that a farmer sorts and divides his potatoes. First the fairest and the comeliest—with exceptions always—are picked out and given to the ministry. Then the lot is again assorted, and the best are assigned to the law. Business and teaching take the few sound and fair specimens that are left. Last of all, the college basket, with all its leavings, its blights, its abortions, and half-growths, is emptied into the lap of Medicine. It is very well understood among college boys that after a man has failed in writing, failed in speaking, failed in every purpose for which he entered college—after he has dropped down from class to class—after he has been kicked out of college—there is *one* unfailing city of refuge—the Profession of Medicine. On this subject we speak not from hearsay, nor from general and indefinite impression, but from long and special investigation, and with abundant opportunities of gaining information. We repeat again, with stronger emphasis than before, that in our American colleges Medicine is the most despised of the professions. On this subject we challenge contradiction, and we promise shortly to publish in these columns statistical evidence and testimony that shall put the question beyond the realm of discussion."

We may notice one other point dwelt upon by this caustic writer—viz., an approximate comparative statement of the number of books, pamphlets, etc., relating to Medicine published in Europe and America during the last ten years.

"Obstetrics and gynæcology, 500 to 25; ophthalmology and otology, 1500 to 25; electro-therapeutics, 40 to 2; all departments of Medical science, 4000 to 500. In this calculation translations or reprints are not included. If we simply compare England and the United States, nearly equal in population, the superiority of the former is wonderful. Between the Medical literature of the United States and Germany there can be no comparison, only contrast."

We hope that Professor Gross is correct in taxing his opponent with exaggeration, or that his remarks have a more local application than the writer attributes to them. Still, as he undoubtedly indicates real defects, displays them in language of no mean power, and is evidently actuated by a warm desire for the elevation of the Profession, which at present he represents as so depressed, we have no doubt that the criticisms he has put forth will in time yield good results. In the meantime we are happy to acknowledge that, whatever amount of truth his picture may contain, the exceptions must indeed be numerous, and are glad to record Dr. Gross's experience of how his *confrères* are appreciated among ourselves. Speaking of the alleged slights to which the American delegates were subjected at the Paris International Congress, he says:—

"My impression, from all I have seen of the Parisian Physicians and Surgeons, is that they intended no such slights. The Congress was essentially a French affair from beginning to end, intended to enable a few Frenchmen to ventilate themselves, as I am told they did, to the great disgust of the delegates of other countries. Paris is the hub of the universe, and consequently all outsiders are barbarians. The French are the most polite impolite people in the wide wide world. They know nothing of our language, and are as ignorant of our Profession as the Sioux Indians. Our English brethren, who know us much better, fully appreciate us, and speak in the warmest praise of our wonderful progress and elevated position."

We recollect that, a year or two since, one of our Paris *con-*

frères, after spending some time of the heat of summer in our island, and observing how John Bull loved to give himself relaxation during that period of year, on his return proposed to the Société de Chirurgie that, in place of meeting week after week all the year round, a vacation should be declared. Instead of agreeing to the proposition by acclamation, a committee was appointed, which reported adversely, and that for the most advanced and cosmopolitan reasons:—What would the luckless strangers do who frequent Paris at this season of the year if they found the halls of the academies and learned societies closed, and their opportunities of enjoying French eloquence and imbibing French instruction cut off? All we can say is, that if there are idiosyncrasies which can enjoy scientific discussions in the dog-days, they may have what is vulgarly called a "bellyful" this present year at the Académie de Médecine. This learned body has, in fact, involved itself in a triangular debate. First came the discussion on purulent infection, the progress of which was interrupted by the reading of M. Barth's report on the recent epidemic of cholera, which will entail an endless debate. This, however, had not commenced when the President recollected that a debate on M. Depaul's report on animal vaccination, begun a year or two ago, had never been finished, and summoned M. Guérin to recommence it forthwith. A fourth discussion, on the mortality of new-born infants, also only postponed, is looming in the distance: so that here we have the learned body fairly enclosed within a quadrilateral, and how and when it will extricate itself remains to be seen. Meanwhile M. Guérin, kept away from the Academy for some time by illness, has returned like a giant refreshed, and poured forth a torrent of argument and eloquence which truly seems inexhaustible. Already he has occupied two meetings of the Academy with a speech which fills thirty columns in his *Gazette Médicale*, and he is to have at least another day to finish up. M. Depaul will have his reply, and M. Guérin his rejoinder, to say nothing of the operations of their coadjutors. Certainly our sympathies are with the view taken by M. Guérin, although we cannot spare him our space; for he reproaches M. Depaul with exaggerating grossly every defect that can be imputed to the arm-to-arm vaccination, and, in place of seeking to perfect its performance and spread its application, drawing off public attention to superfluous and insufficient substitutes. When this flood of eloquent talk has subsided, we shall endeavour to gather up the residuum for the use of our readers, if any such remain; for at present we meet with nothing but constant reiterations of well-known arguments and facts. Sometimes, while attending our own Medical societies, and observing the hesitation and awkwardness of many of the speakers, we have been tempted to wish that they were gifted with some of the fluency of our *confrères d'outre mer*. But, on reflection, we think matters are better as they are, and we prefer having a good practical fact stammered out, or the results of careful observation somewhat confusedly yet briefly detailed, to this avalanche of well-rounded phrases and epigrammatic periods which, rushing past you with fearful velocity and endless repetition, leaves you, as regards the acquisition of knowledge, very much where it found you.

PARLIAMENTARY.—LIFE PEERAGES—MEDICAL OFFICERS' SUPERANNUATION IRELAND BILL—CONTAGIOUS DISEASES ANIMALS BILL—CRIMINAL LUNATICS BILL—BABY FARMING—THE INQUEST AT ST. PANCRAS—SMILL-DOWN CHILDREN—THE COUNTY CORONERS BILL.

In the House of Lords, on Thursday, July 8, on the motion to read the Life Peerages Bill a third time after discussion, the House divided when the Bill was rejected by 166 to 77.

In the House of Commons, the Medical Officers' Superannuation (Ireland) Bill was read a third time and passed.

On Friday, the House of Commons, at its morning sitting, made progress with the Contagious Diseases (Animals) Bill in committee, up to clause 90.

A clause was introduced by Mr. Forster requiring railway companies, at the direction of the Privy Council, to provide food and drink for the cattle conveyed on their lines.

On Monday, Mr. P. Wykeham-Martin gave notice that when the Criminal Lunatics Bill came on for second reading he should move that it be read a second time that day three months.

On Tuesday, in the House of Lords, the Marquis Townshend next proposed the second reading of a Bill which he explained was directed against "baby-farming." It was notorious that in many cases infants were intrusted to persons whose wish was that their lives might come to a speedy end, and whose character was such that, but for the lowness of their terms, they would not be vested with so important a trust. Instances were but too common in which infants thus perished from neglect or ill-treatment, and his proposal, therefore, was that every person taking charge of them should be licensed by a magistrate, and should be required to give security for the proper discharge of her duties.

The Marquis of Salisbury regarded the Bill as a most extraordinary one, since it would make it unlawful for any person, including, therefore, the mother, to take charge of any child under five years of age for the purpose of nursing without having previously obtained the authorisation of a justice of the peace. (Much laughter.) He would advise the noble Marquis to subject these very numerous Bills to some more careful scrutiny before he submitted them to the consideration of the House. (Hear, hear.)

The Marquis Townshend remarked that the Bill would only apply to children placed out to nurse. After the way in which the Bill had been received it would be useless for him to press it.

The Bill was accordingly withdrawn.

In the House of Commons, Colonel Barttelot asked the President of the Poor-law Board whether it was the intention of the Poor-law Board to institute an inquiry into the death of Mary Allen, who lately died in St. Pancras Workhouse under circumstances which caused an inquest to be held, as reported in the *Times* of July 7, and whether the Poor-law Board intended to hasten the furnishing of the new parish Infirmary at Highgate.

Mr. Goschen: It is the intention of the Poor-law Board to institute an inquiry into the case referred to by my hon. and gallant friend. With regard to the second part of the question, I may say that the progress of the furnishing of the new parish Infirmary at Highgate must depend upon the action of the contractors and the Board of Guardians. The Poor-law Board has issued all the necessary orders, and approved the plans, but the carrying of them out rests with others.

The Contagious Diseases (Animals (No. 2) Bill passed through Committee.

On schedule 7,

Dr. Brewer moved an amendment to the effect that cattle affected with pleuro-pneumonia, and slaughtered under the provisions of the Bill, should not be sold in the fresh state, but only after being salted.

Mr. W. E. Forster remarked that this was a measure for checking disease in cattle, and not one for checking disease in men. The Nuisances' Removal Act would, he believed, suffice to meet the case referred to in the amendment.

Dr. Brewer then withdrew the amendment, stating that he would reintroduce it on the report.

On Wednesday, July 14,

In answer to a question by Dr. Brewer in reference to the increasing number of stillborn children alleged to be buried as stillborn,

Mr. Bruce said he was afraid the information possessed by the Home Department on this subject was defective. The only answer he could give to the question was that this subject formed an important part of the inquiry being carried on by the Sanitary Commission, the members of which were prosecuting their labours with a view to remedy the defects in the Act.

In answer to another question by Dr. Brewer as to the suspension of the master of the St. Pancras Workhouse,

Mr. Goschen said that he had heard that the master of the St. Pancras Workhouse has been suspended from his office for one month. He made himself a party to certain allegations to the effect that some of the patients were improperly discharged from the infirmary before they were cured. He frustrated the efforts of the guardians by making reports for which there was no foundation, and accordingly he has been suspended without a day's notice. The workhouse has been entrusted in the meantime to the charge of a clerk.

The House then went into committee on the County Coroners Bill.

On Clause 1,

Mr. J. Fielden moved an amendment, the object of which was to entitle all electors on the Parliamentary register to vote for county coroners. He said that, as the clause stood, the franchise for the election of those coroners was given to freeholders only. As the inquiries held by coroners were most frequently in the cases of poor persons, he thought it would be more satisfactory to the public generally to have the franchise in respect of election for coroners as wide as that in respect of the election of members of Parliament.

Mr. Goldney, who had charge of the Bill, said that only freeholders were entitled to vote for coroners in boroughs and cities, and, for the sake of uniformity, he thought it would be well, in a Bill which only dealt with county coroners, to keep to the old franchise.

After a short conversation, in which Mr. T. Collins, Mr. Young, Mr. Crawley, Mr. Bruce, and Mr. Hornby supported the amendment, and Sir J. Pakington spoke against it,

Mr. Goldney said, if it was the general feeling of the House that the amendment should be adopted, he would not oppose it.

The amendment was then agreed to, and the clause as amended was ordered to stand part of the Bill.

Clause 2 was also agreed to, and the chairman was then ordered to report progress.

GENERAL CORRESPONDENCE.

ANIMAL VACCINATION.

Letter from Dr. H. Blanc.

[To the Editor of the Medical Times and Gazette.]

Sir,—Allow me to refer to the very able article of your Paris correspondent on the subject of animal vaccination; not that I have anything to object against the conclusion he arrives at—on the contrary, I feel gratified that such an impartial witness should have come forward to testify to the truth, and expressed his conviction of the usefulness of a system of such vital importance. But having in a former letter stated in the *Medical Times and Gazette* that lymph taken from the heifer does not keep well in tubes or on points, I must now somewhat correct that assertion. Regarding tubes, I am still of the same opinion, although I do not despair that some means will be found of preserving it in its fluid state for inoculation into man. But as to the points—thanks to Dr. Ballard, at whose suggestion some further experiments were made—I am glad to say that out of the large number I have forwarded to different Practitioners only in one instance has a complete failure been reported to me. In most cases well-charged points, wrapped up as soon as dry in goldbeater's skin, as recommended by Mr. Hinds, of Birmingham, have produced as fine and normal vesicles as when fresh lymph is used.

The question of the keeping of the virus seems in a good way of being satisfactorily solved. No doubt, when points are used, certain precautions must not be neglected. The following plan seems to me the best:—A few scratches with the point of a lancet should first be made on the arm, like this ,,,, ,,,, When ,,,, ,,,, the little blood that flows at first has been wiped off with blotting-paper, both sides of the points should be well rubbed in, and the blood and lymph that have spread around the scratches should be collected with the point, placed and pressed upon the scratches, and there left to dry.

With all these precautions, when heifer's lymph is used, be it fresh or dry, will failures still now and then occur? Yes. Were it otherwise, I could not believe in the specific action of cow-pox. We know that some individuals are insusceptible to small-pox, a highly infectious and contagious disease proper to the human race; in some instances the disease takes a highly fatal and confluent form, in others it is modified, and some have only a few scattered pustules. Must we therefore be astonished if we find individuals insusceptible to the inoculation of the small-pox of the bovine race? With fresh lymph direct from the heifer success is the rule, but still we find some individuals more susceptible than others, and the readiness or otherwise of receiving the virus depends on the general health of the population—for example, when small-pox is prevailing, the results of vaccination with cow-pox are then far above the ordinary average. In some children six punctures will develope six fine vesicles, in some five, in some four, even less in some few exceptional cases. But what does this prove?—that the lymph is bad or inferior? No. The same lymph—nay, the same vesicle—gives highly successful cases, and some apparently not so favourable. Cow-pox is but a disease, and must find a suitable soil for its development, and, above all things, the susceptibility of the individual must be present.

When human lymph is employed, either the vesicles are small, inferior, and have lost even their inoculative power, or they are fine, well developed, and possess the power of transmission to a high degree in the human race. The very fact of this great, constant, unfailing inoculative power shows how far such lymph is removed from the original stock. Jenner himself noticed that some cow-pox gave false vesicles, unprotective, but *offering to a high degree the inoculative power* at the present day so much depended upon as a proof of good lymph.

If we follow the march of the best vesicles obtained with human lymph, and compare it with what we observe with cow-pox direct from the heifer, then only shall we be able to understand the great difference existing between them. In the first instance, by the tenth day the vesicle begins to fade and dry, the areola is limited, the general reaction either missing or very slight. The vesicles, on the contrary, obtained with cow-pox only reach their full development on the ninth, tenth, or eleventh day; for some days more they increase in size, the areola is well marked, the constitutional disturbance more apparent, and desiccation often begins only on the sixteenth or eighteenth day. An individual so vaccinated, should he even have but *one vesicle*, is, I believe, protected against small-pox more than with *four* due to human lymph.

I am, &c. H. Blanc, M.D.

9, Bedford-street, Bedford-square, W.C., June 28.

CHLORODYNE AND THE LIQUOR CHLOROFORMI COMPOSITUS.

Letter from Mr. P. Squire.

[To the Editor of the Medical Times and Gazette.]

Sir,—Mr. Davenport, in an advertisement which appeared in your journal on the 10th inst., has mentioned a case of poisoning by that notorious medicine called chlorodyne, which appears to have been prepared from a published formula in the *Canada Lancet*, and contained four grains of morphia in every ounce. Mr. Davenport then goes on to warn prescribers against the "Liquor chloroformi compositus," the formula for which is given in my "Companion to the British Pharmacopœia." I may in reply say that in that formula there is only "a quarter of a grain of morphia to the ounce," and although it has appeared in every edition of my book, I have not had one complaint against it until now. It approaches very closely in composition the compost sold as chlorodyne, and enables Medical men to prescribe a medicine they know the composition of. I therefore see no reason, in a therapeutic point of view, for the warning given.

I am, &c.

Oxford-street, July 13. P. Squire.

OBITUARY.

JAMES YEARSLEY, M.D., M.R.C.S.

James Yearsley died on the 9th inst. at his residence, in Savile-row, of cancer of the liver at the age of 64. He was born, I believe, at Cheltenham, and became a pupil of Mr. Fletcher, of Gloucester, one of whose daughters he married. He passed his examination at the College and Hall in 1827, and subsequently took the degree of M.D. at St. Andrews in 1862.

When Yearsley commenced practice in London as an aurist, he opened an institution for diseases of the ear in Sackville-street, Piccadilly. He had removed the tonsils in some cases of deafness associated with stammering, and had been struck with the result of these operations. The stammerers, in some cases, were able immediately after the operation to express themselves distinctly, and without any convulsive efforts. Yearsley, being fully under the conviction that stammering might be cured by removal of the tonsils, published some remarks on the subject. These attracted the attention of the Profession and the public, and the rooms in Sackville-street became thronged with stammerers anxious to undergo the operation which was to relieve them of their wretched infirmity. I was present on one occasion when several patients were operated upon. The late Mr. Pilcher was also there. Pilcher was not only an able Surgeon, but unquestionably one of the soundest physiologists of the day. In a conversation which we held, Pilcher deprecated the operation of removing

the tonsils, on the ground that it was founded on no principles of physiology or pathology, and would in the end prove to be useless. Yearsley replied—"Well, the operation may be useless, but, at all events, it can do no harm." "I am not so sure of that," said Pilcher; "we have much to learn about the influence the tonsils exert upon the system." Several cases were operated upon that day with a skilfulness which called forth the admiration of all present. The immediate effect was striking in the extreme, in one man in particular, who had entered the room in such a state of convulsive agitation that it was painful to behold. The tonsils were removed, and he spoke calmly, deliberately, and without hesitation. Pilcher was struck with the result, and certainly was for the time astonished. "If the effects," said Pilcher, "be permanent, you have made a great discovery, Mr. Yearsley; but I do not believe they will be lasting." Pilcher's opinion proved to be the correct one: in the course of a few days the stammerer stammered as badly as ever. At this time, the fame of Curtis having declined, there were two other Practitioners in the field besides Yearsley to compete for honours. Harvey and Toynbee appeared upon the stage. Toynbee, as I have said in a recent article, was more of an anatomist than a Practitioner. Harvey was a practical man, and in his wide sphere of observation had many opportunities of testing the effects of removal of the tonsils. He soon discovered that their removal in some cases was followed by a condition of the mucous membrane of the throat which became exceedingly annoying to the patient: the remedy, in fact, was worse than the disease. I am not aware that Toynbee did anything to counteract the opinion which prevailed in favour of the operation; but Yearsley, who was a shrewd man, discontinued its performance, except in those cases of deafness which resulted from closure of the Eustachian tube by enlarged tonsils. He subsequently, therefore, confined his operation of removal of the tonsils to these cases, and no unbiassed person will deny that in this respect he conferred great benefit upon those who were suffering from the cause specified, and that he was most successful in the treatment he pursued. Yearsley's mind was highly suggestive, and he deserves to be remembered for his invention of the artificial tympanum. It is scarcely necessary to mention, perhaps, that Toynbee claimed credit for being the originator of this mode of treatment in certain cases of deafness. The disputants are gone; the facts remain. It is only due to the memory of Yearsley to say that he fully established his claim to being the inventor of the artificial tympanum.

Yearsley, in more than one respect, was a representative man. He was original in his views, bold in the expression of his opinions, and chivalric in the defence of his claims to be regarded as an inventor. But he was rash, often intemperate in language, and sometimes scurrilous. He was part proprietor of a Medical journal which at that time exerted some influence on the Profession. In the conduct of this journal he was associated with a gentleman of great ability and one of the most brilliant writers of the day. The gentleman in question had in times past done good service, not only to the literature, but to the status of the Profession. That the *Medical Circular* did not attain the high position to which it was entitled from the ability and energy with which it was conducted, was mainly due, I believe, to the really Quixotic character—or perhaps, to speak more correctly, the obstinate conduct—of Yearsley. Yearsley was too apt to take offence. His sword was too readily unsheathed; his hand would appear to have been against every one, and, of course, everybody's hand appeared to be against him. With more prudence, and less, we may possibly say, of the fighting element, the *Medical Circular* might have been a great power. Yearsley made a grave mistake in his calculation of the position of the Profession when he established his journal. He believed that the time for what is called trenchant writing had not gone by. He knew that one of his contemporaries had fought his way to success by attacks upon individuals. Since the journal in question was established, reform had advanced with the steps of a giant. Above all things, the Profession had repudiated to a man the attacks upon private character and the calling of nicknames. When I relate in the pages of this journal the early history of Medical reporting, the vicissitudes and dangers to which those who were foremost in the fight were exposed, the Profession will be in a position to award honour to those to whom honour is due. I have been behind the scenes from the advent. I propose to enlighten the Profession upon some most curious points in its history. In the future articles which I shall contribute to this journal I shall attempt to elucidate the secret and private motives which actuated the prime movers in the events of the day. Forty years since the state of the Medical Profession was very different from what it is now. Yearsley was never popular with his brethren. He had done much, whilst connected with the *Circular*, to alienate their good opinion. He was not of the "high order" amongst us. But, however, if he cannot be regarded as one of the *élite* of the Profession, it would be unjust not to give him credit for his suggestiveness, for his courage, and for the benefit he conferred upon us by his establishment of a work which is yearly increasing in importance, the Medical Directory. I have purposely avoided in this article any specific allusion to his quarrel with Liston, and to his more serious dispute with a rival editor. These will be discussed in future contributions to this journal.

J. F. C.

NEW BOOKS, WITH SHORT CRITIQUES.

Bathing: How to do it, when to do it, and where to do it. By Edgar Sheppard, M.D., M.R.C.P., Medical Superintendent, Colney Hatch Asylum. Third edition. London: Hardwicke.

Diaphoresis: A Powerful Aid in the Arrest and Removal of Human Disease, and thereby prolonging Life. By Charles Clarke, M.A. Cantab., M.R.C.S.E. London: John Churchill and Sons.

*** Dr. Sheppard's remarkably popular pamphlet sees the light for the third time, in no material respect differing from its immediate predecessor. Dr. Sheppard is an enthusiastic, but by no means an injudicious, advocate for the use of the Turkish bath. His results in the treatment of certain forms of insanity by it have been most encouraging. Mr. Clarke would seem to esteem diaphoresis a panacea. The means of procuring it, he advocates, is not the simple appliance advised by Dr. Sheppard, but a combination of sweet spirits of nitre, ipecacuan wine, and tartar emetic. This, says he, is the best diaphoretic with which he is acquainted.

A Biennial Retrospect of Medicine, Surgery, and their Allied Sciences for 1867-68. New Sydenham Society. Pp. 518.

*** The present volume has as editor of the portion relating to Physiology, Mr. Henry Power; of Medicine, Dr. Anstie; of Surgery, Mr. Holmes; of Ophthalmology, Mr. Brudenell Carter; of Obstetrics, Dr. Barnes; and of Forensic Medicine, Materia Medica, etc., Dr. Stevenson. Of course such a work must vary in value with the value of the materials; but that they have been judiciously chosen and carefully arranged we are ready to testify. No one who has not been engaged on such work knows the great labour a volume like this entails, and what care and judgment are requisite to present, in one of its size, the advances made in Medicine during a period of two years.

Des Fistules Uréthrales chez l'Homme. Par le Docteur Coctean, Prosecteur des Hôpitaux, ancien Interne Lauréat des Hôpitaux, Lauréat de la Faculté. Paris: J. B. Baillière et Fils. 1869. 127 pages.

Of Urethral Fistulæ in Man. By Dr. Cocteau, Prosector to the Hospitals, formerly Laureate Interne, Laureate of the Faculty. Baillière and Sons.

*** The author treats his subject in four chapters. The first deals with the causes and modes of formation of these fistulæ; the second treats of urethro-rectal fistulæ; the third of urethro-perineal and urethro-scrotal fistulæ; the fourth of penile fistulæ. The whole is illustrated with appropriate cases.

MEDICAL NEWS.

Royal College of Surgeons.—The following gentlemen passed their primary examinations in anatomy and physiology at a meeting of the Court of Examiners on the 13th inst., and, when eligible, will be admitted to the pass examination:—

Barnardo, T. J., of the London Hospital.
Biggs, H. G., of Guy's Hospital.
Burger, Alexander, of Bonn.
Chadwick, G. J., of Guy's Hospital.
Chute, H. M., of Bristol.
Davies, D. A., of University College.
Doudney, Edwin, of Charing-cross Hospital.
Forbes, A. L. A., of the Dublin School.
Fordham, J. W., of the London Hospital.
Grant, G. M., of St. Mary's Hospital.
Griffiths, R. G., of the Dublin School.
Harding, A. W., of University College.
Healey, T. St. C., of the Hull School.
Holder, William, of the Hull School.
Kelly, William, of Liverpool.
Matcham, Alfred, of Guy's Hospital.
Manson, R. T., of Newcastle.
May, Walter, of the Dublin School.
Morgan, James, of the Dublin School.
Morison, B. P., of Guy's Hospital.
Seymour, Francis, of Guy's Hospital.
Wallis, E. D., of University College.
Webb, C. F., of King's College.
Wybrants, R. B., of the Dublin School.

The following passed on the 14th inst:—

Baines, E. C. A., of the Birmingham School.
Cartwright, J. P., of St. Bartholomew's Hospital.
Dempsey, M. J., of St. Bartholomew's Hospital.
Hoadley, Robert, of the Middlesex Hospital.
Holden, A. F., of University College.
Johnson, F. P., of University College.
Moore, H. C., of the Birmingham School.
Norman, A. B., of St. George's Hospital.

Passmore, F. G., of Guy's Hospital.
Power, Thomas, of Dublin.
Priestley, Henry, of Sheffield.
Rayne, C. A., of University College.
Reed, James, of Guy's Hospital.
Roberson, Edward, of Charing-cross Hospital.
Tosswill, L. H., of St. Bartholomew's Hopital.
Walpole, A. H., of Newcastle.
Westcott, W. W., of University College.
Whitfield, Monkhouse, of Charing-cross Hospital.
Wilson, D. D., of Glasgow.
Wolverson, Thomas, of the Birmingham School.

The following passed on the 15th inst.:—

Atkinson, Walter Mark, of the Charing-cross Hospital.
Hayes, Aylmer Ellis, of St. Mary's Hospital.
Fisher, John, of King's College Hospital.
West, Maurice Thomas, of St. Bartholomew's Hospital.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, July 8, 1869:—

Ballantine, George, Westbourne-square.
Drew, Alfred Stanbanks, Stow-on-the-Wold.
Hallam, Arthur, Sheffield.
Hudson, Hubert Ernest, Cranbrook.
Jones, Richard Mansell, Denbigh.
Manby, Alan Reeve, East Rudham.

As Assistants in compounding and dispensing medicines:—

Airey, George, Wigan
Chilwell, Joseph, Tamworth.
Masson, George, 43, London-bridge.
Stooke, Arthur, Old Ford.
Twemlow, Richard, Manchester.

The following gentlemen also, on the same day, passed their First Examination:—

Deshon, F. P., Middlesex Hospital.
Leigh, J. T., Charing-cross Hospital.
Lucas, T. P., Westminster Hospital.
May, Thomas, Westminster Hospital.
Mugliston, H. B., London Hospital.
Parsons, S., University College.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

EDIS, ARTHUR, M.D.—One of the Honorary Physicians at the British Lying-in Hospital, Endell-street.

HODGES, F. H., M.R.C.S. Eng., L.R.C.P. Ed.—House-Surgeon to the Birmingham and Midland Eye Hospital, *vice* Henry Denne, L.R.C.P. Lond., M.R.C.S. Eng., L.S.A. Lond., resigned.

HORSFORD, T. S., M.R.C.S.—House-Surgeon to the London Hospital.

LLOYD, JOHN, L.R.C.P.L., etc.—House-Surgeon to the North Riding Infirmary, Middlesborough-on-Tees, *vice* Dr. Williams, resigned.

MACALISTER, ALEXANDER, M.D., L.R.C.S.—Professor of Zoology and Director of the Museum of the University of Dublin.

O'DONNELL, H. J., F.R.C.S.—Honorary Surgeon to the Royal South London Ophthalmic Hospital.

OPPENHEIM, LEWIS, M.R.C.S.—Honorary Assistant-Surgeon to the Royal South London Ophthalmic Hospital.

SMITH, HEYWOOD, M.B. Oxon., M.R.C.P., Assistant-Physician to the Hospital for Women—Physician to the British Lying-in Hospital.

NAVAL AND MILITARY APPOINTMENTS.

ADMIRALTY.—The following appointments have been made:—Edward W. Leet, Assistant-Surgeon, to the *Mercury;* Staff Surgeon Cree, promoted to retired Deputy-Inspector.

WAR OFFICE.—The following appointments have been made:—21st Hussars: Staff Assistant-Surgeon Edwin James Fairland, to be Assistant-Surgeon, *vice* John Munday, who exchanges. 25th Foot: Staff Surgeon St. John Stanley, to be Surgeon, *vice* Surgeon-Major Henry Vereker Bindon, M.D., appointed to the Staff. Medical Department: Surgeon-Major Henry Vereker Bindon, M.D., from the 25th Foot, to be Staff Surgeon-Major, *vice* Staff Surgeon St. John Stanley, appointed to the 25th Foot; Assistant-Surgeon John Munday, from the 21st Hussars, to be Staff Assistant-Surgeon, *vice* Edwin James Fairland, who exchanges.

BIRTHS.

ALCOCK.—On July 3, at Lord Weymouth's Grammar School, Warminster, the wife of Dr. Alcock, of a daughter.

CUOLOHAN.—On July 10, at 9, Grange-road, Bermondsey, the wife of H. Cuolohan, M.D., of a daughter.

GANE.—On July 7, at Surat, Bombay, the wife of Dr. H. J. Gane, of a daughter.

GOODE.—On July 7, at Derby, the wife of Henry Goode, M.B., of a son.

MITCHELL.—On July 8, at 5, Lowther-cottages, Liverpool-road, Holloway, the widow of the late T. H. Mitchell, M.R.C.S., of a son, stillborn.

RICHARDS.—On July 10, the wife of F. W. Richards, M.B., Winchester, of a son.

WARD.—On July 7, at the Royal Arsenal, Woolwich, the wife of William Pearson Ward, Surgeon-Major, Royal Artillery, of a son.

MARRIAGES.

GOOD—DAY.—On July 1, at Alvediston, Wilts, Joseph Good, M.D., of Wilton, to Harriette Elizabeth Anne, eldest daughter of W. Day, Esq., of Alvediston House, Salisbury. No cards.

GUNTER—CHADWICK.—On July 5, at All Souls', Hampstead, the Rev. William Gunter, Chaplain, R.N., to Caroline Couran, eldest daughter of the late Frederick Chadwick, M.R.C.S., of Burnham, Somerset.

KENNEDY—KENNETT.—On July 10, Alfred Edmund Kennedy, L.R.C.P., to Hester Delina, daughter of the late C. Kennett, Surgeon, Farleigh.

RIDDELL—GOSLING.—On May 20, at St. Stephen's Church, Ootacamund, Neilgherry Hills, East Indies, George Dalziel Riddell, Assistant-Surgeon 3rd Infantry, Hyderabad Contingent, to Laura Mary, youngest daughter of the late Major-General H. C. Gosling, Madras Army, formerly commanding the Pegu Division, British Burmah.

SHUTE—YOUNG.—On July 13, at Henfield, Sussex, Gay Shute, F.R.C.S., Croom's-hill, Greenwich, to Margaret V. S. Young, only daughter of the late William Young, Esq., of West Stoke, Sussex.

WENDT—AYLWARD.—At St. George's Catholic Cathedral, Southwark, Adolph H. T. Wendt, of Hamburg, to Fanny S. Aylward, only child of the late Dr. Aylward, of Chislehurst, Kent.

DEATHS.

FULLERTON, MARY, wife of Mr. J. C. Fullerton, Surgeon, at 32, Ellington-street, Barnsbury, on July 10.

LEE, HENRY, M.D., at Weatheroak-hill, Alvechurch, on July 10, in the 77th year of his age.

REID, ALEXANDER DANIEL, younger son of Daniel Reid, M.D., at Hazelwood, Banffshire, on July 5, aged 8 years.

SNAITH, FREDERICK, B.A., M.D., at Boston, Lincolnshire, on July 7, in his 63rd year.

WHITFIELD, HENRY, M.R.C.S., at Ashford, Kent, on July 7, aged 63.

YEARSLEY, JAMES, M.D., at his residence, 15, Savile-row, on July 9, aged 64.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

DORSET COUNTY LUNATIC ASYLUMS.—Assistant Medical Officer; must be duly qualified and be registered. Applications and testimonials to the Committee of Visitors of the Dorset Lunatic Asylums, on or before the 31st inst.

HAY UNION.—Medical Officer; must be legally qualified. The gentleman appointed will be required to reside in Hay. Applications and testimonials to Mr. C. Griffiths, Clerk to the Guardians, on or before August 4, election on August 5.

QUEEN CHARLOTTE'S LYING-IN HOSPITAL.—Physician-Accoucheur; must be F. or M.R.C.P.L., or F. or M.R.C.S., not practising Pharmacy. Candidates to attend a meeting of the Committee of Management on Monday, July 19, or on Monday, July 26.

ROYAL SEA-BATHING INFIRMARY, MARGATE.—Resident Surgeon; must be legally qualified. Applications and testimonials to Mr. John Thompson, Secretary, 1, Queen-street, Cheapside, on or before July 23.

SUNDERLAND GENERAL HOSPITAL.—House-Surgeon's Assistant; must have passed his primary examination and have completed his third year of Medical study. Applications and testimonials to C. D. H. Drury, Esq., House-Surgeon, on or before July 24.

UNIVERSITY COLLEGE HOSPITAL.—Resident Medical Officer. Applications and testimonials to John Robson, Esq., Secretary to the Council of University College, on or before July 17.

UNIVERSITY COLLEGE.—The Professorship of Medical Jurisprudence will be vacant at the end of the present session. Further information may be obtained of the Secretary.

WESTMINSTER HOSPITAL.—Surgeon and Assistant-Surgeon. Candidates for either office must be F.R.S.C.E., not practising pharmacy or midwifery. Applications and testimonials to F. J. Wilson, Esq., Secretary, on or before July 20. Election on July 30.

WHITEHAVEN AND WEST CUMBERLAND INFIRMARY.—House-Surgeon; must have both Medical and Surgical qualifications. Applications and testimonials to W. Wilson, Esq., Hon. Sec., Whitehaven, on or before July 30.

POOR-LAW MEDICAL SERVICE.

*** The area of the district is stated in acres. The population is computed according to the last census.

RESIGNATION.

Ulverstone Union.—The Ulverstone District is vacant; area 8463; population 8759; salary £35 per annum. The Workhouse is vacant; salary £25 per annum.

APPOINTMENTS.

Alderbury Union.—Humphrey P. Blackmore, M.D. St. And., M.R.C.S. Eng., L.S.A., to the Sixth District.

Gower Union.—David T. Williams, M.R.C.S.E., to the Western District and the Workhouse.

Newmarket Union.—Edward Watson, M.R.C.S. Eng., L.S.A., to the Ninth District.

Romford Union.—Francis H. Parsons, M.D. Glas., M.C. Glas., to the Third District.

Saffron Walden Union.—Edward Harley, F.R.C.P., M.R.C.S.E., L.S.A., to the Seventh District.

CHAIR OF PATHOLOGY IN THE UNIVERSITY OF EDINBURGH.—We understand that Dr. Andrew Smart, author of the "Reports on the Pathology of the Cattle Plague," is a candidate for this chair.

ARTS EXAMINATION.—The list of those gentlemen who have just been reported as having passed this ordeal at the College of Surgeons is much too long for publication in the *Medical Times and Gazette.*

Royal College of Surgeons Examinations.—At the recent primary or anatomical and physiological examination for the diploma of Membership of the Royal College of Surgeons, just one-third of the thirty-six candidates examined on the first day were rejected; on the second day, out of another three dozen candidates there were sixteen, and on the last, out of two score there were twelve, making a total of forty rejected candidates out of the eighty-eight who presented themselves. The questions submitted on this occasion were as follows:—1. Describe the articular surfaces of the os calcis; and mention the bone with which each articular surface is in contact. State the position and the connexions of the ligaments which bind the os calcis to other bones. 2. Describe the structure of a tooth. State the number of the permanent teeth, their classification, and the periods at which they commonly make their appearance. 3. Name (in the order in which they occur from the surface to the vertebræ) the parts included in the space bounded above by the hyoid bone and below by a line drawn along the upper margin of the sternum and the sterno-clavicular joints. 4. Describe the position and connexions of the duodenum; also the structure of its mucous membrane—viz., valvulæ conniventes, villi, epithelium, and glands. State the changes the food undergoes in that part of the alimentary canal. 5. The ovary; describe its position, connexions, and structure. 6. State the functions assigned to the different parts respectively of the organ of hearing. The last examination for the present session in pathology and surgery takes place this day (Saturday).

Collegiate Proceedings. — The following are the only subjects of any interest in the report just suspended in the hall of the Royal College of Surgeons for the information of its Members and students:—That a candidate rejected in Medicine be not admitted to re-examination in that subject until after the expiration of three months from the date of his rejection. A letter was read from Mr. Hammond, Under-Secretary of State for Foreign Affairs, transmitting, by Lord Clarendon's direction, a report drawn up by Dr. Siddall, Physician to her Majesty's Legation in Japan, of his proceedings while rendering professional assistance to the Japanese Government in attending on wounded soldiers. A letter was read from Mr. E. S. Hall, M.R.C.S., of Hobart Town, Tasmania, in reference to the skull of the last male aboriginal of Tasmania (the renowned King Billy). Mr. Hall has been informed that the skull has not been received at this College. Mr. James Lithgow, of Weymouth, who was elected a Fellow on January 14, was admitted, and Mr. William Joseph Square, of Plymouth, was elected a Fellow of the College.

King and Queen's College of Physicians, Ireland.—On July 7, A. B. Steele, Esq., Liverpool, and Joseph Godden, Esq., Birkenhead, were admitted Licentiates of the College by examination.

Disease in the United States.—In consequence of the hot weather which has recently and suddenly come upon the United States, the thermometer verging towards 100° Fahr., numerous cases of sunstroke are reported, and disease is generally prevalent.

Medical Charities.—Mr. Peter Maze, of Portland-place, has left a contingent interest in £35,000 to several charitable institutions, and, by his last codicil, he has made absolute the following bequests to Medical charities—viz., to the Bristol Infirmary £1000, and the Bristol General Hospital £100. Miss Jane Morris, of Connaught-place, Hyde-park, has bequeathed £300 to the Great Malvern Hospital.

A Medical botanist named John Kirby, of Halifax, has been committed for trial for unlawfully using an instrument with intent to procure the miscarriage of a young woman named Elizabeth Sutcliffe, who is dangerously ill.

The Clifton Board of Guardians have decided to board out the orphan children now in the workhouse, upon the principle adopted throughout Scotland and the greater part of Ireland; and a committee of ladies, resident in the neighbourhood, has been formed to exercise supervision. The system has now been adopted in seven unions in England, and is rapidly making headway.

Australian Meat.—The needed supply of animal food for consumption in England has been temporarily interfered with. The serious drought which prevailed last year in Australia has made the exportation of meat to this country a losing speculation. It is consolatory, however, to learn from the last despatches that plenty will soon reign in the colonies in question, and that they will in a short time be able to export large supplies of meat to us.

The *Scotsman* says that it "is understood that upwards of a hundred Medical students, principally seniors, have signed a requisition to Dr. P. H. Watson to become a candidate for the chair of Clinical Surgery in the University of Edinburgh."

Poor-law Medical Officers' Association.—We beg to remind our readers that the annual meeting of this active and useful Association will be held at the Freemasons' Tavern, on Wednesday, the 28th inst., at 5 p.m., for the election of officers and council for the ensuing year, and for the transaction of other important business. The annual dinner will take place at half-past six o'clock. The occasion promises to be of more than usual interest, as several members of Parliament, including Drs. Brady, Brewer, Lush, Lyon, Playfair, C.B., Messrs. Corrance and Torrens, and other influential gentlemen, will be present. We would urge all Medical officers to join the Association, which numbers nearly 800 members, and is ably and successfully carrying on a good work, in which the Profession generally takes deep interest. The Association year commences on August 1.

What is Pure Water?—Our contemporary *Scientific Opinion* gives vent to the generally felt dissatisfaction at the late Report of the Royal Commission on Water Supply. It shows that the visible and physical qualities of water are no proofs of its wholesomeness; and that mere chemical analysis is equally deceptive, since waters containing like amounts of carbon and nitrogen may differ most widely in their effects, through the physiological action of the matters they contain in a living state. Admitting the well-known facts which the Commissioners tell us of the practical purity and generally sufficient quantity of the Thames water, *Scientific Opinion* accuses them of shirking the main question, which is how to practise filtration so as to insure immunity from the effects of cholera dejections and similar organic matters.

Charing-cross Hospital.—The following prizes were awarded on Monday, the 12th inst., Professor Owen in the chair:—The Governors' Clinical Silver Medal to Mr. Kidd. *Botany:* A silver medal to Mr. Noakes, and certificates of honour to Mr. Leigh, Mr. Drake, and Mr. Graham. *Materia Medica:* A silver medal to Mr. Atkinson, and certificates to Mr. Leigh and Mr. Noakes. *Midwifery:* A silver medal to Mr. Towt, and a certificate to Mr. Connolly. *Pathology and Morbid Anatomy:* A silver medal to Mr. Hyde, and a certificate of honour to Mr. Connolly. *Forensic Medicine:* A silver medal to Mr. Connolly, and a certificate of honour to Mr. Rix. *Practical Chemistry:* A silver medal to Mr. Leigh, and a certificate of honour to Mr. Noakes. *Senior Anatomy:* A silver medal to Mr. Leigh, and a certificate of honour to Mr. Walker. *Junior Anatomy:* A bronze medal to Mr. Routh, and a certificate of honour to Mr. Taylor. *Chemistry:* A silver medal to Mr. Lea, and certificates of honour to Mr. Taylor and Mr. Whitelam. *Senior Medicine:* A silver medal to Mr. Gosse, and a certificate of honour to Mr. Towt. *Junior Medicine:* A bronze medal to Mr. Gravelle, and a certificate of honour to Mr. Leigh. *Senior Physiology:* A silver medal to Mr. Noakes, and certificates of honour to Mr. Drake and Mr. Burroughs. *Junior Physiology:* A bronze medal to Mr. Chittenden, and certificates of honour to Mr. Crouch, Mr. Cheesewright, and Mr. Taylor. *Surgery:* A silver medal to Mr. Hyde, and certificates of honour to Mr. Towt and Mr. Kidd.

Rewards for Services performed during the Prevalence of the Cholera.—The *Gazetta Medica di Torino* publishes the names of more than a hundred Medical Practitioners who have received silver medals for their services in the various provinces of the kingdom of Italy during the cholera epidemic of 1867-68. Another list of more than 300 Medical Practitioners and *farmacisti* who have received *menzioni onorevoli* is also given. We are surprised that we have heard nothing of the scientific history of this epidemic from some of so numerous a body as that which has gained these distinctions.

From filth, insufficient food, and bad water, all the animals in the city of Joudpoor have become affected with mange. The hundreds of dogs thronging the streets during the day, and making night hideous by their howlings, are one and all victims of mange. The affection exists in every shape and form, from slight falling of the hair to the formation of sores over the whole body. I have frequently seen puppies ten or twelve days old with mange. The Brahminee bulls, roaming over the city, are with few exceptions diseased; also nearly every camel, and the great majority of the horses and working bullocks. When riding through the narrow streets, it requires all one's attention to prevent contact with one or other of the mangy animals one meets; the slightest touch is

indeed sufficient to convey the disease. But neither Joudpoor dogs nor Brahminee bulls understand giving place to human beings. The former lie in the middle of the street, and decline moving unless actually driven away by blows. The latter, trusting to their weight, size, and thickness of hide, bore their way even through crowds, whenever fancy dictates. Of course the people generally give place to these favoured quadrupeds, and the European, having in wholesome dread the probability of his horse becoming mangy, is glad to do so likewise. Notwithstanding all care, every horse I have had at Joudpoor has sooner or later contracted mange.—*Marwar, the Land of Death, by W. J. Moore, of the Political Agency, Joudpoor.*

Compressed-Air Baths in Asthma.—M. Guéneau de Mussy and other Physicians, at a recent meeting of the *Société de Thérapeutique*, bore witness to the great advantage derived from the treatment of asthmatic patients by compressed air at the establishment opened for the employment of this agent by M. Gent.—*Gaz. Méd.*, July 10.

NOTES, QUERIES, AND REPLIES.

Be that questioneth much shall learn much.—*Bacon.*

The old students and teachers of University College have issued an appeal on behalf of one of the most meritorious of their former students, J. Owen Evans, M.D. Lond., M.R.C.S. Dr. Evans for some time acted as Medical missionary in India, and on his return engaged in the most laborious general practice, first at Shoreditch, and afterwards at Frattou, near Portsmouth. This he is unable to carry on from a succession of deplorable illnesses, and his friends now appeal for funds to enable him to take a twelvemonth's rest. Communications may be made to J. T. Clover, Esq., 6, Cavendish-place, London, and to H. Burford Norman, of Southsea.

Ishmael.—Apply to Mr. H. K. Lewis, 136, Gower-street, W.C., or Kimpton, High Holborn.

Constant Subscriber.—Much depends on the county court judge. In case 1 you ought to recover, according to the precedent of Dr. Lavies's case for breach of contract; in case 2 also, *à fortiori*. A question might arise whether the qualification of M.R.C.S. covers midwifery; but this is a point not decided, and may not be raised.

Medicus.—We think that if Medicus reads that article with care, he will not put such an interpretation on it as his note conveys. We admire the subject of it and his devotion intensely, but comment on his mistakes because it is the duty of a Medical man to warn the world against such mistakes. What advice would Medicus have given to this holy man? The same that St. Paul did to Timothy, "Use a little wine for thy stomach's sake and thine often infirmities"—the same that the venerable bishop and all the clergy of the diocese gave him. With respect to alleged miraculous cures, our correspondent must know the humiliations and annoyances to which our Medical brethren in France are often exposed by popular credulity on this score. Which are *we* to rely upon—Medicine or miracle?—Medicine being in reality the search after, and obedience to, the laws which the Creator has impressed upon animated beings.

A Sufferer.—Any respectable Medical Practitioner can treat the cases. Quacks and advertisers should be avoided.

A new publication called the *Shadow*, published at Manchester, contains in its last number a very able article on the question of vaccination. If the public press generally were to follow the *Shadow*, they would render *substantial* service to the public.

M.D.—A memoir of the late Dr. Joseph Bullar, of Southampton, has been published by Mr. Henry Dayman, F.R.C.S. Dr. Bullar was the author of the charming little volumes entitled "Evening Thoughts" and "A Second Series of Evening Thoughts."

The following, which we extract from the *Pacific Medical Journal*, is at least amusing:—

The writer of this article was once called upon to visit a sick infant in consultation with Dr. C——, a regular Practitioner then residing in this city, who had emptied his purse in a long series of experiments on the properties of "alcohol as food." On arranging for a second visit, Dr. C—— was unable to attend between the hours of eight in the morning and six in the evening. Such a strange announcement required an explanation, which was given about as follows:—"I am occupied in the service of Dr. Young. It is mortifying to me as a regular graduate to confess it, but the necessities of my family have compelled me to take the position. Dr. Young gives me $250 a month for prescribing for his patients, and I am under obligation to remain in his office from eight in the morning till six in the evening."—"And does not Young prescribe for his patients?"—"Oh, no! I thought everybody knew that. He sits in the front office at his desk, keeping the books. When the patients enter, he receives them and passes them into my room. I examine and prescribe for them, they supposing always that I am Doctor Young. I give them the prescription, which they take to Young, and he settles with them and receives the money. I pass for the Doctor and he for my clerk."

Advertiser should read a forcible letter in the *Examiner and London Review* of last Saturday on the subject. It has been well said that "those who live in glass houses should not throw stones." Protestations of purity seldom come from the pure. "When a lady talks about her virtue, we may well suspect her chastity." Mrs. Partington tried to keep back the sea with her mop. She was simply laughed at by all sensible persons. The Medical Mrs. Grundy scolds "naughty people" who advertise in any other than Medical journals. It may well be asked, upon whom has the mantle of Cæsar descended?

Women Doctors.—Under this heading, the *Globe* of Wednesday contains an able and interesting article, which concludes as follows:—"There is not the slightest need that people who hold 'advanced opinions' upon the power and rights of womanhood should be perpetually deafening us with a narration of the marvels achieved by the female brain. We quite believe it all. But the greater the admiration that is felt for these splendid examples, the more strongly must it also be felt that they are exceptions. Does anybody expect that every Hospital nurse is to develope into a Florence Nightingale? And because Madame du Chatelet translated Newton's 'Principia' into French, without the original losing an atom of vigour in the process, is every female dabbler in 'Euclid' to be accepted as a safe exponent of astronomical wisdom? It is quite natural that women should like to keep these dazzling examples before their eyes as witnesses of the height to which female intellect may aspire, but they are bound in all sobriety also to remember that the common consent of civilisation has reserved certain fields of science for the exploration of masculine minds, and that, though women may lawfully work as amateurs, they cannot be tolerated as professors."

Alpha, of Liverpool, makes the following queries:—

"For the office of honorary Physician to the Liverpool Northern Hospital there are four candidates (A., B., C., D.), and all possess the necessary diplomas.

"But A. is Surgeon to a volunteer corps, and B. is Medical officer to a local dispensary, wherein he is expected, by virtue of his appointment, to undertake the treatment of both Surgical and Medical cases; therefore the query—Are A. and B. pure Physicians?

"Now, supposing neither A. nor B. has, within the last six months, performed a Surgical operation, are they (considering the facts that they still hold their aforesaid respective appointments, and consequently, directly or indirectly, by holding these appointments, profess themselves ready to act as Surgeons when required to do so) eligible for the office of honorary Physician to the Liverpool Northern Hospital in the face of the following rule:—

"'21. Physician's Qualification.—A Physician cannot hold office in this Institution who is not a Fellow, or Member, or Licentiate by examination, of the Royal College of Physicians of London, Edinburgh, or Dublin, or who shall not have taken his Medical degree at one of the following Universities, viz.:—Oxford, Cambridge, London, Dublin, Edinburgh, or Glasgow; nor can any Physician be eligible who practises, or within six calendar months shall have practised, Surgery, pharmacy, or midwifery.'

*** It depends entirely on the interpretation put on the rule. Does the holding of the appointments mentioned constitute practising Surgery, supposing the private practice of the holders has been that of pure Physicians, and that they receive no fees? We have no doubt but that A. may.

The Registrar-General of Scotland, in his Report for June, says:—

"As throwing light on the causes of disease, and on the high mortality which has prevailed during the month, it is worthy of remark that, excepting during the first week of June, not a day passed but the wind blew more or less from the north or east. This unusual prevalence of cold northerly and easterly winds not only reduced the temperature far below its mean, so that over the greater portion of Scotland the hill-tops were covered with snow on the 15th, 16th, and 17th of the month, but largely increased the mortality. This increase was not confined to diseases of the respiratory organs, but in almost the same proportion extended to all classes of disease, and in especial to those considered as epidemics—viz., to fever, scarlatina, measles, and hooping-cough."

The *York Star*, issued from the Asylum, Bootham, York, contains, in its number issued July 1, several very curious and instructive papers.

Medical Officers of Asylums and the County Administration Bill.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—A question that has been in abeyance ever since the celebrated Bucks controversy has just cropped up in a very unexpected quarter. I allude to the dependent and precarious position held by superintendents of English county asylums. It has been made the subject of remonstrance to Mr. Bruce, the Secretary of State. A deputation of Middlesex magistrates, consisting of Mr. Pownall, Chairman of Quarter Sessions, Mr. Turner, Chairman of the Parliamentary Committee, and others, have had an interview with the right honourable gentleman, and the second of them expresses his fears that, in the event of the County Administration Bill passing, old servants, good officers of the county, might be disturbed without compensation, and he trusted that provision would be made for them. This gentleman, while objecting to others having disturbing powers over the Medical superintendents, would, however, reserve it to himself and his compeers. The 10th clause of the County Administration Bill provides that the executive powers of the County Board may be delegated to a committee, but such committee shall not be deemed to be duly constituted unless it consist of an equal number of official and elected members, the latter of whom must be elected members of boards of guardians in the county. The security, fortunes, and honour of a considerable number of Medical men are thus placed absolutely at the disposal of this delegated committee, without any power of appeal to, or redress from, any superior board or authority whatsoever. That the Medical journals, the various associations, the General Medical Council, and others interested in the general or material prosperity of their Professional brethren should have so long overlooked this definite and pressing grievance, must be a matter of

surprise. The subject, nevertheless, had not escaped the scrutiny of some gentlemen of high standing, authority, and acquirements so far back as 1859, her Majesty's Commissioners of Inquiry into the state of the Irish asylums. In their valuable and instructive report, page 9, the opinions and recommendations on the subject of asylum appointments are fully recorded; and, with regard to this particular question, the power of discharging the chief officers, they report to her Majesty that the Government, and not the visiting committees, should have a power of removal founded on full investigation of the officer's incapacity or misconduct. The document is signed by Sir Thomas Redington, R. Andrews, Esq., Messrs. Lutwidge and Wilkes, Commissioners in Lunacy, and by Sir Dominic Corrigan—names that have done the State some service. The rights that ha ve been bestowed upon the Irish superintendents must surely be the due of the English, nor should the inferior position of the latter be allowed to rest without redress. The Poor-law Medical staff have been long emancipated from the power of the village guardians. Will they allow their less fortunate brethren to come within their control? Will they not rather render assistance in obtaining the insertion of a clause in the new County Administration Bill that no Medical officer of any asylum maintained wholly or in part out of the public rates shall be dismissed without the sanction of the Secretary of State being first obtained, and that founded on a full investigation into the officer's incapacity or impropriety of conduct?

London, July 10. I am, &c. ALIQUIS.

BERRY DEFENCE FUND.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—The expenses incurred by Mr. O. W. Berry in defending the false charge recently brought against him, and his subsequent successful prosecution of his accuser for perjury, have amounted to the sum of sixty guineas, The committee will be obliged by the insertion of the following list of subscriptions towards defraying the same. I am, &c.

10, Charles-street, Soho, July 14. E. SANDWELL, Hon. Sec.

Amount acknowledged, £14 12s.; Dr. Hyde Salter, Harley-street, £1 1s.; E. Canton, Esq., Montague-place, £1 1s.; Dr. Barr Meadows, Dover-street, £1 1s.; Dr. Head, Harley-street, £1 1s.; W. Adams, Esq., Henrietta-street, £1 1s.; Dr. Calthrop, Netley, 10s. 6d.; Dr. Wilkinson, Shaftesbury, 10s. 6d.; W. Powell, Esq., Tenbury, 10s.; W. Cox, Esq., Mitcham, 5s.

Subscriptions may be made payable to H. Woolcott, Esq., Charing-cross Hospital (Treasurer), or Dr. Sandwell, 10, Charles-street, Soho (Hon. Sec.).

COMMUNICATIONS

have been received from—

Mr. RIVINGTON; Mr. DUVAL; Dr. STEELE; Dr. J. C. MURRAY; Dr. B. STONE; Dr. A. MACALISTER; Dr. BEATSON; Mr. A. T. NORTON; Mr. C. P. COOMBS; ISHMAEL; ALIQUIS; Mr. R. A. S. PROSSER; Dr. FAYRER; Dr. EDIS; Mr. E. MILLS; Mr. JOHN LLOYD; Mr. T. S. HOARSFORD; Mr. T. P. PICK; Dr. DUDFIELD; Mr. P. SQUIRE; MEDICUS; Mr. THOMAS MEREDITH; Dr. F. G. RUBIO; A CONSTANT SUBSCRIBER; Mr. JOHN WOOD; Mr. J. HUTCHINSON; Dr. RUMSEY; Dr. B. W. RICHARDSON; Dr. QUAIN; Mr. SPENCER WELLS; Mr. J. F. CLARKE; Mr. J. CHATTO; Dr. J. W. KIRK; Dr. SANDWELL; Mr. W. FRANCIS; Dr. T. H. HODGES.

BOOKS RECEIVED—

Elam's Physician's Problems—Bible Animals, Parts 19 and 20—Lee's Menton and San Remo—An Answer to Mr. J. Stuart Mill's "Subjection of Women"—Mapother on the Dublin Hospitals—Cobbold's Entozoa—Dayman's Memoir of Dr. Joseph Bullar—Report of the Belfast District Hospital for the Insane—On the Supply of Animal Food to Britain—American Medical and Surgical Reporter, Nos. 22, 23, and 24—United States Sanitary Commission Memoirs—Chicago Medical Times, No. 6—Des Dyspepsies, par le Dr. Williéme—Archiv für Ohrenheilkunde—Davis on the Surgical and Therapeutical Uses of Carbolic Acid.

NEWSPAPERS RECEIVED—

Indian Medical Gazette—The York Star, vol. ix. No. 3—New York Medical Gazette—Scotsman.

VITAL STATISTICS OF LONDON.

Week ending Saturday, July 10, 1869.

BIRTHS.

Births of Boys, 1022; Girls, 974; Total, 1996.
Average of 10 corresponding weeks, 1859-68, 1851·5.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	643	636	1279
Average of the ten years 1858-67	641·6	586·0	1227·6
Average corrected to increased population	...	...	1350
Deaths of people above 90	...	...	...

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-cough.	Typhus.	Diarrhœa.	Cholera.
West	463388	...	2	10	...	13	6	3	...
North	618210	1	4	13	2	17	12	6	...
Central	378058	...	3	11	3	13	6	9	...
East	571158	...	5	32	1	15	11	10	...
South	773175	3	15	19	...	11	7	2	...
Total	2803989	4	29	85	6	69	42	30	...

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·951 in.
Mean temperature	64·2
Highest point of thermometer	80·0
Lowest point of thermometer	49·1
Mean dew-point temperature	55·3
General direction of wind	W.S.W.
Whole amount of rain in the week	0·00

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, July 10, 1869, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the year 1869.	Persons to an Acre. (1869.)	Births Registered during the week ending July 10.	Deaths. Corrected Average Weekly Number.	Deaths. Registered during the week ending July 10.	Temperature of Air (Fahr.) Highest during the Week.	Temperature of Air (Fahr.) Lowest during the Week.	Temperature of Air (Fahr.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3170754	40·7	1906	1462	1279	80·0	49·1	64·2	0·00	0
Bristol (City)	169423	36·1	101	76	*65	74·0	46·7	61·4	0·38	38
Birmingham (Boro')	360846	46·1	217	175	113	75·3	50·5	61·5	0·05	5
Liverpool (Boro')	509052	99·7	337	295	220	73·5	53·0	61·4	0·10	10
Manchester (City)	370892	82·7	217	210	*186	79·7	47·0	61·1	0·50	51
Salford (Borough)	119359	23·1	72	60	38	74·8	50·1	60·7	0·48	48
Sheffield (Borough)	239752	10·5	165	126	86	73·7	50·0	61·5	0·12	12
Bradford (Borough)	138522	21·0	102	71	57	75·6	54·1	62·6	0·07	7
Leeds (Borough)	253110	11·7	103	129	117	76·0	49·0	63·3	0·00	0
Hull (Borough)	126682	35·6	56	59	52	79·0	47·0	61·1	0·14	14
Nwestl-on-Tyne, do.	130503	24·5	71	69	59	74·0	52·0	60·1	0·12	12
Edinburgh (City)	178002	40·2	130	86	114	71·7	49·0	59·3	0·10	10
Glasgow (City)	458937	90·6	330	268	265	71·7	50·9	60·1	0·81	82
Dublin (City, etc.+)	320762	32·9	173	158	101	75·6	46·0	62·5	0·19	19
Total of 14 large Towns	6546587	35·5	4070	3244	2752	80·0	46·0	61·5	0·22	22
Paris (City)	1889842	...	...	...	787 Week ending July 3.	...	...	...	...	...
Vienna (City)	(1563) 560000	...	...	...	304	...	...	Week ending July 3. 64·9	...	...

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·951 in. The barometrical reading increased from 29·72 in. on Tuesday, July 6, to 30·24 in. on Saturday, July 10.

The general direction of the wind was W.S.W.

Note.—The population of Cities and Boroughs in 1869 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous.

* The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

+ Inclusive of some suburbs.

APPOINTMENTS FOR THE WEEK.

July 17. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 1½ p.m.

19. Monday.

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 1½ p.m.; St. Peter's Hospital for Stone, 2½ p.m.

20. Tuesday.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.

21. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.

WESTMINSTER HOSPITAL SCHOOL OF MEDICINE, 11 a.m. Mr. C. Carter Blake's Lectures on the Comparative Anatomy of Warm-blooded Vertebrata—Lecture VII.: The Class Mammalia (concluded).

22. Thursday.

Operations at St. George's, 1 p.m. Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

23. Friday.

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

CLINICAL SURGERY.—No. IV.

ON HIP DISEASE.

By THOMAS BRYANT, F.R.C.S.,
Assistant-Surgeon to Guy's Hospital.

CASES OF ARTICULAR OSTITIS OF THE HIP-JOINT ARRESTED BY TREATMENT IN ITS FIRST STAGE—RECOVERY WITH SOUND JOINT.

PART I.

(*Continued from page 77.*)

WE will now proceed to quote some few instances of early synovial disease to contrast them with those which have been just given.

Case 15.—Disease of Hip-joint (Synovial)—Recovery.

William W., aged 4, came under my care at Guy's Hospital, July 30, 1866, for some affection of the left hip-joint. It had existed for six months, and had come on without any known cause; pain in the part and limping were the prominent symptoms. When seen these symptoms still existed. There was much thickening about the neck of the bone and in front in the groin; pain was caused by pressure both behind the trochanter and in the groin; the glands in the groin were also enlarged. The foot was everted. The head of the femur moved smoothly in the acetabulum, but pain was caused by the attempt. There was not much spasm of the muscles about the joint. A long splint was applied, fomentations ordered, and tonics given. By October 8 the symptoms had materially improved. On January 14 the joint could be moved freely without pain or exciting spasm. The thickening about the joint had much subsided. On March 25 all signs of disease had disappeared. The child was allowed to use the limb. On May 20 the limb appeared to be quite sound, and the child could walk well. In October the report states the child was quite well.

Case 16.—Hip Disease (Synovial Disease)—Recovery with Sound Joint.

Mary H., aged 4, came under my care at Guy's Hospital on February 26, 1865, for some affection of her right hip-joint. It had existed for five months, and had come on without any assignable cause. Pain in the part and limping were the early symptoms. When I saw the child there was clearly much thickening about the articulation, swelling around the articulation, and pain on pressure over the part; the joint, however, moved smoothly, and there was no spasm of the muscles of the articulation. There was increase of heat in the part. The pelvis was tilted upwards on the sound side, giving the appearance of elongation to the limb on the affected one. Rest with fomentations and tonics were recommended, and in three months the symptoms had much improved, all increase of heat had disappeared, and the thickening about the soft parts and trochanter had much diminished, the mobility of the limb was greater, and the pain less. On September 20 the joint was pronounced to be sound, all signs of disease having disappeared. The child was allowed to use the limb to walk. In December she was still well. Six months later the joint was sound.

Case 17.—Early Disease of Hip-joint—Synovial Inflammation—Recovery with Good Joint.

Ellen W., aged 3, came under my care at Guy's Hospital on April 20, 1863, for hip disease. It had existed for seven weeks, and had come on after a fall upon the part. Limping succeeded the injury, accompanied with pain and some swelling of the joint. The thigh also became slightly flexed and drawn inwards. When I saw the child the adductor muscles of the right thigh were in a state of violent spasm. Any attempt to abduct the limb excited severe pain. There was some fulness in the groin, and also behind the trochanter major, and any pressure upon these parts gave rise to suffering. There was also some surgical fever. Fomentations were ordered to be applied to the hip, and absolute rest enforced. Cod-liver oil was also given. In one month these symptoms had much improved, some movement of the limb being permitted. By June 6 the spasm of the adductor muscles had disappeared, and by September 10 all signs of mischief had passed away; the joint could be moved readily without pain, the fulness about the articulation had gone, and no signs of disease remained. Six months later the child was still well.

Remarks.—I have not deemed it necessary to quote many examples of early synovial disease of the hip-joint: in young subjects they are not so common as articular ostitis, yet they occur, and are to be recognised by well-marked clinical characters. They are frequently the result of some injury, as a fall, and are invariably accompanied with pain and swelling of the affected part. A distinct thickening of the soft parts about the affected joint can always be made out in these cases in their earliest stage, and it is by this symptom that the Surgeon should be guided in his diagnosis; for in articular ostitis pain without swelling indicates its earliest appearance, whereas pain with swelling always accompanies early synovial mischief. The treatment of these cases of early synovial disease differs also from that of articular ostitis when attacking the hip-joint, for in the latter class of cases it has been shown that recovery may take place without the application of any splint or weight—the removal of all interarticular pressure, by abstinence from walking or standing, being the only essential practical points to be observed—whereas in hip-joint disease from early synovial disease it seems advisable to apply a splint in most cases, if not in all; for any movement of the joint unquestionably affects the diseased tissue, and as a consequence tends to interfere with a reparative process and retard recovery. The weight and pulley may be used instead, or any other mechanical contrivance by which the limb can be kept quiet. The constitutional treatment of these cases must be conducted upon ordinary rational principles. No special treatment is required. In two of the cases recorded, however, it will be observed that splints were not used. In one its application was postponed on account of the severity of the local symptoms, and when these had subsided the use of the splint did not appear necessary.

ORIGINAL COMMUNICATIONS.

LARGE MULTILOCULAR CYSTIC TUMOUR OF THE LOWER JAW REMOVED BY EXCISION.

By W. B. BEATSON, M.D., F.R.C.S., Civil Surgeon, Nagpore.

PYKAJEE, a Hindoo cultivator, aged about 35 years, made application at the Nagpore City Hospital in April, 1868, for relief on account of a tumour of the lower jaw, causing great pain and difficulty in mastication and deglutition. Three years previously he had first noticed a small swelling of the gum close to the molar teeth on the left side, which, in the course of a year, attained the size of an orange. It was now as large as a child's head, and extended from the zygoma to the clavicle, carrying the ear backwards and outwards, almost filling the cavity of the mouth, and forcing the tongue, soft palate, and alveolar process of the upper jaw over towards the right. The mouth remained constantly open from the upward pressure of the tumour, which appeared on the mouth as an epitheliomatous mass, containing loosened teeth. The external surface presented several convexities, indicating the existence of separate cysts, was uniformly smooth and tense, and gave to the finger the feeling of crepitation which arises from the presence of fluid beneath thinned and distended bone. As he was suffering terrible pain from distension, a trocar was immediately introduced into the two most prominent cysts, one of which gave sixteen, the other twelve ounces of thick grumous and straw-coloured fluids. No diminution took place in the size of the tumour, but the relief of tension was so great that pain almost entirely abated, and he was able to eat rice. Excision of the diseased bone was proposed to him and agreed to, but as he felt much better after the tapping, and as the proceeding had to be postponed for some days on account of the severe illness of the operator, the patient left the Hospital, promising to return when he had buried his mother-in-law, whose demise he declared had just occurred.

Nothing more was seen of him until the end of March, 1869, when he reappeared little altered in appearance. The tumour had, however, grown considerably; an extension of it was passing up under the zygoma, and commencing to distend the temporal fossa, and the cavity of the mouth was so much encroached upon that mastication was impossible, and deglutition very difficult. He was, of course, far from robust in condition; but as little was to be gained by delay, and the decease of his mother-in-law might be again expected at any

moment in the event of his being frightened, the operation was performed with as little delay as possible on March 30, 1869.

Condition previous to operation.

A strong ligature was first passed through the point of the tongue, the first molar tooth on the right side was extracted, and, the incision having been commenced, the bone was divided at that point with saw and nippers. The incision was then extended to the articulation on the left, and the facial flap dissected upwards. Forcible depression now brought into view the soft portion, extending into the temporal fossa, and this being divided disarticulation was effected without any trouble, no real joint existing, and the tumour rapidly dissected from the submental portion of integument. Lastly, the detached portion was enucleated from the temporal fossa. The bleeding was not great, and that from the facial vessels appeared to cause just sufficient faintness to check hæmorrhage from those divided in the later stage of the operation. Chloroform had been administered by Dr. John Law, of the Madras Medical Service, and all vessels were promptly secured by my assistant, Baboo Gopal Chunder Roy.

The tumour weighed four pounds eleven ounces, and consisted of a number of cysts developed between the laminæ of the bone, mingled with an exuberant growth of epithelioma. The cystic dilatation of the bone extended beyond the symphysis, and stopped just short of the point of division by the saw. Of the body and ramus of the left side, no form was left, the whole, including the coronoid and condyloid processes, being expanded into cysts, the smooth surface of which, articulating with the glenoid cavity of the temporal bone, had replaced the maxillary joint; hence the ease with which disarticulation was effected.

The pulse, after the operation, remained for some time imperceptible; but he rallied and took stimulants. At 4 p.m. reaction had fully set in; pulse 150. On the following morning the ligature, which had never appeared necessary, was withdrawn from the tongue. There was high fever and a pulse of 150 at 4 p.m. After this the progress of the case was one of gradual improvement, the afternoon febrile exacerbation gradually diminishing and the wound healing by first intention, except at the point of exit of the ligatures. On April 7 the ligatures had all separated. Speech and power of deglutition improved daily, and at the end of the month he left the Hospital to proceed to his home in satisfactory condition.

A Short Prize Essay.—"The Massachusetts Medical Society having offered a prize of 50 dollars for the best dissertation which shall describe in *plain language, briefly*, an effective and ready method of ventilating sick rooms, one that can be put in operation at once, *at the moment needed, with least difficulty and expense*, in houses of ordinary construction, we hereby offer, as the only possible way of fulfilling all the conditions demanded, the following essay:—'*Pull down the window sash* and *leave the fireplace open*.' The prize may be sent to the publishers of the *Medical Gazette*."—*New York Med. Gaz.*

TREATMENT OF URETHRAL STRICTURE BY FORCIBLE DILATATION WITH MR. B. HOLT'S INSTRUMENT.

By J. FAYRER, M.D., C.S.I., F.R.S.E.,
Professor of Surgery, and Senior Surgeon Medical College Hospital, Calcutta.

(*Continued from page* 45.)

Case 13.—J. K., West Indian, carpenter, aged 34 years, admitted on December 6, 1868, with stricture of ten years' duration. It was a very bad case, for the stricture seemed to extend throughout the whole canal from the anterior extremity to the membranous portion, and water was passed with great suffering. After long trial, No. 4 was passed. The canal was dilated on December 28 with the full-sized dilator, and No. 12 passed immediately afterwards. I have not the date of his discharge, but he left the Hospital perfectly cured.

Case 14.—A. A., a Mahomedan, aged 56 years, was admitted on February 17, 1869, with stricture of six months' duration. No. 3 was passed with great difficulty, and the stricture was split with the full-sized dilator on February 21. No. 12 passed easily after the operation. The patient suffered little or no constitutional disturbance, and left the Hospital on the 26th apparently well.

Case 15.—C. M., an East Indian, aged 52, has had stricture for six years. Catheters have been passed from time to time, and about three years ago No. 12 was passed. He was admitted on March 9, 1869, with return of stricture, and no instrument could be passed at the time. In a few days a small bougie was passed into the bladder, and on the 12th the full-sized dilator was passed, and, immediately after it, No. 12 catheter. He had no fever, and since the operation has been doing well, and full-sized instruments pass easily. He has no difficulty in micturition, and is quite cured of the stricture, though up to this date (May 28) he is detained in Hospital by an ulcer on the leg. This is healing, and his general health has much improved.

Case 16.—W. C., an English sailor, aged 43, admitted on April 23, 1869, with stricture which followed gonorrhœa about eight years ago. For the last eighteen months has been suffering from difficulty in passing water, and when he was admitted he had complete retention, which was relieved by placing him under the influence of chloroform and passing a small catheter, No. 5. On the 24th, the next morning, the stricture was ruptured with the largest-sized dilator, and a full-sized instrument passed immediately and without difficulty. As he was evidently of an irritable constitution, a dose of quinine gr. v. and tinct. opii mxxv. was immediately administered; but notwithstanding this he had, the same afternoon, a severe rigor and subsequent fever. This fever continued to return for three days, remitting in the morning, and caused great prostration, but there was no local mischief. The use of catheters was discontinued, and he began to recover, though looking wretchedly broken down and aged, with a profuse herpetic eruption on the lips and great irritability of stomach. He continued to pass a full stream, and has not had the least inconvenience since. He is still in Hospital, being rather weak from the prostration caused by this urethral fever, but he is perfectly well as to the stricture.

The history of these sixteen cases has been recorded very briefly, but sufficiently, I think, in detail to prove that the method of treatment illustrated is not only a good and expeditious, but a safe one. I have on a former occasion pointed out what I believe to be a peculiar tendency in the subjects of stricture to suffer from fever after the passage of instruments; and I attribute this, to some extent, to that peculiar state of the nervous system found in the residents of a malarious climate like Lower Bengal, which may be considered to increase the proclivity that exists more or less in all to this urethral fever. Such being the case, it was not unnatural to suppose that the violence used in forcibly rupturing the stricture, and the open wound so caused, would to a great extent add to a danger which is sometimes of a formidable character even where no violence at all has been used in the passing of an ordinary catheter. The result of these cases shows that my apprehensions were almost groundless, for in the majority of the cases little or no constitutional disturbance followed. Most recovered rapidly; some would not remain as in-patients, and all, on the whole, did well.

In the last case, that of a man of a peculiarly nervous and irritable constitution, urethral fever of rather a severe form followed; but he recovered, and I feel satisfied that similar

results might have followed the passage of an ordinary bougie through the narrow and irritable stricture. The nature of the relief afforded is, I believe, not unlike that which follows the splitting or dividing of an irritable ulcer or fissure in the rectum; the division releases tension, and, so far from increasing irritation, gives relief.

I think the originator of what appears to me to be a very successful and rapid mode of treatment of a very painful and distressing disorder has every reason to congratulate himself on having conferred a real benefit on Surgical science.

ON THE EARLY PROGRESS OF ARMY SANITATION IN INDIA.

By C. A. GORDON, M.D., C.B.,
Deputy Inspector-General of Hospitals.

Hill Stations.

(*Continued from page 6.*)

Some discussion having lately taken place in regard to the question whether or not it is necessary, on military grounds, to retain a large proportion of our forces in the plains, it may be desirable to recount the opinions in reference to this important point that were submitted to the Royal Commission. Major-General Godwin considered that it would be advantageous to place more troops at hill-stations, reducing the number in the plains, as at Jullundhur, Umballah, Delhi, and Meerut. According to the views of Sir John Lawrence, one regiment will hold a country which would require ten to recover it if lost, and believed that had more troops been stationed at Delhi and Cawnpore in 1857, those places would never have been lost. "The natives of Peshawur," he remarked, "are very observant, and the whole valley might be lost in twenty-four hours. It is not possible to foresee what may occur." "Disarming the populace can only be effected to a very limited extent." "It requires great management. There are greater difficulties on all these questions than people can conceive." "The troops should be placed where the natives are most warlike." Colonel Greathead thought it "of the first importance to keep bodies of troops at the main strategical points." "It would," he adds, "be a great thing to have the men in the hills, could it be done with equal advantage, politically speaking." Brigadier-General Russell was of opinion "that the withdrawal of the troops from the plains would render a larger force necessary. The sheathed sword must always be in view of the natives." He would "place the troops where they would be likely to enjoy the best health, provided the security of the country was not sacrificed." Sir P. Cautley considered "that troops are sent to India to be usefully employed, but if they are too much out of the way in the Himalayahs they would be of no use." Colonel Campbell was of opinion that "it would not be safe to leave the great cities without garrisons. Railways might make a difference. Has no doubt, from the number of troops in India, that a great reduction might be made in the plain stations without abandoning really important posts. They could be better kept in bodies not too large as reserves." Mr. Elliot thinks "there would not be the slightest difficulty in Madras in administering the police of the country so that a considerable portion of the troops might be quartered in the hills, leaving comparatively small garrisons at the plain stations." Colonel Durand "thinks it would endanger the security of the country to place large bodies of troops permanently in the hills." "Any surplusage of reserves beyond what are necessary for the quiet occupation of the country may be obtained in the hills, especially when the railroads are completed; but the key points—*e.g.*, Allahabad—must not be given up, the country being held practically by the sword, and small posts must be avoided." Sir Charles Trevelyan was of opinion that "the plain stations must be held," and "that troops occupying those stations are in some degree acclimated, and better able to act effectively than they would be if suddenly brought down into the plains." "Small posts would be a source of weakness;" and Sir A. Tulloch "considers the placing of troops on high ground is very important as far as it can be done consistently with purposes of defence."

On such evidence, and much more to the same effect, the Royal Commission considered(a) it as proven that these stations are useful chiefly for prevention, but not always for the cure, of disease; that they are suitable for children and for healthy or ailing men, but not for unhealthy regiments, thus confirming the opinions that had been expressed by army Medical officers in their reports already quoted; and accordingly, among their recommendations of measures to be adopted, we read the two following, namely:—"30. That the strategical points of the country which must be occupied be now fixed with special reference to reducing, as far as possible, the number of unhealthy stations to be occupied. 31. That a sufficient number of hill stations on elevated ground be provided, and that a third part of the force be located in these stations in rotation."

In 1864 the Sanitary Commission for Bengal was formed, one of the principal objects aimed at by its organisation being to indicate the best means of giving effect to the thirty-nine recommendations by the Royal Commission. No sooner had it been formed than, among other important subjects, that of hill stations came under its consideration, and in its first annual report (page 28) we find the various conclusions at which it arrived on the matter. These it is not necessary to give in detail. Two only will suffice, as they bear directly upon the views expressed in regard to the classes of persons most likely to benefit by those sanatoria. They are as follow, namely:—

"3rd. That all makeshift arrangements for housing troops in the hills are objectionable, and that good barracks and good sanitary arrangements are as necessary in the hills as in the plains.

"7th. That it has been proved by experience that the influence of hill climates upon European constitutions is preservative against disease rather than curative, that to obtain the greatest amount of advantage the men who are sent to the hills should in all cases be selected, in preference to sending whole regiments, and that no general removal of sick men to the hills is proper.

"8th. That it must be assumed, on military and political grounds, that no very large proportion of the army can be placed on the hills; and that the only portion of the army that can be stationed in the hills is that which may be looked upon as a reserve, to be drawn upon in emergencies, over and above the force which is ordinarily necessary for the military occupation of the country; that after reducing as far as possible the number of unhealthy stations in the plains, a sufficient number of hill stations should be provided, to which such portion of the troops as can be spared from duty in the plains should be sent in rotation, and that all stations in the plains within practicable distance from the hills, should have their hill sanatorium to which a portion of each regiment should be sent."

The great importance to the army serving in India of the question now being discussed will, I trust, justify me in briefly referring to my own views regarding it as expressed to the Sanitary Commission of Bengal, and subsequently published.(b) After quoting the grounds upon which I arrived at the opinion expressed, I state my conviction that selection is the essential principle according to which depôts at hill stations should be supplied, and that the following are the various classes of persons in whose cases removal to such sanatoria is most calculated to be beneficial—namely, 1. Some who are actually ill. 2. Old soldiers whose period of service is about to expire, and who are permitted as an indulgence thus to keep on to their pension. 3. Weakly men, debilitated by continuous service in the plains. 4. The recruits and young regiments on first arrival in India. And lastly the wives and children of soldiers as occasion may require.

So far the views expressed have been unanimous in regard to the manner of utilising hill sanatoria in India, as to the classes who should be sent to such places, and as to the proportion of the total force in India who might in this way be withdrawn from the plains, and kept in reserve.

In the later numbers of the departmental Blue Book, however, there occur views of an opposite nature to those of the writers and officers to whom I have alluded. In the volume for 1863 an endeavour is made to prove that entire regiments should, in accordance with a roster, be sent to the hills, no consideration being given to the circumstances in which each may have been previously situated. Among other arguments adduced with this object, it is said(c) that, "by sending regiments, they would carry with them their own institutions, officers, style of discipline; that a regiment is like a family, and that all these would be unimpaired, instead of being broken through, as they must be under different circumstances, and that the idea of composite battalions presupposes a state of impaired health which is to be corrected, not prevented." I have elsewhere(d) endeavoured to show the fallacy of this objection,

(a) Octavo Report, page 164.

(b) "Army Hygiene," pp. 347 *et seq.*

(c) Page 405.

(d) Page 344.

and would now only briefly refer to what I look upon as its weak points. If by the "discipline" we understand the maintenance of troops in a condition of physical fitness for service, surely that can better and more effectually be insured in a cool bracing climate, as that of the hills, than it can be under the exhausting influences of the plains, and men can under the former, much better than under the latter, be subjected to a system of drills and exercises adapted to the state of their powers. If, on the other hand, we are to understand by discipline the punishment for and repression of crime, there is no more difficulty in applying the one at a hill station than there would be in the plains, while repression becomes far easier, inasmuch as inducements to and means of committing offences are far fewer at our hill than at our large military stations in the plains. Doubtless carefully selected officers would be required to command and take Medical charge of troops under the one circumstance as much as they in reality are under the other, but that such are to be obtained in sufficient numbers admits of not a doubt. Nor am I alone in these opinions. Dr. Moore,(e) to whom I have already several times alluded, observes, with reference to these objections—namely, that the men would suffer in their drill and fall off in their discipline—"With selected commanding officers, however, this need not be the case; and even admitting that there were temporary deteriorations, and that the men returned to their corps a little slack in their duties, better this than having to replace them by raw recruits; better that they should appear a little round-shouldered, with the ruddiness of health, than be stretched out on Hospital cots." Nor are there wanting officers of experience who believe that, in some instances at least, if indeed, not in a considerable number, the mere fact of a soldier having a temporary change from a system of routine under which he has lived for years would itself be a sanitary measure of no mean importance. It is well to observe, however, that among the opinions quoted there are none adverse to the selection, in suitable cases, of regiments as such to be sent to the hills. It is possible that many would be benefited by the change; only that, as with individuals, so with them, careful selection is required. Hill climates, like many other remedial agents, are valuable when properly used, as they are pernicious under opposite conditions.

The next argument employed in the same Blue Book is to the effect that no regiment can be kept in physical and military efficiency during ten years' continuous residence in the plains,(f) and that, therefore, the recommendation is submitted that every regiment shall spend two years in the hills after every four in the plains; but that "if the climate of the station at which a corps has been for the previous two years is a trying one, such corps should be moved to an intermediate one—namely, one of 3000 to 4000 feet of elevation, while for healthy regiments sent to the hills the elevation should be 5000 or 7000 feet.(g)

It is necessary to observe, with reference to this paragraph, that not only did the regiments that in 1857 came to the plains from hill stations suffer severely from sickness, as already observed, but that the corps which best stood the brunt of the severe service during that and the following year were those that had not been in the hills at all. We moreover know that the regiments which during the Affghan, Gwalior, Scind, and Punjaub campaigns performed very arduous service, had not, as regiments, previously enjoyed residence at hill stations. These facts are notorious in India. It is difficult now to obtain statistics of regiments in India for the desired periods but Dr. Chevers, in his very valuable work from which I have already freely quoted, gives particulars(h) from which I am enabled to indicate several regiments that actually retained better health during successive years in the plains than we have seen others did at hill stations. A very few examples must suffice:—The 3rd Light Dragoons had served continuously in the plains during seventeen years, and their average mortality from 1850 to 1853 was 20·9 per 1000; the 9th Lancers had been continuously in the plains since 1842, and their average yearly mortality from 1850 to 1855 was 22·3; the 10th Foot had also been continuously in the plains from 1842, and its mortality was, during the same five years, at an average of 34·5; that of the 24th Foot in the same period was 24·3; 87th Regiment, 39·9, and so with others that could be mentioned.

At page 409 of the Blue Book already quoted, we read, that "when a regiment has suffered severely from fever or bowel complaint, the first move, if such were practicable (I mean, if such stations existed—I have no doubt there are plenty of such localities), should be to a station of moderate elevation, with a dry, bracing, non-malarious climate. For men who have suffered from the above diseases, a climate like Bangalore would be much more beneficial for the first eighteen months than climates such as those of Kussowlie, Dugshai, or Simla." Undoubtedly, this is the case, and the sole matter of regret is that Bangalore is the only station in India which even approximately enjoys the requirements here enumerated. It is important, however, to observe that the unsuitability of ordinary hill stations for sickly regiments is conceded in the extracts made, notwithstanding that in the same page it is stated that "every regiment that has passed a full period (say two years) at Mooltan, Meean Meer, Peshawur Valley, Delhi (one year), Gwalior, or Agra, should go out of the plains on its relief." This is precisely such a case as the Bengal Sanitary Commission desired to guard against. There can be no sanitary objection against, but, on the contrary, benefit must accrue from, sending a regiment from either of the stations named to the hills, provided the men are not in a low condition of health or have not, as a body, suffered from epidemic sickness. In either case the Commission, adopting the views of the many eminent men who had written on the subject, would exercise discrimination; and, indeed, that a similar method of selection is contemplated in regard to regiments under such circumstances is indicated by the remarks in the preceding page of that volume, where it is very correctly stated that "after a corps has gone through a severe sickly season at such stations as Meean Meer, Agra, Mooltan, Gwalior, Delhi, Peshawur, or Allahabad, the removal of such corps either to a hill station, or, in the absence of suitable stations at an elevation of from 3000 to 4000 feet (with a moderate rainfall), to such healthy plain stations as Hazarabagh, Bareilly, Roy Bareilly, Jullundhur, Sealkote, or Rawul Pindee, is essential to the recovery of its health and efficiency."

(*To be continued.*)

(e) "Health of the Tropics," page 93.
(f) Page 406.
(g) Page 407.
(h) Page 138.

NORWEGIAN NOTES.

By JONATHAN HUTCHINSON, F.R.C.S.,
Surgeon to the London Hospital, to the Ophthalmic Hospital, and the Hospital for Skin Diseases.

(*Continued from page 45.*)

At Molde I visited the General Hospital. This institution is supported by the State, and receives patients from the town and district. It is a roomy building newly built (seven years), and, as usual here, of wood. Everything in it was clean and neat. Several of the wards had no patients, although duly supplied with beds. Dr. Sand told me that he had accommodation for thirty-six patients, but that at present he had but fifteen in.

Ratio of Syphilis to other Diseases.

Out of the fifteen patients in the house no fewer than eight were syphilitic. I saw almost all of these; all were forms of constitutional syphilis, and one was an infant with the inherited form. When we remember that Molde is a small town of some fifteen hundred inhabitants, and that the Hospital patients come to a large extent from a thinly scattered rural population, this ratio of syphilitic disease strikes one as certainly high. Dr. Sand was kind enough to show me his register (very carefully kept), and from it I gathered that about a third of the patients were usually syphilitic. No leprosy is admitted here, there being a special asylum for it.

Treatment of Syphilis—Results of the Expectant Method.

Several of the syphilitic cases were severe ones, and three had lost more or less of the palate. None of the patients had been syphilised, and none, as far as could be ascertained, had ever taken mercury.

I asked Dr. Sand his opinion of syphilisation, and he used strong language in denouncing it, and stated that though sometimes urged to do so by his patients, he had always declined. I asked whether he ever gave mercury. "No, never to Norwegians; they do not bear it. I believe it does good in England, but not here." His usual plan was to employ the expectant method in the early stages, and iodide of potassium in the late ones. For the case of congenital syphilis under care at the time of my visit, nothing was being done beyond the administration of iodide of potassium to the mother.

One of the syphilitic cases was peculiar in that its subject, a girl of only 15 years, had already the disease in its *tertiary* form. It was the acquired form.

Frequency of Non-Venereal Contagion of Syphilis.

Dr. Bidenkap, in Christiania, had told me that cases of acci-

dental (or non-venereal) contagion of syphilis were not uncommon amongst the Norwegian peasantry, and a fact mentioned to me by Dr. Sand here confirmed that statement. Quite recently a group of cases, consisting of the father, mother, and three children, had been in the Molde Hospital, all presenting the symptoms of the secondary stage. My impression is that such occurrences are rare in English practice. A few weeks ago, I had in the venereal ward at the London Hospital a girl of four years old and her mother, both presenting syphilitic symptoms in precisely the same stage—that is, a secondary papular rash, sore-throat, and iritis. No doubt the contagion between them had been accidental. The source of the disease could not be ascertained from either, and they had shown symptoms almost simultaneously. In my own experience such occurrences have been very infrequent. Probably the careless habits of the Norwegian peasantry and their neglect of early symptoms may account for their increased risk in this direction.

It may interest some to know what other kind of diseases besides syphilis are to be met with in the Hospital of an out-of-the-way Norwegian town. I may say that there were none of any great importance. A case of senile arthritis, one of whitlow, one of ulcer of the stomach, a case of severe ulcers of the cornea in a healthy-looking young man, and a case of phthisis made up the chief.

Are the Norwegians usually of Strong Constitution?

It seems to be the impression of all the Medical men with whom I have conversed that the Norwegians are not of good stamina, that they readily succumb to depressing influences, and do not bear well any method of treatment which is depletory. It is, however, very difficult to get at the truth on such a matter. Those who give their evidence have rarely had the opportunity of forming an estimate of the comparative stamina of two different nations, and it is so easy to form the impression that those with whom we have to do are especially feeble. My belief is, however, that the Norwegian Surgeons are in this instance right. Their Hospital patients certainly do to me look pale and sickly beyond what I have been used to in home institutions. Dr. Scott, of Shields, with whom I had the pleasure of conversing on board steamer to Christiania, and who has a special connexion amongst the Norwegian sailors who frequent Shields, spoke strongly on this point, and said he was constantly obliged to use tonics and quinine for his Norwegian patients earlier than he would have done for Englishmen.

Almost all the peasantry are thin and pale, and it is rare to see any one who gives to an English eye the idea of robust and vigorous health. Those who have colour are rarely healthily ruddy, and often exhibit the circumscribed patches of deep red which imply debility rather than health. Phthisis is common, and struma also. The scale of diet both in health and sickness is, to our ideas, low. In the Hospitals no beer or other stimulant is ordered excepting as an extra, and fish takes the place of meat with us. Out of Hospital, tobacco, coffee, fish, cheese, sour milk, and oat and rye bread are the main articles of consumption. The chewing of tobacco, which appears to be almost universal and almost constant in the male part of the population, cannot but exercise some influence, good or bad, on the general health. My impression is that Norwegians, even of the labouring classes, are small eaters, and one may suspect that tobacco and coffee do something to prevent the larger consumption of solid food.

The Norwegians have a reputation for the immoderate use of stimulants, and especially of spirits. I saw, however, but little to confirm this belief. If the peasantry in the mountainous districts were much in the habit of getting drunk, they would certainly all be drowned, so terribly dangerous are many of the roads, excepting to those in possession of all their faculties. A large company of navvies whom I had the opportunity of watching whilst engaged on a new road, took hot coffee with their meals instead of beer. Of fresh meat the Norwegians get but little, and their fish and milk are often used in a state of partial decomposition instead of fresh. On the other hand, we must not forget that the entire population, males, females, and children, are engaged in outdoor occupations, and have the advantage of mountain- or sea-air or both. It is possible that these influences may enable them to resist the depressing effects of constant tobacco-chewing and habitual deficiency of nutriment in their diet, and may make coarse and otherwise unwholesome articles agree fairly well.

Dr. Sand did his best to impress upon me his belief "that the human body in Norway is not so strong as in England;" but he was equally emphatic on the fact that when he had an English patient to deal with he was obliged to feed him much better than he did his countrymen, thus admitting that the Norsk constitution could rally and get well on a regimen on which an Englishman would sink. We must clearly make great allowances for habit; and the circumstance that a man is fat, florid, and jolly-looking, although adding something to the pictorial effect of social life, by no means always implies corresponding real vigour of constitution.

Second Visit to Christiania.

My second visit to Christiania was on July 9, just before returning home, and was only very short. I had the opportunity, however, of being made acquainted with some exceedingly interesting facts, chiefly through the great kindness of Professor Boeck and Dr. Bidenkap.

I will mention first some cases to which I alluded in a letter written just after my former visit.

Cases of Inherited Syphilis in Infants.

As a month had elapsed since I first saw the two infants(a) under Dr. Bidenkap's care in which syphilisation had been resorted to, I was anxious to observe what progress had been made. I may confess that I quite expected to hear that one at least was dead. Both were, however, improving, and appear likely to survive. In the case in which syphilisation had been for a while abandoned it had been again resumed, and the little patient has certainly gained ground under it. In both cases the treatment has been complicated by the administration of iodide of potassium to the mother with the intention of its influencing the infant through the milk. In neither has any mercury been given. Both are severe cases, and in one the child's face is very extensively ulcerated. As compared with our English cases, they are certainly more severe than we usually see.

As regards inferences as to treatment, we have three courses open to us:—1st. To believe that the repeated syphilitic inoculations have done good. 2nd. To believe that the benefit is attributable to the iodide of potassium. 3rd. To consider that the disease is subsiding spontaneously.

How best to estimate Real Success in the Treatment of Syphilis.

Since it is now generally admitted that the phenomena of primary and secondary syphilis are transitory stages of a specific disease and destined to spontaneous disappearance, the advocates of different plans of treatment must grant that there are special difficulties in the way of forming reliable conclusions. Patients get rid of secondary syphilis under mercury, under syphilisation, under iodide of potassium, under chlorate of potash, under an absolutely negative treatment. Individual cases differ so much in severity and in natural tendency as to duration, that the utmost caution is necessary before we infer that any given plan of treatment has been influential. These remarks apply equally to the secondary syphilis of infants and that of adults.

The prevalence and the severity of tertiary syphilis in any given community, the frequency of hereditary transmission, the severity with which tainted infants suffer, and the frequency of those peculiar diseases which we now consider to be characteristic of the tertiary stage of the inherited disease, are the data by which we can best hope to estimate the real and ultimate efficiency of any plan of treatment which is in general use. In Norway generally during the last ten or fifteen years mercury has fallen into comparative disuse. There are still some Surgeons who employ it, but my inquiries on this point convinced me that they are a small minority, and that, in addition to the believers in syphilisation, there are many who distrust mercury, and prefer expectant treatment. On all hands it is admitted that tertiary syphilis has become much milder and more manageable. How stands the question as to the inherited disease? I was very much interested in making inquiries on this head. Our Norwegian *confrères* may very fairly remind us in England that, in spite of our general use of mercury, we have notched teeth and syphilitic keratitis in tolerable abundance, and that if any one wants to study the infantile forms of disease he can find plenty of materials at any of our out-patient departments. "Your mercurial plan," they may remind us, "judiciously and temperately employed as it at present is by almost the whole British Profession, clearly does not eradicate the taint."

There are, however, more difficulties in the way of forming anything like a truthful estimate of the relative prevalence of these diseases in different communities than might at first sight be expected. Cases of syphilis in infants can easily be diagnosed and counted, and the ratio of mortality can be ascertained. The diagnosis of the later forms, however, is often

(a) See *Medical Times and Gazette*, July 10, page 43.

a matter of individual opinion, and of much difficulty. The enormous differences in population may also easily mislead us. Thus the entire population of Norway is not two-thirds that of London alone, and those of its five or six largest towns added together amount only to 142,000, or much less than that of Edinburgh.

Now the discovery of the real meaning of notched teeth and interstitial keratitis and of the nature and frequency of several other consequences of tertiary syphilis from inheritance would certainly never have been made had it not been for the immense field of observation afforded by the Moorfields out-patients, for at our general Hospitals such cases are very infrequent. There is no chance in Norway of obtaining any similar field in order to make a comparison. There are no out-patient departments, the Hospitals are of course comparatively small, and there are no ophthalmic institutions.

Having thus explained the sources of difficulty, I will mention such facts as I could get, and leave them to be taken for what they are worth.

1. Infantile syphilis appears to be both frequent, severe, and fatal. I saw cases of it in every Hospital I visited, even in the little one at Molde with its fifteen inmates.

At a recent discussion in Christiania Dr. Fayes, Surgeon to the Lying-in Hospital, stated that eighteen infants born of syphilitic mothers all showed the disease, *and almost all died*.

2. Dr. Bidenkap, whose experience of syphilis as it occurs in Christiania is very large, told me that he had been long looking out for syphilitic teeth, and could not find a case.

3. At all the Hospitals which I visited I looked about for the well-known physiognomy of inherited syphilis, for interstitial keratitis, and for notched teeth, nor would any marked example of such physiognomy have been likely to escape my notice if casually encountered in the street. The result was that I did not until shortly before my return see a single well characterised case. It must be remembered, however, that the total number of individuals inspected was, after all, only small. In the country districts the population is very thin. I saw several doubtful cases and a single pronounced one (the exception just referred to). In this last case the child's features were much deformed.

Without going further, I think we may venture at any rate to believe that the remote results of inherited syphilis are not more frequent in the Norwegian population than in our own.

4. Tertiary syphilis in adults from acquired disease is evidently common in Norway, and fairly severe. As I have already stated, everybody agrees that it is nothing now to what once it was; but before we accept this as evidence that the old mercurial treatment was bad, and that syphilisation and expectancy are both or either of them good, there is something else to be said.

Radesyge.

The Medical nosologist may have the pleasure of striking his pen through the word "radesyge." The puzzling mystery concerning its nature and diagnosis is solved. Every Norwegian Surgeon with whom I conversed on the subject agreed on this. "We have no such disease, and as a specific malady, distinct on the one hand from tertiary syphilis, and on the other from leprosy, we never had. The name was from the beginning a mistake, and is now wholly disused." But there is room for more exultant triumph than merely in the clearing up of a point in diagnosis and the simplification of nosology. Not only is it now recognised that what was called "radesyge" was really inveterate tertiary syphilis, but the disease itself has subsided into insignificance. The special asylums for radesyge are closed, and when the stranger in pursuit of the Medical curiosities of the country asks to be shown the disease, he is told that there are no cases. What has worked the change? "The disuse of the poison mercury," shouts a chorus of voices. "Syphilisation as a radical cure of syphilis," modestly but firmly suggest its advocates,(b) whilst the impartial observer is, I think, obliged to ignore both.

(To be continued.)

One of the Smaller Lungs of London.—There is some fear that Chesterfield House, Mayfair, with its old garden and the stately trees, with their rookery, will be destroyed to make room for a row of new houses. It is said that Mr. Charles Magniac has purchased the site for £180,000; but, being rich enough to do this, there is reason to hope that he will be liberal enough to live in Chesterfield House himself, and so to save one of the few green and open spots left in London.

(b) At the recent discussion in Christiania, from which I have repeatedly quoted, Professor Voss prophesied that if syphilisation should fall into disuse, the radesyge asylums would soon have to be reopened.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

HOSPITAL FOR DISEASES OF THE THROAT.

This is one of those special institutions the establishment of which has excited a good deal of antagonism—partly, perhaps, from the specialty, on the basis of which it is founded, having been so recently created, and partly from its being the last of the special Hospitals of any note which has been instituted. When this Hospital was established many Practitioners felt inclined to regard it as the last straw on the camel's back, and hence, in the contest between general and special Hospitals, it has, perhaps too often for its own advantage, afforded the ground on which the principle was to be fought. Whatever, however, may be the ultimate destiny of this little Hospital, there can be no doubt that it has already done good service to the Profession; for whilst it is probable that the special department for throat diseases recently established at some of the general Hospitals would never have been founded if it had not been for the existence of the Hospital for Diseases of the Throat, it is certain that those departments have in their internal arrangements profited, either directly or indirectly, by the experience of the special Hospital.

In all cases we believe that Dr. Morell-Mackenzie's rack-movement laryngoscopic lamp is used, and this mode of illumination is in itself so advantageous that its general employment must be regarded as highly satisfactory.

As there are a large number of Practitioners who have neither the time nor the opportunity of visiting the special Hospitals, it is desirable that the manner in which Professional work is done at these institutions should be made known in other ways.

The Hospital now under notice is a large private house in Golden-square, which, we believe, has previously been used for public purposes. It has been as well adapted to the use of a Hospital as is possible, and affords accommodation for 16 in-patients. The men's wards on the first floor are large and airy, but the space for the women is rather contracted. Although the Hospital received and treated as many as 138 in-patients last year, it is especially to the out-patients' department that attention will be called, where the employment of the oxy-hydrogen light differentiates it from any other Hospital. The consulting-room is rather small, considering that there are generally in attendance—at least, on the demonstration days—the Physician and clinical assistant, each seeing cases, and a clinical clerk, besides several Medical visitors. There are three lamps at which patients are examined, and one of these is reserved for visitors.

The oxyhydrogen light consists of a lantern which contains the burner, and a long telescope-tube, in which the lens is placed for conveying the luminous rays to the patient's mouth. The Practitioner sits directly opposite the patient, and the end of the conducting tube of the lantern is placed at the side of the Practitioner, so that the light is thrown directly into the patient's mouth (not indirectly, as is the case when a large circular reflector is used).

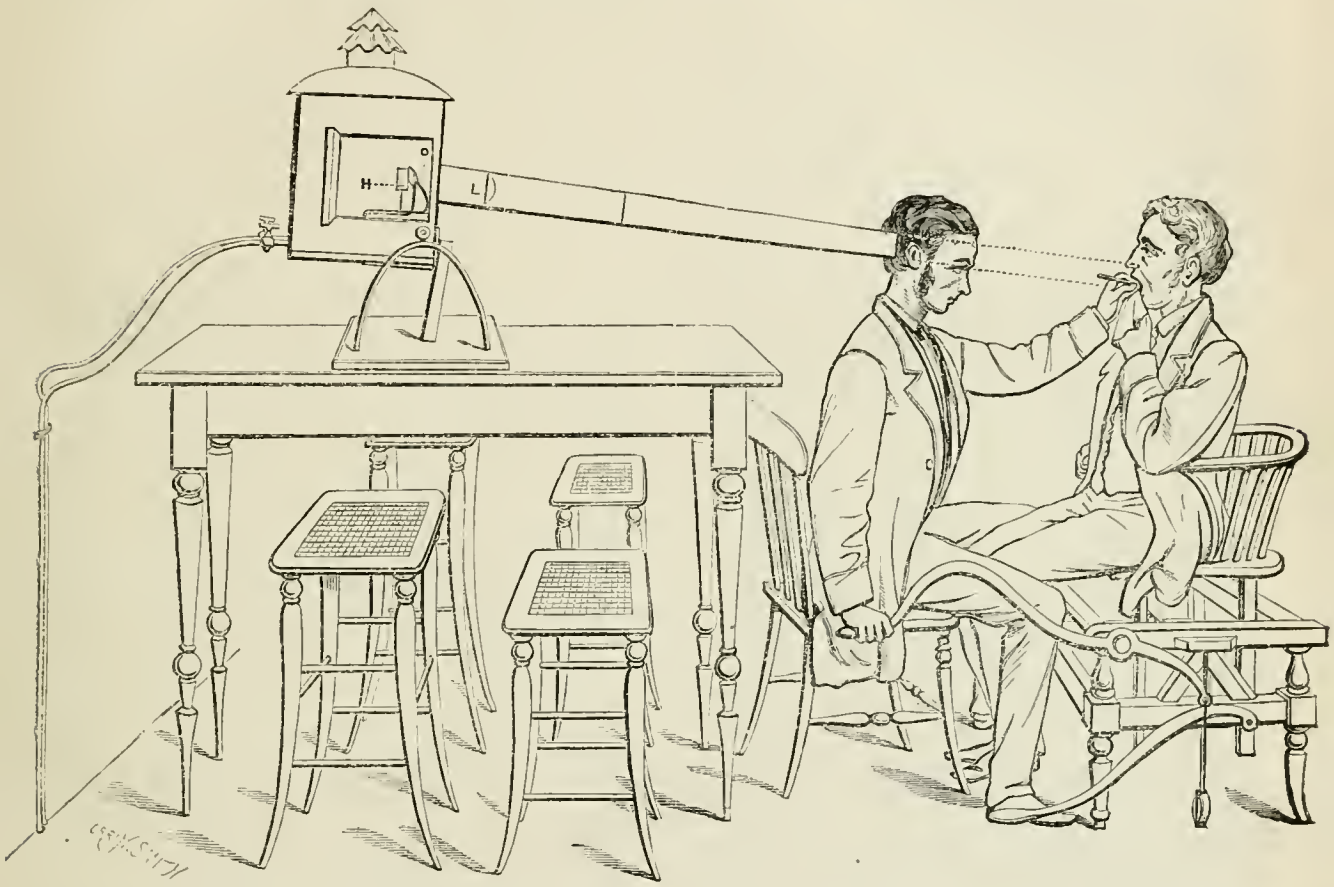
The lantern stands on the table, which is three feet high, three and a half feet long, and only one foot broad; one end of the table is immediately behind the operator, and on each side of it two stools (the front lower than the back) are placed, so that four spectators in addition to the operator can look on to the laryngeal mirror at the same time. The conducting tube serves to direct the eyes to the right point of view, so that those looking on have no difficulty in seeing the laryngoscopic image. A fifth chair may be placed at the side of that of the operator, so that altogether six people can see at the same time. This chair, however, though perfectly convenient for a demonstration *pur et simple*, is rather in the way when remedies have to be applied, as the instruments, brushes, solutions, etc., stand on a table at the right-hand side; and, as the demonstration must, after all, remain secondary to the treatment of disease, it is dispensed with on ordinary occasions.

The lantern is fixed so that the direction of the light may be altered either horizontally or vertically, but of course the light itself is a fixed point. A most brilliant and perfectly clear light is easily thrown on to the laryngeal mirror by focussing the lens situated in the conducting tube, with the aid of its telescope arrangements. In the particular apparatus now being described, the tube is 37 inches long, and a concavo-convex lens

is used, but of course the length of the tube must vary according to the focal power of the lens.

This mode of illumination is by far the best which has yet been invented for laryngoscopic purposes—at least for demonstrations. Not only is the light superb, but the mode of illuminating is much less fatiguing to the operator when a large number of cases have to be seen, and the heat, if not actually less, is less felt on account of its being further removed from him. It may be well to add that the accessory arrangements essential in this mode of illumination are well managed. Though the apparatus itself is rather large, it does not take up much room, the oxygen being kept under pressure in a room below and brought up through an ordinary gas-pipe, as will be seen in the annexed cut (Fig. 1), to which we also

Fig. 1.

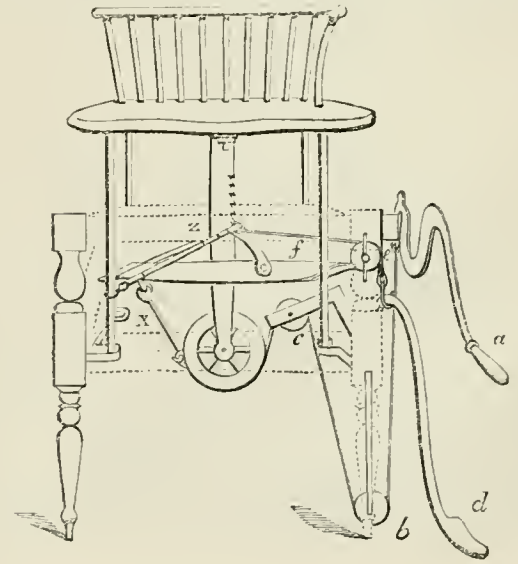


refer for other details already described, and, in place of hydrogen, common gas is used. The two gases (H, hydrogen or common gas, and O, oxygen) are entirely distinct, and only become united in the flame. This precaution, which slightly diminishes the intensity of the illumination, removes all possibility of an explosion.

For ordinary laryngoscopy, but especially when the oxyhydrogen light is used, Dr. Morell-Mackenzie recommends his laryngoscopic chair. A side view of this chair is shown in Fig. 1, and a more diagrammatic and direct view in Fig. 2. By reference to the latter cut, it will be seen that by pressure on the handle (*a*) a lever of the second kind is brought into play through *b* and *c*, the fulcrum being at *x*. No great exercise of power is required, for the leverage is very great, and the handle is so convenient that by merely leaning on it (as the operator is doing in Fig 1) (a), a man fourteen or fifteen stone in weight can be easily raised, and when raised is kept in the desired position through the rack arrangement in the axis of the chair. On the other hand, by touching the pedal (*d*) with the foot, the catch of the rack is raised, and the seat of the chair is lowered. By means of this chair, the operator can easily and rapidly put the patient at any convenient height, without himself rising from his chair.

Whilst recommending the oxyhydrogen light and accessory apparatus for clinical (or perhaps, more strictly speaking, educational) purposes, it is only right to say that for a simple examination, or even for a delicate operation, the ordinary rack-movement laryngoscopic lamp is probably more convenient. The oxyhydrogen light also requires so much management,

Fig. 2.



(a) Although the operator is seen to be using the laryngeal mirror in one hand, and raising the patient with the other, this is really "a draughtsman's licence," in order to show two processes which in practice cannot be conveniently carried on at the same moment.

and the manufacture of the oxygen involves so much trouble, that this mode of illumination is not likely to come into general use in private practice, though nothing can be better for Hospital purposes. The price of the apparatus, which is made by Mr. Millard, of Islington, is £15 15s., and the consumption of gas costs at the rate of about 2s. an hour. The chair costs another £6 6s., and can be supplied by Messrs. Mayer and Meltzer.

Before taking leave of this Hospital, it may be well briefly to call attention to the principal kinds of local treatment which the Medical staff employ. There appear to be three kinds of local treatment which serve for the majority of cases. These are—1st, aqueous solutions; 2nd, electricity; 3rd, mechanical means. The solutions mostly used are chloride of zinc (60 grains to fl. oz.), perchloride of iron (120 grains of the salt to fl. oz.), and sulphate of copper (15 to 20 grains to fl. oz.). Solutions of nitrate of silver are used in syphilitic ulceration alone, and in these cases Dr. Morell-Mackenzie much prefers the solid nitrate fused on to slender rods of aluminium, which can be applied to the exact spot. Carbolic acid (30 grains to fl. oz.) is strongly recommended in those obstinate cases of dryness of the mucous membrane which are so difficult to cure. Iodine is found to be most serviceable in syphilitic condylomata. In some cases of advanced syphilitic disease Mr. Evans, Surgeon to the Hospital, prefers bark and nitric acid to the large doses of iodide of potassium commonly given.

Electricity in its induced forms is used both in laryngeal and œsophageal debility. In most cases, one pole is introduced within the larynx or œsophagus, as the case may be, the other being placed on the neck externally in the form of a collar. It is especially in the nervous forms of aphonia that the most striking results are obtained.

Under the head of mechanical means are included the removal of growths, scarifications, etc. Forceps are principally used for the former purpose, though we noticed also an *écraseur* just imported from Vienna. The most serious objection to the *écraseur* is that the wire gets bent before the growth can be reached. In Störk's recently invented instrument, however, the wire is placed in the groove of a small rigid loop of metal. It appears to be far preferable to any laryngeal *écraseur* hitherto used, although perhaps, strictly speaking, it approximates more to a *guillotine* than an *écraseur*. We saw also some of Mr. Oakley Coles's ingenious obturators worn by patients with defects of the palate, and they appeared to answer well. Mr. Coles's plan consists in closing the aperture, but not allowing the instrument to pass into the nares.

We saw scarification performed in one case of œdema of the arytenoid cartilage, and we saw another case in which the same operation had been done a few days previously with entire subsidence of the swelling. In addition to the local treatment already referred to, it may be remarked that inhalations and lozenges are largely employed. Amongst the former, creosote, compound tincture of benzoin, oil of wood-pine and turpentine are those most frequently ordered. Of the lozenges, tannin, rhatany, guaiacum, benzoic acid, and chlorate of potash are those most largely given—gargles are very little used.

In conclusion, we may call attention to the fact that free demonstrations are given every Thursday at half-past two; and as the average attendance of patients on that day is from 80 to 100, a visitor cannot fail to see some cases of unusual interest.

ST. MARY'S HOSPITAL.

COMPOUND FRACTURE OF THE TIBIA TREATED BY LONG-CONTINUED TEPID IRRIGATION.

(Under the care of Mr. HAYNES WALTON.)

T. S., a strong healthy man, aged 37, a harness maker, was admitted into the accident ward of St. Mary's Hospital, under Mr. Haynes Walton's care, on March 16, 1869, with a severe compound fracture of the left tibia. While measuring a horse for a crupper, he received a kick on the left leg a little below the knee.

On admission, there was a semilunar wound two inches wide, with the convexity of the curve upwards near the junction of the middle and upper thirds of the leg. At the bottom of the wound the tibia was seen split up the centre, and above that point was another transverse fracture of the bone. The fibula was uninjured. There was a good deal of hæmorrhage at first. Three silk sutures were inserted, and the wound sealed up with lint soaked in collodion, the limb being arranged on an iron back and two side splints.

During the night much oozing took place from the wound, and was arrested by a pad pretty tightly applied, and with the aid of an opiate the patient passed a fair night.

March 18.—Has been bleeding at intervals since yesterday morning. Pulse 120, weak; tongue dry at tip; passed a restless night. More oozing occurred from the wound, and during the next two or three days the leg and thigh became much swollen and red. The lint, etc., was removed from the wound, whence there was a free discharge of pus. Linseedmeal poultices were applied, and an abscess opened on the outer side of the thigh on March 29.

On the 30th he had a rigor in the morning, and felt very ill and exhausted during the rest of the day. Pulse 120, weak; tongue furred.

31st.—Mr. Walton removed two bits of bone from the tibia—one from the anterior surface two inches long, and another measuring an inch and a half—the wound at this time looking angry and sloughy, and the surrounding cellular tissue being much inflamed.

April 1.—Irrigation with lukewarm water was commenced to-day, the water dripping slowly from a perforated bit of tubing fastened to the tap of a can which was suspended over the bed.

5th.—Patient has felt great comfort from the irrigation, which has been constantly kept up. The redness around the wound is now subsiding, and the sloughs are separating. There is no longer any anxiety of face; the tongue is clean; he sleeps well, and the wounds in the thigh are healing nicely. The irrigation ordered to be continued, with the addition of weak carbolic acid lotion to the water.

16th.—Has remained comfortable during the last few days, taking eight ounces of wine, with iron and quinine, daily. Another bit of bone, an inch long, was removed from the tibia yesterday. There is still free suppuration: appetite much improved; irrigation still continued, the patient expressing great relief from it, and complaining when the water is allowed to get at all cold.

20th.—Mr. Walton opened several sinuses this morning. There is less suppuration now, and there seems to be good formation of new bone going on. The man, however, continues weak and low, although eating well, and taking now eight ounces of brandy in the twenty-four hours.

23rd.—Another abscess in the thigh opened to-day.

29th.—Same treatment is continued. Some more dead bone is seen at the bottom of the wound. Patient takes a good meat dinner, with ale, daily.

May 14.—The man continues tolerably free from pain; the granulations are healthy, and gradually filling up the wound, at the bottom of which there is still some ragged and exposed bone. His general health is improving, and he feels a good deal stronger.

22nd.—On changing the splints to-day there did not appear to be any firm bony union yet, but otherwise the patient is going on well, the tepid irrigation being still continued.

On June 2 the splints were again readjusted, but the union seemed no firmer yet. More openings along the outer side of the leg have been made.

On the 28th the irrigation was discontinued. There was now not much redness and swelling left, and hardly any pain. The large hole left by the sloughing of the first wound was nearly filled up, but some discharging sinuses remained in the leg for some distance around, and necrosed bone was felt. The patient had, however, quite regained his health, ate and slept well, and suffered very little pain. The limb was still kept in splints and slung up.

Remarks by Mr. Haynes Walton.—During irrigation the process of formation of new bone was established unusually quickly. Irrigation was continued until the new bone had nearly quite surrounded the necrosed portion of the tibia. It was considered prudent not to interfere with that piece of dead bone, because it had not yet been separated from the living, no sequestrum having formed. The small wound was after that dressed with cotton wool every two or three hours, so that while sufficient moisture was left for the purpose of the continuation of the formation of new bone, any superabundance of pus was soaked up and taken away sufficiently often to prevent decomposition, and the air was excluded. During the treatment it was impossible to attend to the position of the limb with reference to straightness, so that a little distortion existed. This is being attended to now that some consolidation is setting in. The back iron splint with the foot-piece has been used throughout, and the apparatus, together with the leg, has been suspended in a leg-cradle. At first the question of amputation was seriously

entertained, and afterwards, two or three times, it seemed almost inevitable to save life; but as the patient's general health improved the alternative was postponed.

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Medical Times and Gazette.

SATURDAY, JULY 24, 1869.

GENERAL MEDICAL COUNCIL.

We have ever been anxious to think, speak, and hope the best things possible of the Medical Council. We have fully recognised and made the most of all the difficulties they have had to contend with, from within and from without. We have carefully gathered up and enlarged upon every scrap of work they have done or really tried to do, and accepted all with gratitude and praise. We have waited, hoped, suffered, and endured—have been animated, in short, by the truest spirit of charity towards them; but we must confess that in this last session they have tried us very sorely, and that our charity has shown symptoms of failing.

What has the session produced? Some of the committees of the Council have done real work, and we hope shortly to be able to devote some space to the consideration of the reports of the Committees on Medical Education and on the Amendment of the Medical Acts. But what have the Council done besides cumbering our pages with long and wordy discussions, tedious and vain to the last degree—*vox et præterea nihil?* Only one report—that on State Medicine—was discussed with any final result, and the result in this case was only a resolution depending on remote contingencies—viz., that if an amended Medical Act can be obtained *it is desirable* that it should empower the Council to register a qualification in State Medicine, supposing they are ever asked to do so. The very warmest admirers of the Council, even those members of it who are most profoundly convinced that, "for the purposes of the existing Act, the present Council is essentially well constituted," can hardly consider, we must venture to think, that the passing of that one resolution is sufficient for one entire session! And yet what else can be pointed out as work done? Two or three judicial acts might perhaps be named, but a much smaller and less costly machine than the Council could at least equally well perform those acts, and there is absolutely nothing else to quote as the result of the ten days' sitting. The report of the Committee on Medical Education was received, and was remitted to the various licensing bodies for consideration and comment. The large majority of the Council are representatives of the licensing bodies, be it remembered; but it appears that they do not presume to know the opinions of the bodies they are supposed to represent, even on what must, or ought to, be such a familiar topic as Medical education. So the members returned by the licensing bodies send the report to those bodies—that is, to themselves sitting elsewhere—for consideration, and then it returns, with their own comments, to be reconsidered by themselves sitting in the Medical Council! About the report of the Medical Acts Amendment Committee the Council agreed to differ—*i.e.*, they adopted the clause praising their own constitution, and one or two other clauses, but refused to adopt the report as a whole, and then sent it to the Lord President of the Council as an only partially adopted report. They found it impossible in their twelfth annual session to come to any clear practical decision as to what should be stated as the most requisite amendments of the Medical Act. For years the subject has been before them, and year after year they have been going, cap in hand, to Her Majesty's ministers, begging them to take charge of a Medical Acts Amendment Bill; and now, when at last the Lord President of the Council holds out a hope that the Government will take up the subject, and deal with it in the largest and fullest way, and asks their advice and help, all they can do is to send him a report, saying "Here are some thoughts and opinions about the matter, but we do not agree about them:" in other words—We, the General Medical Council, have been in existence for twelve years, the matter about which you ask our counsel has been constantly before us, various bodies of the Profession have addressed us on it, we have appointed committee after committee to report on it, we have discussed it year after year in Council, and since your letter especially asking assistance and advice from us, we have had another committee and another discussion, and the result is—that the subject is too great for us; we must leave it to your judgment and wisdom, aided by such advice and help as you may be able to get from elsewhere. And God send the Profession and the public a happy deliverance!

It is difficult to believe that the Council can have understood the tenor of the Lord President's letter to them, or have remembered that he has at his elbow, in the person of the Medical Officer of the Privy Council, a very able man of strong and pronounced opinions on Medical politics. Do they wish to play into that gentleman's hands, and to make him dictator to the Profession?

Altogether the proceedings of the Council this year must have been noted with feelings of grievous disappointment, and closely akin to despair. Each and all of them are distinguished and eminent men in the Profession — which means that they are men of clear and sound judgment, of promptness, and decision; but gathered together as a legislative body in the Medical Council, a strange blight seems to fall on them, and their proceedings are chiefly remarkable for dilatoriness, indecision, delay, loquacity, and self-satisfaction. Can it be that they are in some way infected by the air of the place in which they meet? Of course we are not saying that each individual member of the Council undergoes this unhappy metamorphosis; we speak of the total results of the actions of the majority of the Council as a body. Is there any hope of improvement? We certainly fail to gain any gleam of it from the proceedings of this session, and, among other things, we cannot but think the somewhat sudden retirement of the late President as an event of gloomy omen. We know nothing about the motives for his resignation beyond what he has stated in his own speeches, and perhaps we have no right to suggest anything more; but we cannot help strongly suspecting that had he been able to see any hope that the Council would take a decided, active, and leading part in the preparation of an Amended Medical Acts Bill, and of their more worthily answering the expectations of the Profession and the public as the Council of Medical Education, he would have been willing to retain for a while longer his office as their President. He would have felt more than rewarded for all his additional labour and trouble could he, on retiring a year or two years hence, have presented to the Profession as the latest achievements of the Council a well-digested and fully and

largely amended Medical Act, and a settled, finished, and working scheme of Medical education.

Be that as it may, however, Dr. Burrows's retirement from the Council is a serious loss. But one of the worst symptoms about that body is their corporate self-satisfaction. This year again they have once more enumerated the good works they have brought forth in the twelve years since they first met. They have, year after year, published a more or less imperfect Register of the Profession. Well, a staff of clerks could have done that without the Council. They have improved preliminary education. Grant it, though it is not undisputed. They have done some good by their supervision of examinations; they have gathered together a mass of opinions about the improvement of Professional education; and they have formed a British Pharmacopœia—their *magnum opus*. Well and good. They have been credited in no niggardly measure with all this: but we would venture to suggest that it is time they ceased to trade on it, or to bring it forward as a triumphant answer to all detractors. One does sometimes meet with a man who, having, by the help of tutors and "coaches," achieved, in his youthful days, some collegiate or university distinction, has expected to be worshipped, on the strength of it, as a great man and a genius for ever after. And such perhaps he has remained in his family circle, but the outside world is apt to value the work done in early years only as an earnest of still better work to come.

THE CHAIR OF CLINICAL SURGERY AT EDINBURGH.

Ever since Mr. Syme resigned the chair of Clinical Surgery in the University of Edinburgh, the future fate of that chair has been a subject of anxious thought and discussion among the Medical Profession in the northern metropolis. The Clinical Surgery chair has hitherto been protected by monopolies above every other Medical or Surgical chair in the University. First, a few Professors contest for its continuance with all these unique and exclusive privileges; secondly, most of those who desire to see it retained hold, however, that (as in all Medical schools in Scotland, England, and elsewhere) the other Surgeons and lecturers on Systematic Surgery in the Edinburgh Infirmary should be allowed to give qualifying courses of Clinical Surgery; while, thirdly, many members of the Profession believe that, as the great and paramount object of modern Medical educational reform is in the diffusion and extension of clinical education, this end would be far more promoted by the total abolition of the chair than by any other measure. In this last case, all the Surgeons of the Hospital would give the Clinical Surgical instruction, instead of one only; three or four of them now are lecturers on Systematic Surgery; but they are sternly and strangely prohibited from lecturing clinically, because they teach systematically the practice of Surgery. The anomaly produced, in other words, by the present exclusiveness of the Clinical Surgery Professorship is this—that while none of the Surgeons and lecturers on Systematic Surgery attached to the Edinburgh Infirmary can give qualifying lectures on clinical Surgery, on the contrary, all the Surgeons and lecturers on Systematic Surgery in all the Hospitals, Universities, and Medical schools of Glasgow, Aberdeen, London, etc., can do so. The Edinburgh Chair of Clinical Surgery is the only chair of mere Clinical Surgery in the world. In all other places and schools the Hospital Surgeons and lecturers on Systematic Surgery are the clinical teachers, and can one and all give qualifying courses of clinical Surgical lectures to the pupils of the University of Edinburgh, provided they themselves reside in any other city or Medical school than Edinburgh and are Surgeons to any other Hospital than the Hospital of Edinburgh. Only one Chair of Clinical Surgery was ever, we believe, founded on the Edinburgh model—viz., the Chair of Clinical Surgery in University College, London; but there matters have been entirely changed from the Edinburgh type, for while Professor Erichsen is the able Professor of Clinical Surgery, his Surgical colleagues in the Hospital and school, Sir Henry Thompson and Mr. Marshall, lecture along with him on this subject, and give the students the advantage of all the Surgical cases in the Hospital and of all the differences which may exist in their practice. In Edinburgh the Professor of Clinical Surgery has hitherto been successful in preventing any licence whatever of this kind and any such advantage as this to the students and the school.

THE ARMY MEDICAL DEPARTMENT ON ITS NEW FOOTING.

For many years before the Crimean War our Army Medical Officers were entrusted with the entire control and management of their own Hospitals when stationary, and with the control of all matters belonging to their department in connection with forces employed on actual service. That, like all other branches of the army, our Hospital department should have broken down on that occasion is not matter of surprise to those who remember the general state of unpreparedness in which all were for the requirements of a severe struggle; but that, the first panic over, we should have rapidly got all establishments into complete and effective order as the campaign continued, while our allies found their arrangements gradually become less and less efficient, surely indicated that, however faulty our system may have been, theirs was still more so. But, with a strange fatuity, nothing would please a certain set of persons, who unfortunately obtained "the ear of the public" when the struggle was over, but to demolish the system according to which the Medical Department of the British army had been able to recover itself and act effectively, and adopt that of the French, the results of which have recently been communicated to us. The *executive* power, as that expression is understood in our service, was withdrawn from our Surgeons; they were deprived of the power of ordering arrangements connected with the treatment, regimen, attendance, and accommodation of the sick, who would thus be but nominally under their charge. Governors and captains of orderlies were appointed to perform duties the necessity for which had not previously been discovered, and a class of officers called purveyors were appointed, but totally independent of Medical officers, to correspond direct with the War Office upon all matters connected with the management of the sick, except alone the administration of medicine. New Hospitals were erected, and some existing ones altered so as to meet the requirements of what was called the improved system, and it may fairly be said that under it the powers of our Medical officers to carry out the purposes for which they were maintained were reduced to a minimum, to the great injury of the service, and to the cost of the tax-paying public. At this juncture we receive some light upon the system, as it existed in its native country, which such persons would introduce into ours.

Dr. Chenu, of the French army, has just published, in two volumes, a report on the war in Italy, and in the course of his work takes occasion to contrast the working of his own department and that of the British army during the Crimean war. After referring to the losses by casualties in action and by sickness in the two armies during each of the two winters the allies were before Sebastopol—showing that, whereas among his own countrymen the losses were much greater during the second than the first, in the British the reverse was the case—Dr. Chenu remarks that "in Prussia, England, Italy, and America the Doctor is alone responsible for the manner in which he performs his duty; but in France the Medical officer is dependent on the *administration*, and is consequently merely an executive agent." He observes that on the occasion referred to the melancholy results which occurred among the French troops arose from the system under which so small an amount of power is vested in the Surgeons, and that, although

these were quite as much devoted to their duty as were those of the English army, they were deprived of all initiative. Thousands of men were uselessly sacrificed because hygienic measures were unknown or unappreciated by the administration.

It would seem, however, that the failure of this French system, after fourteen years of an experimental trial in our army, has been so signal that it has been determined to "try back," and restore the conditions as they existed before that time, and as common sense indicates that they should exist. The cumbrous military staff of the Herbert Hospital is to be dispensed with, the principal Medical officer being very properly placed at the head of that institution, the object of which—namely, the treatment of sick men—would seem, judging from its former manner of administration, to have been forgotten. What, let it be asked, would be thought of a system under which the paymaster and quartermaster of a regiment were both irresponsible to and independent of the commanding officer, and where the latter was supervised by a Surgeon in all that referred to discipline and routine? No less anomalous has been the system of Hospital administration now abolished at Woolwich, but still permitted to exist elsewhere. Yet in the changes now made there is an acknowledgment of past error, and, let us hope, a promise of still further changes, the result of which will be to give Medical officers that control in Medical affairs that military officers have in military matters.

HILL STATIONS IN INDIA.

That the climate of hill stations in India is more healthy to Europeans than that of the plains is an accepted fact; yet when this fact comes to be applied in practice with reference to our troops several difficulties present themselves, a fuller account of which our readers may gather from the series of papers on army sanitation in India, published in this journal from the able pen of Dr. Gordon, C.B. One of the questions which have then to be answered is, What proportion of our effective force can, with due regard to military requirements, be permitted to occupy such places? Another, What classes of men should be sent to them? and on each of these very opposite opinions have been expressed by officers of great experience and high reputation.

With regard to the first, which is principally military and political in its bearings, all that need here be said is that a proportion of 20 to 30 per cent. includes the extremes between which opinions have fluctuated, but it is with the second that we are more particularly concerned.

It may be sufficiently easy to rule that one-third, one-fourth, or any other proportion of our soldiers shall be quartered in the hills, but it is by no means an equally simple matter so to dispose of that proportion as to confer the greatest benefit upon the largest number, and thus indirectly insure the very purpose for which an army is retained in the country. We can readily understand that, unless care be taken, many men may be sent to the hills whose condition is unsuited for their climate, and who would really have continued in better health had they been permitted to remain in the plains; while, by the fact of their occupying the accommodation available, many others, whose cases are of a nature likely to derive benefit by such a change, are forced to remain at their original stations, exposed to the various causes of disease from which they have begun to suffer. To act upon such a want of principle would really seem the height of carelessness, and yet this looks like the manner in which, for some years at least, troops have been sent to the hills, entire regiments, usually after having been visited by severe epidemics, or stationed during more than usually lengthened periods at unhealthy places, being for the most part sent direct to elevations varying from 6000 to 7500 feet, without any selection either of men likely to benefit by the change or of those—and they are manifestly not a few—who are equally likely to suffer by it. We must not, indeed, omit to observe that a small number have annually been selected from particular regiments and sent to so-called "convalescent" depots, but under the system pursued very few of them ever after became effective, and, as proved by statistics and reports published from time to time in these pages, the rates of mortality and invaliding among the regiments at such places have been far greater than among corps occupying some of the stations in the plains.

But a more enlightened policy has lately been introduced. Men, carefully selected, have been taken from different regiments and sent to the hills, some as working parties on roads, others employed in the erection of barracks and the various duties connected with the formation of new stations, sites for which have been selected, and we cannot doubt but that the results of the measure will be most successful. One of the arguments even very recently used against what has been called "the breaking up of regiments" which such a plan involved was that *discipline* would suffer. We cannot see its force. Military exercises can surely be more effectually practised in a cool than in a hot and oppressive atmosphere, and crime more easily repressed where there are few temptations and opportunities for its commission than at places where both abound, as they do everywhere in the plains. Nor is it difficult to understand that the temporary withdrawal of men, and, it may be, officers also, from the routine of some few regiments may be in itself a sanitary measure of no small importance.

On the other hand, it is to be feared that exaggerated views prevail in regard to the salubrity of hill stations themselves. Recent accounts have cast doubts upon the fair fame, in this respect, of at least two such places; but official reports have for years past expressed misgivings. Some of those highest in elevation and in latitude have been swept by virulent epidemics; none would seem to be altogether exempt from the ordinary diseases of the plains, and the facts are notorious that in many instances persons in an impaired state of health suffer aggravations of their complaints by a sudden change to the hills. Others become affected with maladies to which they were strangers in the plains, and all, on returning to the low grounds, manifest a liability to endemic disease which was not apparent beforehand. What, then—it may be asked—Are hill stations in India a delusion? Very far from it. They are declared to be specially valuable for the restoration of health in a certain restricted class of persons, and, if less salubrious than England, to afford to the soldier a better chance of preserving health than he could enjoy in the plains. They are, moreover, well adapted for young soldiers and newly arrived men, and in all these respects may be, if utilised judiciously, of the greatest importance to the health and efficiency of our army, whereas, like many other things good in themselves, they may be rendered worse than useless. To avoid the evil and secure the good can only be done by carefully selecting men, whether as individuals or regiments, to be sent to the hills, and by making a no less careful selection of those for whose conditions experience has shown that they are unsuited.

THE WEEK.

TOPICS OF THE DAY.

The following is the list of Members of the Royal College of Physicians who have been selected this year by the College for the honour of its Fellowship:—

John Thomas Arlidge, M.B. Univ. Lond, Newcastle-under-Lyme.
John Cockle, M.D. Univ. R. Coll. Aberd., 13, Brook-street, London.
Matthew Alexander Eason Wilkinson, M.D. Univ. Edin., Manchester.
John Langdon Haydon Down, M.D. Univ. Lond., 39, Welbeck-street, London.
William Alexander, M.D. Univ. Edin., Halifax.
William Henry Ransom, M.D. Univ. Lond., Nottingham.
Owen Daly, M.D., Univ. Dub., Hull.

Henry Day, M.D. Univ. St. And., Stafford.
George Fielding Blandford, M.B. Univ. Oxford, 3, Clarges-street, London.
Henry Maudsley, M.D. Univ. Lond., 38, Queen Anne-street, London.
William Henry Broadbent, M.D. Univ. Lond., 23, Upper Seymour-street, London.

This list may perhaps be considered an improvement on some former ones; but on reading it through, it seems difficult to discover on what principle the Council of the College have made their selection. The two first names on the list are those of senior Members of the College, whom all will rejoice to see promoted to the rank of the Fellowship. We have then the names of several country Physicians, who are, no doubt, each and all worthy of the same honour, but are certainly but little known beyond their own towns and counties, whilst of the five London Physicians in the whole list, three of them have made their reputations in the specialty of mental diseases. We think that the list is calculated to give great dissatisfaction amongst the Members of the College who are practising in London, and although a part of the selections made must command general approval, the list as a whole will do little to strengthen the College or to reconcile the Profession to the present mode of election.

Dr. John Ogle, of St. George's Hospital, has been elected a corresponding member by the Medico-Chirurgical Society of Edinburgh.

The newspapers of last week contained a report of a prosecution at the Lambeth police-court which we cannot help thinking was a vexatious misuse of the Medical Act. The son of Dr. Charles Taylor, one of the most respected Practitioners at Camberwell, was brought before the magistrate for the offence of placing his name, with the word "Surgeon" on it, on a door-plate. The facts of the case are these:—Mr. Taylor is a student at Guy's Hospital, he is a Licentiate of Apothecaries' Hall, and has passed his first examination at the College of Surgeons, but he cannot present himself for the final examination until November next. In the meanwhile he is employing his spare time as his father's assistant, and filling the offices of clinical clerk to Dr. Pavy, and dresser to Mr. Birkett, at the Hospital. He has not yet registered. We are assured that the name was placed on the door under the supposition that no law was infringed, and we are also informed that, on obtaining legal opinion to the contrary, the plate was removed—before the case was heard in the police-court. Under these circumstances, surely a nominal fine of one shilling would have vindicated the insulted majesty of the law! The police magistrate, however, thought otherwise, and inflicted a fine of £5 and two guineas costs. We should be the last to defend illegal practice of any kind or sort, but we think in this case the letter, and not the spirit, of the law guided the decision. In fact, if Mr. Taylor had been an arrant quack, practising without any diploma or Medical education, it is a hundred to one he would have escaped scot free. But being in everything, except registration, a qualified Medical Practitioner, he is singled out by some informer for prosecution, and the magistrate probably enjoys the joke of putting the Medical Act in force against a Medical man.

Every paper just now contains a report of some prosecution for infringement of the Compulsory Vaccination Act. The other day a respectable butcher residing at Hammersmith was fined for not having his child vaccinated, his plea for delay being that he wished to have his child vaccinated from the cow. The recent inquest on a child who died from erysipelas, the result of vaccination, of which we publish a report this week, seems to afford strong evidence that a morbid poison besides the vaccine can be conveyed by vaccination. If this be true, we cannot wonder at, however we may regret, the dislike to the operation of timid parents who cannot calculate chances. All reasonable objections would be silenced by the regular practice of animal vaccination.

We would draw attention to an advertisement which appears in our present number in reference to the examinations for the Medical Department of the Navy. The examinations for the future are to be competitive, and are to be conducted before a board of examiners, who are to sit at Chelsea. The first examination is to be held on August 9. Candidates must present themselves at the Director-General's office on the 5th of next month. By this change, the examinations for the Naval Medical Department will be assimilated in character to those for the British and East Indian armies. Any regulation by which the three services are put on an equal footing cannot but be salutary.

Readers in the British Museum—and we believe there are not a few metropolitan Medical men who sometimes endeavour, despite difficulties, to consult a book or a manuscript under Mr. Panizzi's great dome—will be glad to learn that part of an increase in the sum voted for the Museum in the present year is to be expended on improving the catalogues, and on providing an extra set of servants on Saturday afternoons, and at other times when the reading room is full, to fetch books within a reasonable time for applicants. For men belonging to a busy profession like our own, who may wish to consult a rare book and perhaps have only part of an hour to spare, it has hitherto been simply waste of time to go to the great national library. From the time the reader has arrived, searched the old catalogue, the new catalogue, the King's and the Grenville, has written his ticket, and sat down to wait until the attendant appears with the book, not less and often more than a full hour has been consumed. In the House of Commons on Monday night, Mr. Walpole spoke of complaints of members of Parliament, who have been kept twenty minutes or half an hour for books, but we believe that a much greater waste of time has been the general rule. Mr. Walpole hopes that for the future no applicant will be kept more than ten minutes or a quarter of an hour. If the hope be realised, a great boon will have been granted, and will be appreciated by none more than by Medical readers.

The squabble between the new guardians of St. Pancras, the *ex-officio* guardians, and the Poor-law Board, of which the Coroner's inquiry in the case of Mary Allen is an outgrowth, seems to be flourishing. The Poor-law Board fixed the 20th inst. to commence an inquiry into the matters in dispute, and have appointed Mr. Montague Bere, Q.C., to hold it. The new guardians, in answer, said that the Medical officer required at least a week to prepare for the inquiry; moreover, many of the guardians were engaged on that day, and they directed the attention of the Board to a resolution they passed to the following effect:—"That no thorough impartial inquiry will be effected by any official body short of a committee of the House of Commons, and that Mr. Thomas Chambers, M.P. for the borough of Marylebone, be requested to move for such committee at the earliest possible period." The whole matter, as we said last week, is a proof of the defects of the present system of divided authority. At the same time some of the alleged grievances, whether true or false, point to the necessity for a proper system of Medical inspection of Workhouse Infirmaries, such as was recommended last year by a Select Committee of the House of Lords, but which recommendation Lord Devon chose not to adopt.

We understand that the Chair of Botany at the London Hospital will shortly be vacant by the resignation of Dr. Silver. An unusually large number of vacancies in Medical chairs have been announced lately. The resignation of the chair of Medical Jurisprudence at University College by Dr. George Harley, in consequence of ill-health, is much regretted.

THE CHAIR OF GENERAL PATHOLOGY IN THE UNIVERSITY OF EDINBURGH.

When the Chair of General Pathology in the University of Edinburgh was last vacant, it was proposed by some to do away with it altogether, and this intention was strengthened by the subsequent defection of Professor Henderson from the paths of legitimate Medicine. Up to a week or two ago some of the members of the Senatus still held to their former opinion, but we are glad to learn that all have now abandoned the scheme of destroying a chair which now-a-days is of such prime importance. The candidates are guarantees for the way the work will be carried on.

HEALTH OF ALDERSHOT.

Scarlet fever and measles are still lingering among the soldiers' families at Aldershot. For more than two years cases of these diseases have been frequent among the women and children, and occasional among the men. During one week lately two children died from scarlet fever; also two women, who were attacked shortly after their confinements, the disease in their cases most probably having assumed the characters of puerperal fever. Another woman had died from the same cause a short while previously. The matter is receiving the earnest attention of the authorities, and we believe that every means to prevent the further spreading of the disease, especially among parturient women, has been adopted. A few slight cases of sunstroke have occurred among the men during the recent very hot weather.

WATER SUPPLY OF GIBRALTAR.

The *Gibraltar Chronicle* of June 17 contains information of the discovery of two wells on the north front, from one of which 72,000 and from the other 400,000 gallons of pure soft water can be obtained daily. They have been discovered by sinking only 10 or 12 feet. We have no information, however, as to the nature of the soil or rock from which the supply flows. Were it only for the purposes of ablution or flushing, such a large increase to the water supply will be a most valuable acquisition to the sanitary condition of the fortress.

CHOLERA IN BENGAL.

Since the commencement of the present hot season cholera has appeared in several of the military stations of the Bengal Presidency, chiefly at Allahabad, Saugor, and Morar. The latter station, although reported lately by Mr. Grant Duff, in reply to Sir D. Wedderburn in the House of Commons, as being salubrious to Europeans, keeps up the evil notoriety which it attained in 1860 and 1861 as a cholera haunt during epidemic years, and we consider it very unfortunate that it should have been considered necessary, for political reasons, to increase the barrack accommodation at that station. A total of 143 cases of cholera and cholera-diarrhœa and 88 deaths of soldiers was reported up to June 7, of which 61 cases and 34 deaths occurred at Morar, and 67 cases and 43 deaths at Allahabad; women and children also suffer, but officers so far have escaped.

DR. GAIRDNER ON THE DEATH-RATE OF GLASGOW.

In the four weeks of February, 1865, the death-rate of Glasgow ranged at the frightful rate of 44, 41, 48, and 47 per thousand of the population. Again, in March, 1869, it was 38, 41, 47, and 46 per thousand. The chief sources of mortality were the zymotic, the tubercular, the nervous, and the respiratory groups of disease, and particularly the acute respiratory diseases of children. Diarrhœa and diseases of the digestive organs were in abeyance. From one of the acutest and most complete analyses of the causes of death which we ever had the opportunity of studying, Dr. Gairdner draws one remarkable conclusion. It may be said in general terms that the north-east wind was the cause of mischief. But something more was at work at Glasgow. Not only did other towns in Scotland still more exposed to the bitterest winds, as Aberdeen, not share the increased mortality, but those districts in Glasgow itself which are most to windward did not suffer most. On the contrary, those suffered most into which the smoke and vapours of the manufactories were carried by the wind. Dr. Gairdner raises the "question whether northerly and easterly winds loaded with manufacturing refuse are, or are not, notably more prejudicial to health than the like winds when blowing direct from the Polar Sea. In the meantime it may be sufficient to remark that, among the constant sources of high mortality in Glasgow, diseases of the lungs are always prominent—perhaps, indeed, next in importance to the epidemic group; and that both in Edinburgh and Aberdeen we have examples of cities far more exposed to the influence of these winds in their *pure* state than Glasgow, and in which, nevertheless, the pulmonary death-rate is not only lower at present, but is persistently lower than with us." Therefore, some other cause must be sought, and Dr. Gairdner has probably detected the right one. Besides that, the victims were those also most suffering from physical and moral degradation and squalid unwholesome dwellings.

CAPTAIN VIVIAN ON SURGEON-MAJOR TUFNELL.

The questions put by Mr. Kirk to the Secretary of State for War on the subject of the long tenure by Surgeon-Major Tufnell of the appointment of Surgeon to the Military Prison at Dublin, together with Captain Vivian's reply thereto, will be found in our "Parliamentary Intelligence." The accuracy of the information on which Mr. Kirk framed his questions was fully testified to by Captain Vivian's admissions of the truth of all the statements implied thereby. It appears that Surgeon-Major Tufnell obtained the appointment which he now holds, while still an Assistant-Surgeon in 1846, on the understanding that he should forego further promotion. Within a short period Assistant-Surgeon Tufnell was appointed to the Regius Professorship of Military Surgery in the Royal College of Surgeons of Ireland, in order, we believe, that the Irish School of Medicine should enjoy advantages similar to those which the Scotch School had for some years derived from the professorship held by the distinguished military Surgeon, Sir George Ballingall. The selection for this professorship of an Assistant-Surgeon who had never seen any military Medical service in the field remains among those things which many of our military Medical brethren feel to be a grievance. Mr. Tufnell held the professorship till its disestablishment in 1860. There was, however, no concurrent disendowment in his case, as he was promoted during the same year to the rank of Surgeon, as a compensation for the loss which he had sustained, and in 1861 he obtained his promotion to the rank of Surgeon-Major. In other words, on the expiration of his twenty years' service he reached exactly the position which, under the warrant of 1858, he should have enjoyed had he not for the greater portion of that time held his appointment as Surgeon to the Dublin Military Prison on the understanding that he was to forego all promotion. And now Captain Vivian tells us that he claims the right to retain his present postion as a full-pay Surgeon-Major on perpetual home service as compensation for the loss which he had sustained by the abolition of his professorship. We do not remember that it was even hinted at that he should transfer his services as Professor of Military Surgery to the newly established school at Netley; the objections to such a proposal would have been so obvious that the idea could hardly have been entertained, and the fact remains that his service of twenty-eight years on full pay in Dublin is now advanced by Captain Vivian in the House of Commons as a reason for still retaining him in that position. His being on the supernumerary list is said to prevent any interference in the promotion of other Medical officers, but it is admitted that his retention of

the appointment of Surgeon to the Military Prison excludes a half-pay Medical officer from that position, and we believe that, were it not for Mr. Tufnell's residence in Dublin, a tour of home service for an Assistant-Surgeon in that city would be placed at the disposal of the Director-General. The fact appears to be that, as events have turned out, the Army Medical Department was made for Surgeon-Major Tufnell, and not Surgeon-Major Tufnell for the Army Medical Department. In Medical military circles it is held that Mr. Tufnell's first promotion nullified in that particular the previous contract between him and the authorities, which, having been once infringed, became virtually void, and that, having accepted promotion, he became fairly liable to all the contingencies of foreign service consequent thereon, and that if he had been at that time detailed for duty abroad and had declined to go, he could have been put upon half-pay. It is said also that if Surgeon-Major Tufnell were now to retire, according to the regulations, on seven-tenths of his present rate of pay, or £343 per annum, with a step of honorary rank, he could not very well complain of the amount of compensation for the loss of his professorship in 1860.

CHARGE OF MANSLAUGHTER AGAINST A PHYSICIAN.

At the assizes of the County Down, held last week, Dr. Connolly, who was *locum tenens* for Dr. Murray, of the Belfast Union, was put upon his trial for the manslaughter of a woman of the name of Keenan, who had died during labour. The case had excited strong feelings of animosity against Dr. Connolly, and some of the witnesses spoke against him with much bitterness. The newspaper reports do not furnish us with the particulars of this case, but the main charge against Dr. Connolly was for inattention in leaving the patient. We mention the case, however, chiefly for the purpose of giving the summing up of the judge, Baron Deasy. Judges are not always so just to Medical Practitioners. Judge Deasy's remarks deserve to be placed on permanent record. The case broke down, but not until an effort was made to address the jury on the part of the prosecution. The judge interfered, and said:—

"I wish to state my view. I have heard the evidence of the last witness, not because I thought it was requisite for the legal defence, but because I thought it right that there should be an explanation of the circumstances under which the prisoner went out, and the circumstances under which he returned. It now appears from the evidence of Mrs. Connolly, that when he came home in the evening and got the note he immediately went to this house, and remained there till three o'clock or so in the morning. During that period I am persuaded there was no want of skill or attention whatever. The only thing upon which a charge could be founded was his going away; but, even if he went away, the Medical evidence would entitle him to an acquittal. But, if his leaving at the time he did might be a ground of complaint, I received the evidence of his mother on that point. If her evidence be correct—and she is as likely to be correct as any of the other witnesses—he came back from waiting to change his clothes, and he was in the act of doing so, when a loud knocking came to the door. He went down immediately to know who was knocking, and then went into the shop, which would confirm what Mr. Falkner said, that he went to take an instrument with him. He appears to have given every possible attention, and did not save himself. He remained in that wretched, miserable cabin, where there was no chair, the chair he used having to be brought from some other house. Under all the circumstances, I think he is not only entitled to a verdict of acquittal, but he is also entitled to it upon the highest grounds put by his counsel—namely, that there was no want of attention and no want of skill. He appears to have been engaged previously in similar duties; and, according to the evidence of the relieving-officer, his conduct was most satisfactory. He appears also to have acted as a Physician during the cholera time, and we have it in evidence that he received a vote of thanks for his skill and attention to the poor. It is not likely that a gentleman of that standing would risk his Professional future by anything that might have the appearance of inhumanity, as his whole future Professional life must depend upon his skill and attention. I have heard this case fully, and I think it was right for the interests of Dr. Connolly that it should be investigated, and I have come to the conclusion that not only is he entitled to an acquittal because the charge is disproved in point of law, but also because the evidence shows that there was no want of skill, no want of attention, no want of kindness on his part to this unfortunate woman; and that, as a Medical man, he leaves this court wholly exonerated from the slightest imputation with respect to his conduct in this case. His Lordship then directed the jury to record a verdict of acquittal.

"Dr. Connolly was then discharged."

THE RIGHT HON. G. J. GOSCHEN, M.P., AT THE LONDON HOSPITAL.

On Monday, the 19th inst., Mr. Goschen, the President of the Poor-law Board, presided at the distribution of prizes at the London Hospital Medical College. Mr. Rivington, Dean of the School, read a long and interesting report of the progress and prosperity of the School, which is one of the most flourishing in London. The several examiners or their representatives then in turn gave their awards, whereupon the prizes were handed to their recipients by Mr. Goschen. Most of the prizes, as will be seen by another column, took the substantial form of large sums of money. At the conclusion, Mr. Goschen addressed those present, remarking how difficult it was for an outsider to take up a Medical subject from a Medical man's point of view, and that, however great had been the discoveries of Medicine, they had not yet succeeded in finding out how to pump knowledge into an exhausted brain, or to give a man at all times appropriate ideas. He was, he said, from his official position being constantly brought into contact with Medical men, without whose aid he would be totally unable to stem the tide of pauperism, and he insisted on the valuable civilising effects such men had on the rude masses among whom they laboured. It was in East London that the great necessity for Medical skill was best seen, and it was there consequently they could best turn for the refutation of the modern doctrines which were opposed to large Hospitals. For his own part he did not think that the Hospital accommodation in London was too large, or otherwise than inadequate to the wants of the population. It was, said he, extremely difficult for outsiders to follow Medical studies; they could only at a distance admire the skill acquired by them; they could recognise the immense boon they conferred on society; they could admire the tact, the skill, and the delicacy of the experienced Practitioner, but there was much in such studies with which it was difficult to sympathise. Still, the student of Medicine felt he was dealing with truths tangible enough; but it was not so with political economy, whose students found often no foundation in fact, but had to deal entirely with theory. There was no profession which so much combined practical pursuits with the duty of instruction as did that of Medicine. The students he addressed were also, in their turn, to become the apostles of health, and it was thus in their power to increase the material prosperity of their country. He trusted that the time would come when the rewards for such services would be much more substantial than they now were. After a vote of thanks by Mr. Curling to the chairman, which was heartily responded to, the meeting broke up.

THE ELECTORS OF THE COLLEGE OF SURGEONS.

To the late Sir B. Brodie the credit generally is given of having been the chief framer of the Charter of the Royal College of Surgeons. At the time it was issued there was a strong feeling of dissatisfaction throughout the Profession. Reform had been demanded, and efforts were made to found another College, not of "Surgeons," but of "general Practitioners." The greatest difficulty which the framers of the Charter had to encounter was the selection of the first batch of Fellows, the future electors of the Council. It was determined to place upon the Fellowship, with but few exceptions, gentlemen only who were connected with Hospitals and Dispensaries. Perhaps,

under the circumstances, this was the best that could be done. But it gave rise to heartburnings and jealousies which became so general that the Council framed the Supplemental Charter. This gave power to the governing body to select a certain number of Members for election to the Fellowship. At the same time the coffers of the College were benefited by the fees thus received. Twenty years have elapsed since the last Charter became law, and there has been during that long time a kind of "lull" in the political position of the College, so far at least as the franchise is concerned. But there are not wanting signs to show that this calm state of things is not likely to be lasting. At every fresh meeting of Councillors the Members at large are reminded that there is a small body of "privileged persons" who rule the destinies of the institution. Like the "freemen" of the older corporations, they bear but a small proportion to the inhabitants generally. It does seem an anomaly, in this age of liberal progress, and when "lodgers" have become possessed of the franchise for the boroughs and cities of this kingdom, that many thousands of educated gentlemen have no voice whatever in the management of their own College. That management virtually is in the hands of the two or three hundred Fellows who vote at the elections. That this is not a satisfactory state of things all must admit. How it is to be altered it is difficult to say; but surely some modification of the Charter might be effected, by which Members of a certain standing could be eligible for the franchise. The subject is one worthy of serious consideration, and which ere long will attract the attention of the "mass." Reform will follow agitation.

FROM ABROAD.—A VISIT TO M. NÉLATON.

SOME recent numbers of the *Journal de Médecine de Bruxelles* contain a communication from M. Delstanche, of that city, on a visit which he paid to M. Nélaton last autumn. Although the article enters into a familiarity of detail which we should suppose will be scarcely acceptable to its object, some of the opinions recorded are of sufficient interest to be reproduced as being those of a man so much esteemed among us as is M. Nélaton. The writer commenced their exploration speedily enough, for while waiting his turn in the great Surgeon's *salon* he so ingratiated himself with a lady he found there, the subject of ovarian disease, that he obtained her permission to be present at the consultation. I was much surprised, he says, to hear M. Nélaton say that had this been a uniloeular cyst he would have first tried iodine injection, seeing how little success has attended this treatment in the hands of others, including Krassowsky, the most recent writer on the subject. He replied that he had perused Krassowsky's work, but that Surgeon, in fact, had operated in a chance manner, without observing any rule, while he himself followed an indication which was well-nigh certain. After having injected a large number of these cysts with very various results, he came to the conclusion that when the fluid is sticky and thready between the fingers, like mucus or pus, the iodine injection has no chance of success, while when it does not give rise to filaments, but resembles serum or urine, and whatever its colour may be—pale, deep, or sanguinolent—there is the same chance of cure as in hydrocele. "I agree," he added, "that this is a somewhat empirical conclusion, but empirical means are not always to be disdained; and, moreover, the rule does not apply only to small and recent cysts, but has been found to hold good in those which date back several years, and have attained an enormous size. For the success of the procedure a trocar of not less than three millimetres in volume, and from twenty to twenty-five centimetres in length, is essential." In multilocular cysts, whatever may be their contents, M. Nélaton rejects injection.

As to ovariotomy, he observed that the fact of his having imported it into France had been contested, but he had ample proof of that. How far we may trust academies was seen by the general cry of reprobation which was raised when the operation was first mentioned at the Academy of Medicine, and when they could not find terms harsh enough to stigmatise this *savagerie*. Soon afterwards he saw it practised in Paris itself, and now it becomes a question of who has had the honour of naturalising it. M. Nélaton has himself performed it sixteen times, and nine times with success; and if his success has not been greater it must be recollected, he observed, that he commenced amidst the most vehement opposition, and could only then venture upon cases reduced to the last extremity. Even in these desperate circumstances he succeeded in more than one half of his cases. Although one of the foremost to testify to the ability of the English Surgeons, he maintains that much of their great success depends upon the fact that they operate in good time before the development of the cyst and repeated punctures have produced adhesions and damaged the constitution of the patients. Such is pre-eminently the practice of Spencer Wells; and now that French Surgeons, like M. Nélaton's pupils, MM. Péan and Labbé, are beginning to follow in the same line, their success is not less striking. In explaining the poor results that had hitherto followed the performance of the operation in Belgium, M. Nélaton observed that this might depend on various causes, such as the condition of the patient or that of the locality, as well as the mode of procedure. Of all operations, ovariotomy is the one in which we meet with the most unexpected occurrences; and to execute it well it is necessary to have often seen it done and to have practised it oneself. It is by practice that simplification of its procedure has been attained, and that we have come to recognise the importance of things once deemed only secondary. But failure does not take place so much from the want of skill in the operator as from the constitution of the subjects and the vitiated atmosphere of Hospitals, death almost always taking place when the operation is performed within their walls.

M. Delstanche had the opportunity of witnessing an ovariotomy and of examining four patients on whom it had been performed, but we have not space for various other of M. Nélaton's observations on this subject. Numerous other topics were discussed, and, among these, the circumstances upon which the efficacy of mineral waters depends. After alluding to the influence exercised by change of air, regimen, diversion of thought, etc., M. Nélaton observed:—

"I think that generally, and whatever the place resorted to may be, these pretended auxiliaries act more efficaciously than do the waters themselves. Not unfrequently, and that in cases in which they seem best indicated, I have seen patients return at the end of the course of waters which they have followed suffering more than when they went to them. But the Doctors arrange all this in a very agreeable manner. This reminds me of what the Emperor said to me lately. We had advised the Plombières waters; he thought little of them, and it was only with great trouble we got him to decide. Our only object was to get him away from the Tuileries, where there is for him neither truce nor peace. His health was suffering from this, and at last he left. On his return I hastened to inquire as to his state of health and the effects of the *villégiature*. 'Oh!' he replied, smiling, 'these Doctors are charming fellows. After some days I found myself worse, suffering in the loins and limbs; and when I sent for them and informed them of what I felt they at once began congratulating me, declaring that what I experienced was the effect of the waters, and was of good augury. I therefore resigned myself to persevere in the treatment, but the pains, in place of diminishing, increased, and I again sent for them, detailing all that I suffered, only again to receive their congratulations and the assurance that this was an effect of the water which I should hereafter recognise. Whenever I ventured an observation, my mouth was always stopped by this unanswerable argument. Really these Doctors are nice fellows.' In relating the circumstance M. Nélaton laughed heartily. 'He does not seem to believe much more in medicine than his uncle did,' I observed. 'Indeed,' he is not much more its partisan,' he replied."

Speaking of the Prince Imperial's illness, M. Nélaton observed that there had been a deep-seated abscess under the *gluteus minimus*, which was entirely raised up by it. "The

hip-joint was not compromised, but the case was none the less dangerous, and I trembled for the life of that child. It was bruited about that there was caries, but this happily was not the case; and now the cure is quite complete, the movements of the limb being in no wise less assured or less free than that of the opposite side." M. Nélaton gave his visitor a particular account of his successful mode of treating coxalgia before the head of the bone has left the cavity. It consists simply in the effectual and careful employment of compression by means of a bandage and a large quantity of wadding, so that effectual and elastic compression is exerted on the joint in every direction without the movements of the child being impeded.

Alluding to his successful career, M. Nélaton remarked:—

"The position of a Physician who is in the possession of a certain repute in a large town, and especially in Paris, rapidly leads to a fortune, for he is sought for not only in Paris, but by all France, and indeed by entire Europe. As regards myself (he added, with modesty) I have been very lucky; for most of the Surgeons with whom I should have had to divide my gains died young, as Sanson, Bérard, Blandin, and others, so that I was left almost without any rivals."

In answer to the observation of his friend that homœopathy and the other variable doctrines of the day do not interfere with the Surgeon's practice as they do with that of the Physician, he observed:—

"It is true that homœopathy does not reduce fractures or operate for cataract, but nevertheless it yet finds means of getting at us. Take cataract, for example. The Surgeon operates, but sight is not at once restored, remaining feeble and uncertain, especially during the first fortnight. Well, that is just the moment spied out by the homœopathist, who, getting hold of the patient, promises to complete the cure commenced by the Surgeon; and as at last the vision, with time, is always more or less improved, he attributes, and has attributed to him, his share of success."

PARLIAMENTARY.—VACCINATION AMENDMENT—NITRO-GLYCERINE—SUPERANNUATION MEDICAL OFFICERS' (IRELAND) BILL—SURGEON-MAJOR TUFNELL—METROPOLITAN POOR ACT AMENDMENT BILL.

In the House of Lords, on Thursday, July 15, the Marquis Townshend withdrew his Vaccination Amendment Bill.

In the House of Commons, Sir J. Hay moved the second reading of the Nitro-Glycerine Bill.

Mr. Bruce said that he should feel it his duty to carry the measure much further in committee, and to prohibit either the manufacture or importation of nitro-glycerine except for scientific purposes. The only question was what to do with the supply already in this country.

The Bill was then read a second time.

On Monday, July 19, in the House of Lords, the Medical Officers' Superannuation (Ireland) Bill was read a second time.

On Tuesday, in the House of Commons, in reply to Mr. Kirk, Captain Vivian said that Surgeon-Major Tufnell had performed the duties of Medical officer of the military prison at Dublin since 1846, and was paid as Surgeon-Major upon the Medical staff. It was true that Surgeon-Major Tufnell had performed these duties, not for twenty-seven but for twenty-eight years' completed service, but until 1860 he was only an Assistant-Surgeon, having foregone his promotion in order to retain this appointment. In 1860 he was promoted to the rank of Surgeon as compensation for the loss of a Regius Professorship which he held in Dublin under a Royal commission. It was quite true that he was the only Medical officer on full pay in charge of a military prison; he held that position by virtue of his appointment to it in 1846 by way of compensation for loss of promotion. It was also true that he held civil appointments in Dublin, and had an extensive private practice; but there was no reason to suppose that these appointments interfered with the performance of his official duties. He claimed a vested right in his present appointment as compensation for the loss of the Regius Professorship; but his retaining the appointment on full pay could not be said to stop promotion, inasmuch as he was upon a superannuation list. In 1874 Surgeon-Major Tufnell would have arrived at that period of service which would enable him, if necessary, to be compulsorily retired, but until then it was not likely that he would resign the appointment.

The House went into committee on the Metropolitan Poor Act (1867) Amendment Bill. An unsuccessful attempt was made by Mr. Torrens, Mr. T. Chambers, and other members, to obtain an alteration of the first clause, which dispenses with the concurrence of two-thirds of the guardians in the dissolution of any union. Clause 3 was struck out. The other clauses up to clause 5 were agreed to.

ROBERT KEATE, F.R.C.S.

A REMINISCENCE.

Many years since, when I was contributing biographical sketches of living Physicians and Surgeons to one of the Medical journals, I had several interviews with the late Mr. Keate, with the object of obtaining particulars of his life and career. I had selected him in consequence of his having been Surgeon to four sovereigns, Surgeon to St. George's Hospital, and one of the Examiners of the College of Surgeons. I had another reason for wishing to obtain information from him. I had been surprised, in talking with my Professional brethren, to find how very few of them were acquainted personally with Robert Keate. A man who had occupied so important a position, I thought, could furnish me with many facts which his brethren would be glad to be made acquainted with. I had never seen him in any Medical society. He contributed little or nothing to the literature of the Profession; he had never held the position of a lecturer, but he had risen to the highest eminence in his Profession. This man's career, I thought, was so exceptional that it was worthy of being placed on record. Accordingly I paid a visit to him at his house in Hertford-street, Mayfair, in the winter of 1853 or 1854. It was a bitterly cold morning, and I was ushered into the consulting-room of the octogenarian, whom I found before a large fire in his dressing gown and slippers. On stating the object of my visit, I was received with the blunt courtesy so characteristic of the late venerable Surgeon. He said—"I shall be happy to supply you with any information which you may require, but I have a strong objection to the publication of any biographical sketch of me during my lifetime. I will think over the matter, and I shall be glad if you will call upon me again at the end of the week." Upon seeing him according to his wish, he said—"I am anxious to furnish you with every particular with regard to my life which may be either useful or instructive. There are many circumstances in my career which I think might be told to the advantage of the rising generation, and, Mr. Clarke, I will leave in the hands of my executor some papers that will be useful to you as my biographer when I am gone." These papers, I regret to say, I never received. That their contents were most interesting I have no doubt. Mr. Keate, however, was not reticent upon some points, but spoke to me respecting them in the most open manner, under the pledge, however, that I should not use any information which he gave to me during his lifetime. I did not abuse the confidence he reposed in me.

Mr. Keate was the son of a man who had rendered himself conspicuous in the last century as one of the Surgeons to St. George's Hospital. Robert was sent early to sea, and was Assistant-Surgeon of the vessel of war in which Prince William Henry, Duke of Clarence, was placed as a midshipman. They served together for some time, and the Duke of Clarence, who had received the kindest attention from Keate, promised him that if ever he (the Duke of Clarence) was King of England, Robert Keate should be his "body Surgeon." This promise was fulfilled, and Keate was the confidential Medical adviser of William IV. when he succeeded to the throne. At the time that he was appointed to this office Keate was justly proud of his connexion with royalty.

When a student I was present at an operation which he performed on Mr. S., an eminent soliciter, who had then chambers in Clement's-inn. Mr. Keate had to amputate a diseased testicle for Mr. S., who gave him a very handsome fee. Keate at that time said rather exultingly, "Between you and Royalty, Mr. S., I am fully occupied." Keate at that time thought that

his connexion with Royalty was the basis of his future fortune. I was a mere boy at that time, but Keate's assistant was a young Surgeon who has risen to distinction since. During the operation a jet of blood spouted from one of the arteries involved in the operation. The spotless duck continuations of the young Surgeon unfortunately received a portion of this jet. Mr. —— stopped in the middle of the operation to wipe off the red fluid from his trousers. There was no chloroform or ether in those days, and the patient was keenly alive to the pain which he suffered. Mr. S. said to me afterwards, "I meant to have given that young man twenty guineas as Keate's assistant, but as he regarded the purity of his trousers as more important than my sufferings, I will not give him a farthing." If Mr. —— honours me with the perusal of this reminiscence, he cannot fail to recognise the accuracy of my statement. Twenty-five years afterwards I again saw Mr. Keate. He was old, but not decrepid. His intelleet was as shrewd as it had been so many years before, but his views with regard to his connexion with Royalty had lamentably changed. "Mr. Clarke," he said, "my connexion with Royalty has been my ruin. I have attended four sovereigns, and have been paid badly for my services. One of them now deceased owed me nine thousand guineas. The late King William IV. always paid me, but my journeys to Windsor to attend upon him and the Queen, as a rule, were a grievous loss to me. I have on many occasions, obeying a summons to the Royal residence, left a room full of patients anxious for my advice. The consequence eventually was that my practice declined with respect to the public, and now that I am more than 80 years old I am a poor man. There is one exception, however, as regards my connexion with Royalty. That exception is the Duchess of Gloucester, who is my immediate neighbour. I visit her daily when she is in town, and the fees I receive in consequence from her form the staple of my income at present." I asked him if he would kindly furnish me with one or two anecdotes that I might make use of in the event of my surviving him. "Well," he said, "I have no objection to relate to you one or two characteristic anecdotes of the late King. I was summoned down to Windsor to see the Queen. As it was 'urgent,' I immediately took post horses, and in two hours was at the Castle. I arrived so early that I was ushered into the breakfast-room of the Royal couple. The Queen was suffering from a pain in her knee, and she gave me a hint that the presence of the King might be dispensed with. Accordingly I said, addressing the King, 'Will your Majesty be kind enough to leave the room?' 'Keate,' said he, 'I'm hanged if I go.' I looked at him for a moment; I then said quietly but firmly, 'Then, your Majesty, I will be hanged if I stay.' When I got to the door of the apartment, the King called me back. 'Keate,' said he, 'I believe you're right; I'll retire. You Doctors can do anything; but if a Prime Minister or a Lord Chancellor had presumed to order me out of the room, the next day I should have had to address his successor.'" "Once," said Mr. Keate, "the Queen had determined to consult a homœopathic practitioner. 'I hate humbug,' said his Majesty, 'and I won't allow any homœopath to prescribe for my wife unless you are present.' 'It is impossible, your Majesty,' I said, 'that I can meet Dr. D——; there is nothing in common between us.' 'Well, then,' was the rejoinder, 'will you overhaul the prescription of the medicine which he orders for her, and see if she can safely take it?' I promised to do so, and on the prescription being handed to me I said, 'Oh, your Majesty, she may take it for seven years, and at the end of that time she will not have taken a grain of medicine.' Dr. D——, the prescriber, who had been smuggled up the back stairs, retired in the same way, fancying no doubt that he had made a convert of the Queen. But in this he was mistaken." As a matter of history, this fact should be recorded, as I believe it is the only occasion on which a homœopathic practitioner has had the privilege of prescribing for a queen or king of England.

I may mention, *en passant*, that the Queen at this time had rendered herself extremely unpopular by her real or supposed opposition to the proposers of the great Reform Bill of 1832. I am not in a position to state whether there were any just grounds for this accusation against her Majesty, but it is a matter of fact that her conduct at this time was commented upon with undue severity by some of the leading Liberal newspapers of the day. A circumstance related to me by the late Dr. W. F. Chambers, would seem to give some colour to the truth of the charge made against the Queen. Chambers was in attendance upon her Majesty at the time that the elections were proceeding throughout the country on the question of reform. Chambers was a freeholder of Middlesex, and the Queen, after a consultation with her Physician, inquired how the election for Middlesex was going on. "I hope," said Chambers, "favourably to the Liberals. I have recorded my vote for them on my journey here." The Queen was not pleased with the answer.

Robert Keate was a great operator, and second to none of his time in the use of the knife. His diagnosis, as a rule, was accurate. He was a careful and sound Practitioner. If he took a lower view than some of his contemporaries of the value of the more philosophical and scientific aspects of disease, he was not ignorant of the advancement which Surgery had made in that direction. His mind was thoroughly practical, and he deserves to be remembered as a great Surgeon and an honourable man. In person he was below the common standard. He had a strikingly sensible face, somewhat large features, but with an eye that denoted intelligence of the highest order. In his manner he was bluff, as became a sailor—not rude, but sometimes *brusque*. In later life he was irritable and ready to take offence, but he was perfectly incapable of any meanness of conduct either to a patient or brother Practitioner.

J. F. C.

THE

VACANT CHAIR OF CLINICAL SURGERY IN THE UNIVERSITY OF EDINBURGH.

(*From an Occasional Correspondent.*)

EDINBURGH.

To those who live in the greater world of London, the turmoil and angry feeling excited by the vacation of a chair like that of Clinical Surgery in the historic University of Edinburgh is scarcely credible. Our Professional circles are so much more contracted than yours, petty jealousies are so much more common among us, political party feeling runs so high—above all, the religious element never fails to insinuate itself into every dispute, so that you need not wonder that the resulting compound is of the hottest and bitterest description. I think, however, I may safely say that, except among his personal enemies, Mr. Syme's resignation is generally regretted throughout Scotland. His name has been so long connected with Scottish Surgery, we have been so long accustomed to refer to him with pride, that, whatever his faults—and no one contends that he was without faults—we deeply regret his retirement, and still more its immediate cause. But it is not so much to refer to Mr. Syme and his retirement as to his probable successor that I take up my pen. As you have already intimated, there are three candidates in the field—Professor Lister, who holds the Chair of Surgery in Glasgow, and who is Mr. Syme's son-in-law; Professor Spence, the present incumbent of the Chair of Surgery in the University of Edinburgh; and Mr. Patrick Heron Watson, who now lectures in Surgeons'-hall, Edinburgh. It may be at once said that each of these is a good man. Comparisons are always more or less invidious, and I shall not, therefore, presume to point out whom I consider the best, for opinions on that, as on other points, are sure to differ, and, after all, mine is only an individual opinion. I may, however, say that Professor Spence is the candidate most distinguished for his clinical work. He is well skilled in Surgery, has long been a teacher of Surgery, and now holds the more important chair of the two. Why he should want to leave it I cannot pretend to say. His published work has been all practical, with the exception of the introduction to the "Principles of Surgery," which made its appearance not very long ago, and which more clearly showed than anything else that Mr. Spence would shine more in the department of practice than in that of theory. He has for many years contributed accounts of cases under his care to the *Edinburgh Medical Journal*, and has written other papers, all bearing directly on questions of practical Surgery. Of Mr. Lister it is impossible to speak in other than terms of the highest praise. His enemies allege against him that he is Mr. Syme's son-in-law and an Englishman. Neither of these, however, it seems to me, are crimes against good morals or religion. But his work, however good, and nobody can say that it is not, has been rather away from than in the direction of practical Surgery. I, of course, put out of sight the introduction of carbolic acid into practice, if, indeed, he can

be said to have done more than carry out the suggestion of the Frenchman; still it is averred that his suggestions and his mode of practice have not had time to be fully investigated, that they are still *sub judice*, and ought not therefore to count in his favour. His contributions to Holmes's "System of Surgery" are known and admired, and his researches on the coagulation of the blood made him familiar to us as a man of science. In short, Mr. Lister is a man among men, although I do not say that this is a sufficient reason for giving him the Edinburgh Chair of Clinical Surgery.

Mr. P. Heron Watson is well known in Edinburgh and the South of Scotland as a rising and talented Surgeon. He began Professional life with military service in the Crimea—the very occupation calculated to set a Surgeon well on his legs. His monograph on excision of the knee-joint showed him capable of dealing with the most important Surgical operations with skill and expertness. He has treated and described every form of Surgical disease and injury, and worked hard at acupressure. But his fame is less than that of either of the other two. This I may say without in the slightest degree disparaging his claim to the chair.

Unfortunately, were I able to say which was the best man, that, in the present state of affairs, would be very far from a guarantee that he would be the successful candidate. Party spirit runs too strong for that in Edinburgh. Our university, as is too well known, has been long celebrated for the contending influences of the members of its *senatus academicus*, and two of its greatest members, Sir James Simpson and Mr. Syme, have for some time been bitterly opposed to each other. Nothing is more to be regretted, but the fruits of this opposition are too often manifest. Then, again, altogether apart from the feelings of the various professors, there is the unfortunate character of the electoral body as far as certain of the chairs are concerned, for this body is a composite one, including among its members office-bearers from the Town Council, and civic dignitaries are not, *ex officio*, among the wisest of men. It was one of these gentlemen who, on the occasion of Mr. Turner's election to the chair of anatomy, recorded a solitary vote in favour of Professor Struthers, because, said he, Englishmen were not wanted in Scotland.

But, putting aside all these unfortunate circumstances, there is another thing to be considered, and that is the mode of conducting the class of Clinical Surgery. Undoubtedly this must be changed. Many things have been overlooked in consideration of the great eminence of Mr. Syme; but it cannot be denied that his mode of teaching Clinical Surgery was not in accordance with modern notions. You in London are so much accustomed to free trade in teaching that you will be surprised to hear that every student in the University was compelled to attend this class, and that every other Surgeon in the Hospital was precluded from giving such instruction as was deemed necessary by the University authorities. Now this is obviously opposed to the welfare of both Hospital and University. If students are let alone, they soon find out for themselves who is the best man for giving them instruction. Besides, as conducted by Mr. Syme, the name of the class was a mere farce—a class of even a hundred men cannot be accommodated round a bed, and Mr. Syme's teaching was accordingly conducted in a class-room. Thereby clinical instruction loses half its force. It would be far preferable to have a smaller body of students and more ward, as contradistinguished from class-room work. It is not therefore surprising that a proposal has been brought forward and influentially supported to do away with the chair altogether rather than allow the present system to continue. This, I think, would be a mistake, but we are all agreed as to the desirability of effecting some change, and especially of removing the embargo on the teaching of others than the clinical professor.

You who live in London have no conception of the extent to which religious opinions or belongings influence a man's career in Scotland. In fact, it might be said that there are no politics in Scotland, only religion. The newspapers hold by one form of creed, and are more influenced by that than by political tradition; and this feeling invariably crops out in any candidature for office. The clergyman musters his forces, and marches them to battle. The Free-Kirk organ denounces the upholder of the Establishment, and the U.P. belabours both—in short, where private feeling is not enough, and where political influence cannot be brought to bear, religious persuasion is sure to carry the day. Under such a system, it is rather surprising that the best man is ever appointed than that he should not, as a matter of course, carry the day.

Should Professor Lister be transferred to Edinburgh, there will be a sharp contest for the vacant chair in Glasgow; but to that I must refer again.

VIEW DAY AT ST. THOMAS'S HOSPITAL.

(*From a Correspondent.*)

The annual inspection of St. Thomas's Hospital took place on Tuesday last, when the Treasurer and Hospital officials met the Governors at Surrey Gardens, and conducted them over the temporary Hospital, capable of accommodating upwards of 200 patients. For more than seven years St. Thomas's Hospital has been comfortably placed here, having extensive and prettily laid-out grounds, much appreciated by the convalescent patients. The necessary alterations in the construction of the old building have been very great, in order to fit it up as a complete Hospital, with all the appliances for out- and in-patients, museum, library, lecture-halls, etc. The internal arrangements, as may be supposed from its extreme compactness and limited space, are very complete. The main building is partitioned off into three tiers, corresponding to the two galleries, the central space being in each case boarded across—the upper floor for female patients, Medical and Surgical; the central floor for male patients, Medical and Surgical; and the ground floor for accidents and casualties, and out-patients' rooms, surgery, etc. The Medical are separated from the Surgical patients by a low wooden partition six feet high. The advantage of this is that any noxious emanations from foul suppurating wounds are at once diluted and wafted upwards, and from the windows all round the building a constant current of air passes through the wards. The statistics of pyæmia, erysipelas, etc., will bear comparison with any one of our well-appointed London Hospitals.

The proposal to substitute cottage Hospitals for our large metropolitan institutions has received the powerful support and advocacy of Sir J. Y. Simpson. It is but fair, however, to St. Thomas's to state that they erected a cottage Hospital years before the present idea was thought of, and it has been in constant use ever since for contagious diseases, ovariotomy, etc. This building is constructed to accommodate four patients—two beds in each ward, connecting which are a kitchen, sisters' room, etc. The walls and roof are of galvanised iron lined with deal. Although convenient and useful for special cases in connexion with a large Hospital, we could not recommend it as a substitute—it is so readily affected by heat and cold. In the summer the temperature is often unbearable, and in the winter the cold is very severely felt in consequence of the thinness of the walls.

After visiting the temporary Hospital, the governors were conveyed by special steamer from London-bridge to Lambeth, where they landed, and were conducted over the works for the new Hospital at Stangate. Those who were present last year had a good opportunity of forming an estimate of the progress of the works during the past twelve months. Our readers are aware that this Hospital is being constructed on the block system; there are seven blocks, exclusive of the museum, lecture halls, etc. There are slight variations in the construction of each block, but the general plan is the same, and they will all be completed at the same time. The walls have been carried up as far as the third floor, and the top wards are about to be commenced. The two- and three-story buildings at the back are being roofed in, and the chapel, which is in a very forward state, will shortly be roofed in. Specimens of some of the proposed internal fittings were carefully inspected by the governors. The large window-frames, which have been manufactured in Sweden and sent over complete, are now ready to be fixed in their places and fitted with glass. The outside walls are faced with red brick; stone is also extensively used, not only for supporting the brickwork and giving additional solidity to the walls, but the river front is constructed to a great extent with stone facings. The inside walls will be coated with Parian cement, glazed, and tinted of a straw colour. Between seven and eight hundred men have been constantly employed at the works since their commencement fourteen months ago; there still remains a great deal to be done. Mr. Currie informs us that he hopes to have it ready by October twelvemonth. The governors expressed themselves much pleased with the progress made, and those competent to give an opinion of the workmanship pronounced it very satisfactory.

ERYSIPELAS AND DEATH FOLLOWING VACCINATION.

On Monday, July 19, an inquest was held by Dr. Lankester on the body of a male child three months old, William Emery, who had died from erysipelas after vaccination. The Coroner said he could not permit a general discussion of the advantage or disadvantage of vaccination; it was established by law after careful inquiry and an experience of nearly seventy years, and it had succeeded in putting a stop to the ravages of small-pox, which, in the preceding century, had swept away millions. The present inquiry must be confined to the particular case of William Emery, as to how the child came by his death, and whether any blame was to be attributed to any one.

Aaron Emery said: I am the father of the deceased, and carry on the business of ham and tongue dealer at 66, Great Portland-street. I have two other children who have been vaccinated; they are in good health. On May 31 the deceased was taken by my wife to the surgery of Dr. Allen, 11, Soho-square, for the purpose of being vaccinated. I saw the child when he was brought back. There were four punctures on the right arm, and one of them had bled considerably. The child continued well, and all four places took very well. On June 7 the child was taken to the surgery for inspection, and was then well. Matter was taken from two vesicles and used to vaccinate several other children. On June 9, the tenth day of the vaccination, the arm became inflamed around the punctures, especially round those which had not been opened, and was greatly swollen. The redness and swelling gradually spread up the arm, the neck, back, and afterwards over the belly and legs. Dr. Allen attended the child till its death, which took place on July 4, five weeks after the vaccination. I have not been influenced to demand an inquiry by any representations made by members of the Anti-vaccination Society, but since the death of my own child I have been informed of many cases where children have sustained injury from vaccination.

Mr. Lewis, solicitor, who appeared for the father, cross-examined Mr. Emery to show that the deceased was in every respect a healthy child, had never had any illness from the day of its birth, was suckled by the mother, was well nourished, and lived in a wholesome neighbourhood and in a well-ventilated house.

Mrs. Emery, mother of the child, said: I took the child to Dr. Allen's on May 31, and saw Dr. Allen vaccinate my child himself from a healthy-looking baby.

Dr. Allen said: I remember the deceased child being brought to my surgery on May 31 to be vaccinated. I was under the impression that my assistant, Mr. Matherson, vaccinated the child while I looked on; but as Mrs. Emery says that I did it myself, I have no doubt that she is correct. I attended the deceased throughout his illness. The child had erysipelas commencing on the arm around the punctures and stealing gradually over the trunk and legs. The erysipelas was not of the phlegmonous kind; the skin felt baggy, and the inflammation was erratic. In the fifth week the child died from exhaustion induced by the disease. I have no doubt that the erysipelas was caused by the vaccination, not simply by the punctures, but by the irritation set up by the vaccine lymph. I have had a very large experience in vaccination, and have vaccinated as many as a hundred in a day in the East of London; but I have never before seen any serious evil, but, from my observation of the present case, I have no doubt that the erysipelas was set up by the vaccine. It is a remarkable confirmation of this opinion that several children were vaccinated with lymph taken from the deceased (who appeared to be exceptionally healthy), and all of them were affected with erysipelas, and one of them died.

Dr. Lankester here explained that the inquest upon this child was held by Mr. Bedford, and he (Dr. Lankester) was present. The vaccination was not successful — it, in fact, did not take, and erysipelas commenced around the punctures. The jury considered that the erysipelas was induced by the punctures, and probably by some peculiar condition of the child, but did not think that the vaccine lymph was the cause.

Dr. Allen then went on to explain that the child from whom the lymph was taken wherewith to vaccinate the deceased, William Emery, was perfectly healthy, not only at the time, but at the present moment.

The Coroner asked Dr. Allen if lymph could induce the vaccine disease and erysipelas at the same time. Dr. Allen thought it could.

The Coroner: Could there be two poisons at the same moment in the lymph?

Dr. Allen: I think so.

Mr. Massey Harding, F.R.C.S., said:—On Saturday, July 17, I examined the body of William Allen. It was the body of a remarkably well-grown infant. On the right arm I found four marks of vaccination of about the fifth week; the scabs had fallen off, leaving the usual red mark. I made an incision through the skin and adipose tissue of the arm; the gash filled with serum slightly tinged, but no pus exuded. I made incisions in the neck and back, but found no pus. Upon examining the body internally I found the brain diffluent from decomposition; the membranes appeared healthy; the lungs were congested; the heart soft from decomposition, the right auricle full. The abdominal viscera were healthy. From the examination of the body, and from the evidence that I have heard, I am of opinion that the child died from erysipelas induced by vaccination.

In reply to the Coroner, Mr. Harding said that he had been a public vaccinator more than twelve years, and had never had a death from vaccination, whether from erysipelas or other cause, but he knew that in the practice of others fatal cases of erysipelas had occurred. For example, a relative of his, Mr. H——, a Medical Practitioner, had a case where the child, vaccinated with fresh lymph from a healthy child, had erysipelas of the same erratic character, ending in death. Dr. Ballard had informed Mr. Harding that a series of cases occurred in Islington, where all the children vaccinated from one vaccinifer had suffered from erysipelas, and one died. The vaccinifer appeared to be well on the eighth day, when the lymph was taken, but erysipelas appeared two days afterwards. These cases were parallel with the present. A consideration of all the circumstances led Mr. Harding to the conclusion that the erysipelas was caused by the irritation set up by the vaccine lymph, and was not due simply and solely to the punctures.

Mr. Lewis cross-examined Mr. Harding as to the prime origin of cow-pox, but was stopped by the Coroner, who considered it irrelevant.

In reply to a variety of questions, Mr. Harding explained that it was impossible for vaccinators to recur to the cow for lymph, as the spontaneous cow-pox was almost unknown in the great dairy farms of England in the present day. The disease was called cow-pox, not because it was now prevailing amongst cows, but because the matter was originally taken from cows by Dr. Jenner. Lymph taken from cows affected with the spontaneous cow-pox would not be less likely to cause erysipelas; on the contrary, it excited more inflammation, and would certainly produce erysipelas more frequently than lymph taken from the human arm. Fatal cases of erysipelas from vaccination had certainly occurred; but their number, compared to the number vaccinated, was very small indeed. No account of the whole number of fatal cases of erysipelas has ever been collected; but in all probability the fatal cases are not 1 in 50,000. Mr. Harding did not think that so small a number of fatal cases of erysipelas could be urged as a serious objection to vaccination.

After a short deliberation, the jury brought in as their verdict that the deceased died from erysipelas brought on by vaccination.

It may be said that at the outset of the inquiry Mr. Emery, father of the deceased, said that he did not attach any blame to Dr. Allen, who had used every possible care, and it was understood throughout the inquiry that no blame was attributed to any individual, but solely to the action of the lymph.

Protective Power of Vaccination.—Dr. Edwin Snow, Officer of Health, Providence, R.I., says that during fourteen years, 1855-69, 10,464 children have been vaccinated in his office; and that, during the same period, he has issued certificates of vaccination to 16,332 children to allow of their entering to public schools. Probably in nine-tenths of these the vaccination scars furnished the sole evidence, but the result has been most satisfactory. During the fourteen years he has known of nearly every case of small-pox occurring in Providence, and has never either seen or heard of a single case in any scholar of a public school who had received a vaccination certificate. If small-pox, he observes, is prevalent in California and the midland cities and New York at the present time, it is not because vaccination has become less efficacious, but because it is neglected or imperfectly applied.—*Boston Journal*, June 10.

REVIEWS.

RECENT WORKS ON OPHTHALMIC SURGERY.

A Treatise on the Diseases of the Eye. By J. Soelberg Wells, Professor of Ophthalmology in King's College, London, Ophthalmic Surgeon to King's College Hospital, and Assistant-Surgeon to the Royal London Ophthalmic Hospital, Moorfields. London: John Churchill and Sons. 1869. Pp. 717.

On Long, Short, and Weak Sight, and their Treatment by the Scientific Use of Spectacles. By J. Soelberg Wells. London: John Churchill and Sons. Third edition. 1869. Pp. 243.

The Theory of Ocular Defects and of Spectacles. Translated from the German of Dr. Hermann Scheffler by Robert Brudenell Carter, F.R.C.S. Exam. London: Longmans, Green, and Co. 1869. Pp. 240.

Diseases and Injuries of the Eye; their Medical and Surgical Treatment. By George Lawson, F.R.C.S., Surgeon to the Royal London Ophthalmic Hospital, Moorfields, and Assistant-Surgeon to the Middlesex Hospital. London: Henry Renshaw. 1869. Pp. 339.

First Notice.

The Professor of Ophthalmology in King's College has given us a comprehensive treatise in which the affections of the eye and its appendages are fully discussed and systematically arranged according to anatomical order. Great care has been taken by Professor Wells to point out the great advances that have been made in late years by British and Continental ophthalmologists; modern views on pathology and treatment are given, and their value tested by the results of clinical experience. The manner in which a great mass of accumulated information is laid before the reader in this well-filled volume leaves nothing to be desired. It is the production of one who seems to have the power of giving, in very clear language, the results of long-continued devotion to the study of his subject in foreign cliniques, and, as a teacher and Assistant-Surgeon in the chief ophthalmic school of this country; it has, moreover, the great advantage of being a thoroughly practical work, dealing not so much with disputed points or minute differences of morbid structure as with diagnosis and treatment. With this view the chapters treating on special diseases are preceded by a clear and comprehensive description of the chief modes of examination of the eye, and also of certain commonly used remedies and appliances in ophthalmic practice. It is illustrated by 107 good wood cuts, many of which are original, and by some coloured ophthalmoscopic figures from Liebreich's "Atlas d'Ophthalmoscopie."

Professor Wells has evidently studied with much attention the subject of granular ophthalmia, and details, in the first chapter, the most recently acquired information concerning the pathology, causes, and treatment of this intractable affection. We are glad to find that great importance is attached to the study and early recognition of a peculiar condition of the conjunctiva which, though fully described by many Continental Surgeons, has in this country been almost entirely neglected save by Dr. Frank and Dr. Marston, whose able articles on "Military Ophthalmia" contain almost all that has been hitherto written in the English language on this subject. This, the so-called vesicular condition of the conjunctiva, is characterised by the presence of a number of small spherical and transparent bodies on the palpebral portion of the lining mucous membrane, which have been likened to grains of sago and to the smaller vesicles of herpes. Whether this vesicular condition be an early stage of granular ophthalmia, or whether the sago-like bodies, which are formed by the hypertrophy of certain physiological organs known as the follicles of Krause, are or are not converted directly into true conjunctival granulations, as has been maintained by Bendz and Stromeyer, are questions which, according to Prof. Wells, cannot be definitely settled without more extended observations. Prof. Wells holds, however, "that whether we accept or not the theory that vesicular granulations are the first symptoms of granular ophthalmia, and may become developed into true granulations, there cannot be the slightest doubt that they must be regarded as a strongly predisposing cause of the latter." It becomes, therefore, a matter of importance that the existence of the vesicular bodies should be detected at an early stage in large schools, barracks, and other places where numbers of persons are collected together, and that timely measures should be taken to prevent a common and contagious affection which ought, with advancing civilsation, to be entirely banished from among us.

In his remarks upon the treatment of chronic granulations by powerful local applications, Prof. Wells lays great stress upon the fact that cauterisation is not practised for the purpose of chemically destroying the granulations, but rather "to maintain a certain degree of hyperæmia and inflammation of the conjunctiva, in order to hasten the absorption of the granulations." For this reason he objects most strongly to the use of undiluted liquor potassæ, as this agent causes more or less destruction of the stroma of the conjunctiva, which results in the formation of dense and rough cicatricial tissue.

In a very clearly written chapter on cataract, Prof. Wells gives a *résumé* of the principal arguments for and against the different operations for senile opacity of the lens, which we commend to the notice of all ophthalmic Practitioners for its practical value. The author gives his opinion of the recently devised and important modification of extraction known as Von Graefe's modified linear extraction in the following words: —"It (Von Graefe's operation) is, in my opinion, to be preferred, as a rule, to any other mode of extraction, more especially in Hospital practice, as the patient requires far less watching and attendance, and the after treatment is extremely simple." The indications for this proceeding are, according to Professor Wells, diabetic cataract, a nervous and feeble patient, or one suffering from severe cough and bronchitis, a small and rigid pupil, and the coexistence with the cataractous lens of some choroidal or retinal lesion.

Stellwag von Carion likewise regards with great favour the operation of modified linear extraction, which, in his opinion, is specially indicated in cases of cataract with the cortical portion quite adherent and the capsule of normal consistency; where suppuration of the cornea is imminent from general or local conditions; and thirdly, where the condition of the patient renders a less strict regimen advisable, or, more particularly, a shortening of the time of confinement to bed. The Vienna professor thus expresses his views concerning the results of the operation:—"Supported by a long array of cases, we may say that, in modified linear extraction, phthisis cornea is very much rarer than in flap extractions; also that there is less fear of injurious reaction in the vascular parts, and that the capsule becomes more accessible, and consequently the detained portions of cataract may be more readily removed. Hence we may have less hesitation about operating on cataracts of normally consistent cortices or those which are adherent to the capsule, and in which the flap operation is very dangerous."

The plan of extraction devised by Dr. Wolfe, of Aberdeen, and performed by him with very good results in 94 out of 107 cases, is intended to give a free and ready exit to the entire lens without causing injury of the parts about the corneal wound or incurring any loss of the vitreous substance; at the same time rapid union is insured. In ordinary cases of cataract, Dr. Wolfe performs iridectomy six weeks before the extraction. The operation is practised exactly in the vertical meridian of the eye, and, in correspondence with the subsequently formed flap, is made upwards in middle-aged subjects, and downwards in persons of advanced age. In extracting, a small corneal flap extending to a line more than one-third of its circumference is made with a narrow Beer's knife in the usual manner; but just before the completion of the corneal section the edge of the knife is turned somewhat backwards so as to carry it under the conjunctiva, and form a central conjunctival bridge. In the second stage this portion of conjunctiva is divided by probe-pointed scissors, and forms a flap which, according to Dr. Wolfe, heals in a few hours, and secures the patient against bursting of the wound from muscular exertion, and against subsequent suppuration of the cornea in feeble and cachectic subjects. The formation of this conjunctival flap, however, is not considered as an essential part of the operation, although it seems to be of great advantage in cases where rapid union is required. The different stages of this plan of operative treatment are fully and clearly discussed in Dr. Wolfe's pamphlet, and illustrated by a few woodcuts. The advantages of the operation are summed up by the author in the following words:—

"1. It is the safest; all the different stages of the operation may be gone through with precision, safety, and almost certainty of success.

"2. The chances of success being so high, we need not put off the operation until blindness of both eyes is complete, but may perform it as soon as one eye is blind, and the other becoming so.

"3. It does not require long confinement, and does not distress the patient.

"4. It is applicable to cases of local and constitutional complications, in which Daviel's operation is inadmissible."

(To be concluded.)

PROVINCIAL CORRESPONDENCE.

LIVERPOOL.

July 18.

The recently issued half-yearly health report for Liverpool is very encouraging, and will serve, no doubt, still further to stimulate the corporation in their efforts to prevent the outbreak and spread of disease by the adoption and enforcement of sound sanitary measures. Very much has been done already, and the fact that much still remains to be done proves only how great the evil was. There can be little doubt that the closing of cellars, the widening and opening up of streets, the doing away with middens, and so on, have done much towards raising Liverpool from the very low position which she occupied on the health scale. Notwithstanding the extremely unfavourable conditions that attach to her as compared with most of the other large towns in the United Kingdom—her dense population, the very precarious nature of the employment on which a large proportion of this population depends for subsistence, the low rate of remuneration which it brings, and the pressure made on her already too contracted space by the never-ceasing tide of emigration that sets through her—she is steadily rising in health, and can now bear no unfavourable comparison with many cities whose circumstances are far more advantageous than hers. As many as 30,000 emigrants have passed through the port in a single month, and in one week not less than 94 have been sent sick to the Workhouse infirmary. Yet with this as a special and terrible source of possible epidemics, we have the gratification to find, from Dr. Trench's report, a decrease of 863 deaths for the half-year, as compared with the average mortality corrected for increase of population during the last ten years.

While writing of the sanitary measures carried out in Liverpool, it would not be right to pass over a crying nuisance in the adjacent district of Waterloo. It was only last year that this place and Bootle were visited with a fever of an enteric type, which spread rapidly through the population. Various conjectures were hazarded as to the source of that outbreak of disease, and the best means of preventing similar attacks in the future; and although no very generally received solution was given to the first point, there was a singular unanimity concerning one preventive measure that ought to be adopted—viz., that of providing for the free discharge into the river of the sewage, which was then creeping lazily in a disgusting stream over the fore-shore on the north side. The hot weather has come round once more, and still this most offensive nuisance remains unabated. With whom the onus of remedying it rests, whether with the Waterloo Local Board or with the Mersey Docks Board, does not seem clear; but nothing can be clearer than that it ought to be remedied, and that speedily.

GENERAL CORRESPONDENCE.

OBSERVATIONS ON THE PROSECUTION UNDER THE MEDICAL ACT AT WOLVERHAMPTON.

Letter from Mr. R. A. S. Prosser.

[To the Editor of the Medical Times and Gazette.]

Sir,—The necessity of the amendment of the Medical Act of 1858 has been made more patent by a decision of the Wolverhampton stipendiary magistrate, by showing how unequal the statute is for the suppression of unqualified Medical Practitioners, and that the same seems to be inoperative (according to the decisions of the judges and stipendiary magistrates) for distinguishing the legally qualified Practitioner from the non-qualified Practitioner.

I have forwarded a summary of the cases brought against an accoucheur of the name of Edward Clews, of Wolverhampton, charged, on the information of Mr. Freeman, Surgeon, of the same town, with the following offences under the said Act:—First, that he did unlawfully, wilfully, and falsely pretend to be a Surgeon; secondly, that he did falsely assume the name of an Assistant-Surgeon as a description, implying that he was recognised by law as a Surgeon; and thirdly, that, not being a person duly registered under the Medical Act, he did unlawfully hold an appointment.

After the practising by the defendant, which was shown in evidence, and the production of the Medical Register, showing that his name did not appear therein. For the defence, it appears that the counsel for the defendant held that there was no evidence to show that he held himself out to be a Surgeon, and that all that had been shown was that the defendant had visited the daughter of the witness Brown and given her medicine, as he (the counsel) might visit a sick friend and take him some medicine. The defendant's counsel then quoted from the *Law Times*, vol. iii. p. 322, the case of Steel, appellant against Hamilton, who announced himself over and about the door of his house as a "Surgeon of the United States," and as a "Surgeon not qualified." The case against him was that he had given a certificate of death, stating the nature of the disease that had resulted in death, and that he had attended the deceased in that case; that the judges held that there was nothing in the Act which prevented a man acting as a Surgeon, and the only penalty for not registering was the inability provided by the Act of recovering any fees for attendances, etc., or to hold certain offices, and that any person at the death, being then present, might give such a certificate as Hamilton had given, and that there was no evidence to show that he was not a Surgeon. The defendant's counsel also referred to the case of Pedgriff *v.* Chevallier, 20 *Law Journal*, 225, wherein Mr. Justice Williams remarked that if the Act had said that no person shall practise as a Surgeon if he were not registered, then the conviction would be right.

The stipendiary magistrate, in alluding to the reported cases, said the judgment must go directly against the present case, inasmuch as Chief Justice Erle had pointed out in Chevallier's case, referred to above, that there was nothing to show that the applicant was not practising as a Surgeon before the Act (1815) passed, and was therefore exempt from its operation; nothing to show that he did not possess a diploma from some of the various learned societies entitled to confer it; nothing to show that he was not recognised by law as a Surgeon entitled to practise; there was nothing indicative of his qualification; the only facts were that he called himself a Surgeon, and was not registered. The learned stipendiary said the like objections were fatal in this case before the court, and it must therefore be dismissed. This was held to decide the other case then before the court, and the third case was adjourned to summon the secretary of a certain society for life assurance to prove its existence and Mr. Clewes's appointment under it.

Now, after the observations which fell from the counsel and also the stipendiary magistrate in these cases, it seems that, under the present Act of 1858, it will be necessary to produce evidence on the part of the prosecution from the different colleges or companies in Schedule A of the Act to show that the defendant has obtained no diploma or certificate to enable him to practise, and that the onus of this part of the proof will fall upon the prosecutor. It is certain that the Medical Act does not insist upon the defendant in any terms, express or implied, to produce his testimonials as to practice, and in default of the prosecutor proving by sufficient evidence from the different colleges or bodies able to grant such testimonials, the different cases for prosecution must fail. There is one remedy which I consider infallible for distinguishing legally qualified Practitioners from unqualified persons practising, and that is by compulsory registration, in which case no person could get upon the Register unless he was duly qualified, and that unless a person could get upon the Register he should be disqualified from practice, and, in case of practising without registration, be liable to a certain fine; and, indeed, according to Mr. Justice Williams's observation, as before referred to in the reported case of Pedgriff *v.* Chevallier, that if the Act had said that no person shall practise if he were not registered, then the conviction would be right.

The above is but an abridgment of the cases before the Wolverhampton Magistrates' Court, and of the reported cases referred therein, made by me for the purpose of showing the insufficiency of the Medical Act and of its present required amendments; and, therefore, any further information must be obtained from the local papers by reference thereto.

I would suggest that the Apothecaries Act of 1815 may be usefully applied to suppress illegal Practitioners until the new Act comes into force. I am, &c.

R. A. S. Prosser, M.R.C.S. and L.S.A.

Birmingham, July 10.

OPERATIVE SURGERY AT GUY'S HOSPITAL.

Letter from Messrs. E. F. Gaitskell, Geo. Shipman, and C. D. Maynard.

[To the Editor of the Medical Times and Gazette.]

Sir,—In your article "On the Teaching of Operative Surgery," of July 17, you state "that a public course should be given in the summer session for the senior students, in which the teacher should go through, surgically and anatomically, the operations, explaining the why and the wherefore of every step and the proper handling of the instruments, making the pupils take it in turn to assist him." We think it only just to our own School—Guy's Hospital—to inform you that Mr. Bryant has given us such a course for some years past, and for the last two he has demonstrated, as far as has been in his power through the pupils, every Surgical act and operation. The attendance upon his class, although a voluntary one, is sufficient to prove the estimate in which it is held; and, as some of those who took an active part in it, we think it only right to bear our testimony to the value of the mode of instruction adopted.

We are, &c. E. F. Gaitskell,
Geo. Shipman,
C. D. Maynard.

Guy's Hospital, London, S.E., July 21.

P.S.—During this summer the average attendance on the class has been fifty, of whom twenty have performed various operations.

THE USE OF CARBOLIC ACID IN COLOMBIA.

Letter from Dr. Felix G. Rubio.

[To the Editor of the Medical Times and Gazette.]

Sir,—I take the liberty to inform you that I have used carbolic acid since it first came to my notice, about six or seven years ago. Allow me to tell you that this country is warm, damp, and has all the propensities peculiar to evolve suppuration and gangrene, and to engender vermin of every description, and to provoke tetanus; and I have always found carbolic acid to be one of the best anti-putrid and disinfectant, as well as the most useful, medicines in the treatment of wounds and foul and old ulcers of every description. It has given me the most flattering and satisfactory and speedy effects. The following is one of the many cases in which I have used carbolic acid:—

Dionisia, a poor, miserable, wretched black woman, 35 or 36 years of age, with filthy and scandalous habits, had suffered for many years from syphilitic ulcers, which had destroyed the palate, part of the upper lip, and the cartilage and septum nasi of the nose. She was shot lately in her right leg. An ounce lead ball entered clean through the upper and external third of the leg, some five or six inches below the knee-joint, passing between the lower part of the head of the tibia and the internal side of the superior extremity of the fibula, without lacerating either of the two bones. I saw her soon after the accident, and, finding that there was but a slight hæmorrhage and very little chance to provoke adhesion by the first intention, I passed through the wound a tape dipped in simple cerate in the form of a common seton, with the object of provoking a suppurative healing action. I lost sight of this woman until two months afterwards. I was called to her, and found the leg completely gangrenous. I was told that this woman had been in a fair way for the first six or eight days after the accident; that one day a venomous fly—there are many of these in this country—sat on the wound, and discharged there a great number of maggots, which in due time all changed into as many vermin, which soon invaded all the soft parts of the leg, and caused a complete sphacelus of the whole limb. The foot and the leg up to the knee were now black, soft, and completely replete of vermin, which formed wave-like movements under the putrid skin, and made the most disgusting sight to look at. The smell was horrible. On the upper part of the knee, just at the attachment of the apex of the patella and the inferior extremity of the os femoris, there was a regular line of demarcation, showing plainly the boundaries of the gangrene. There cannot be anything more repugnant and horrible than the sight of this woman's leg; and, notwithstanding the putrefactive and loathsome state of her limb, the nastiness in which she was inundated, both as to her body and clothing, and the great misery in which she was involved, she was fat, stout, and fleshy, as if she had been fed on her own filth. She was very hungry. I immediately ordered her to wrap up her knee with cloths dipped in a solution of carbolic acid (1 part) and cold water (30 parts), which in a very few hours disinfected the noxious knee, and three days after I separated the putrid limb. I washed well the raw surface with the same carbolic acid solution, and placed the lower flap in apposition with the upper one, and kept them *in situ* by wire stitches. I ordered the carbolic acid solution to be applied constantly to the ulcer, and two weeks afterwards the stump was well. I am, &c. Felix G. Rubio, M.D.

Barbacoas, United States of Colombia,
South America, May 10.

COUNTY LUNATIC ASYLUMS AND THE HOUSE OF COMMONS.

[To the Editor of the Medical Times and Gazette.]

Sir,—The Medico-Parliamentary question raised in your journal respecting the uncertain position and dependency of the Medical officers of Asylums under the new County Administration Bill, prepared and brought in on May 11 by Mr. Secretary Bruce, Mr. Knatchbull-Hugessen, and Mr. Arthur Peel, has assumed quite another aspect during the last week.

In the discussion in the House on the night of July 12, Mr. Scourfield, M.P., complained of the dissatisfaction existing upon the subject of pauper lunatics, in which he was followed by the county magistrates and their friends on both sides of the House—viz., Mr. Kekewich, the Chairman of the Devon Asylum, Mr. T. D. Acland, Mr. Gilpin, etc. They demand the interference of the Government, to have these institutions placed under the inspection of the Poor-law Board, on the ground of their being maintained out of the poor rates.

On the other hand, the guardians of the unions are pressing upon the Government the fact that they are not represented upon the Committee of Visitors of Asylums, and urge the speedy passing of the County Administration Bill, whereby large powers of management of all county offices and places are conferred upon them.

Again, the ratepayers allege that they have no voice in the distribution of the county rates, and petition for a public audit of the accounts.

The Medical officers of the county, who at present have no court of appeal in cases of alleged incompetency, are perfectly ignored under the Bill. The would doubtless prefer a reference to the Commissioners in Lunacy and the Secretary of State than to the Poor-law Board. Some change seems inevitable. The Medical press must take it up, for, as Sir Lucius O'Trigger says, "it is a very pretty quarrel as it stands."

London, July 17. I am, &c. Aliquis.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, May 25, 1869.

Dr. Burrows, F.R.S., President, in the Chair.

A paper by Mr. G. G. Gascoyen was read on

CASES OF IRITIS OCCURRING IN SYPHILIS TREATED WITHOUT MERCURY.

The paper contains a record of eighteen cases of syphilitic iritis which were successfully treated without mercury. Other symptoms of syphilis were present in all these cases; in seven of them there had been no previous treatment for the constitutional disease, and in eleven who were taking mercury when the iritis supervened, but who were not under its influence, the drug was at once discontinued. The treatment adopted was to place some drops of atropine solution, containing four grains to an ounce of water, in the eye three or four times daily; this was continued until the lymph had entirely disappeared and the natural colour of the eye returned. The average time during which the drops were employed was twenty-four days, and no ill-effects of any kind attended their application. Leeches were applied to the temple when there was much conjunctival redness, or, in less acute cases, blisters. Tonics, and to some debilitated patients wine, were given, but, when febrile symptoms were present, a simple saline mixture; opium was freely administered if pain were present. In all the recent cases the eye perfectly recovered, but in five severe old-standing cases, where firm adhesions had formed before the

patient came under treatment, irregularity of the pupil remained, although useful vision was regained in each. Double iritis was present in four instances, and relapses occurred in two; they all, however, recovered completely under the same plan of treatment. Great stress is laid upon the importance of carefully neutralising the atropine solution, and it is considered that inattention to this, and the very great frequency with which instillation of the drops has sometimes been practised, have, by irritating the eye, led to most of the untoward symptoms attributed to the use of atropine in recent iritis. The author considered that the large majority of cases of so-called syphilitic iritis commence with inflammation of the conjunctiva, which, like the other exposed mucous surfaces of the body, is peculiarly liable to congestion in syphilitic persons from very slight causes, and that the iris is attacked secondarily to this. The ocular portion of the conjunctiva is supplied by the anterior ciliary vessel as well as the iris; engorgement of the conjunctival vessels, therefore, is followed by the same condition in the iris, and soon determines inflammation. Examples of this kind are met with during the earlier period of constitutional syphilis, and the symptoms they present are so similar to those of syphilitic iritis, that, unless other syphilitic manifestations be present, the specific variety cannot be distinguished from the other. The author does not regard these as cases of true syphilitic iritis, but of simple inflammation of the aqueous chamber and surface of the iris, resulting from an extension of the conjunctival inflammation. Although excited by, they are not dependent upon, the syphilitic taint, and in their progress they differ in no respect from ordinary inflammation of a serous cavity in any other part of the body, and possess the tendency to deposition of lymph, formation of adhesions, etc., which is characteristic of this affection. For such, mercury is not required unless the peculiar property claimed for the drug in controlling serous inflammation be admitted, and respecting this there is at least much difference of opinion. There are, however, other cases, fortunately not very numerous, in which the iris is primarily attacked; these are indicative of a thorough and general contamination by syphilis, and are entirely dependent upon that disease. They occur during the more advanced period of syphilis, and are characterised by their painless chronic progress, and the formation of large nodular masses in the iris without previous implication of the other parts of the eye. The opinions of the best modern observers with regard to the nature of these peculiar tumours of the iris are considered; and although these authorities recognise the identity in composition between them and the gummatous tumours of other parts, they yet class iritis with the secondary affections of syphilis. The author, however, regards this disease of the eye, which he looks upon as true syphilitic iritis, as belonging to the more advanced, or so-called tertiary, stage of syphilis, and contemporaneous with ulcerations, nodes, etc., for which class of affections mercury is almost universally discarded, and therefore, although acknowledging the great value of mercury in many forms of syphilitic disease, he recommends its discontinuance in syphilitic iritis.

Mr. Dixon said that, if Mr. Gascoyen had given mercury, he might have headed his paper "Cases *cured* by Mercury." Iritis does not last for ever, but we want, if possible, to cut it short. He was certain that he had cured thousands of cases by mercury. The treatment recommended was dangerous. There was also a want of precision in the paper. They wanted a few cases well described—what type the patient could read at given times, and so on. Patches of adhesion might have been left. Many cases of so-called iritis were found to be not really so if the pupils were dilated and the ophthalmoscope used. If the inflammation was deep-seated, atropine would be useless, as it only affected the pupil. If mercury gave such undeniably good results, he could not see his way to throwing it overboard. Small doses of the remedy were quite sufficient. Bloodletting was useless. Many years ago he had written a good deal against the use of belladonna in iritis, but he had changed his mind now.

Mr. Wyatt thought that whatever doubts there might be as to the effects of mercury generally, there could surely be none in iritis. We could *see* the gradual good result. No Surgeon would give give mercury to debilitated subjects.

Mr. H. Lee said that they could not well consider mercury with regard to iritis alone. There was no structure affected with secondary syphilis which might not get well of itself, but the question was, Will it recover sooner under the influence of mercury, and will it have a less tendency to relapse? Cases show that iritis might get well without mercury, but the most important point was the future of the patient. If mercury be not given, they will relapse; with mercury a large proportion never relapse. He regretted the separation of secondary and tertiary symptoms. He differed as to the distinction in treatment recommended. Mercury did as much good in tertiary as in secondary syphilis.

Mr. B. Carter thought few ophthalmologists could go far with Mr. Gascoyen, although he concurred as to the existence of special deposits in tertiary syphilis. Superficial disease of the eye might run its course without deep-seated disease, and he did not know that inflammation was ever reflected by means of the blood-vessels. He believed iritis to be primarily a nerve lesion, of which there were three causes, rheumatism, syphilis, and direct injury. The two former sets of causes act through the nerves. Pridgin Teale had already shown that atropine was sufficient as a remedy in about one half of the cases; in the other half mercury was necessary. He saw a case beginning the other day which atropine did not arrest. He asked if there were any adhesions left after the reported cure; if so, the disease would be apt to return.

Dr. Drysdale had treated a good many cases without mercury. He thought that Professor Boeck would be pleased that he had induced Mr. Gascoyen to take up this subject. Without mercury, iritis had often been successfully treated. Carmichael used oil of turpentine. He thought iodide of potassium useful.

Mr. De Meric said that Gascoyen had advanced the opinion that mercury was good for the general symptoms of syphilis, but useless for iritis. The paper, he thought, was inexact, and the trials were started with the intention of doing away with something. This was an age of demolition. The treatment adopted was not expectant; it was simply everything except mercurial. The paper did not try to establish a difference between common and syphilitic iritis. The question was whether to use mercury in syphilitic iritis or not. Most symptoms will go by themselves, no doubt, but many with mercury never relapse. They might take a series of cases, and test them to the end.

Mr. Holt Dunn's experience went against the use of mercury in iritis. Cases he had seen treated with mercury went bad, and an operation became necessary. Without mercury cases got well.

Mr. Savory asked what was the precise meaning of the paper? What was the precise meaning of the word "recovery" used in it? Who denied that certain cases would get well by themselves? Would these cases prove that iritis was most effectually treated without mercury?

Mr. Gascoyen, in reply, stated that his cases recovered quickly as well as permanently. He gave mercury for secondary syphilis; not so for iritis. Tertiaries, as a rule, were not benefited by mercury, except the patients had taken too much before. In Teale's cases, atropine was given for twenty-four hours; after that, if they did not do well, mercury was given.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, July 7.

Dr. Graily Hewitt, President, in the Chair.

The following gentlemen were elected Fellows:—Dr. Cox, Theale, near Reading; Dr. Geikel, Ontario, Canada; and Mr. Lowndes, Liverpool.

Dr. Braxton Hicks exhibited a new infant's feeding bottle. It had one end large, over which an india-rubber cap fitted of the form of the breast, with the nipple in the centre. The other end of the bottle was supplied with a regulating valve for the admission of air. The conditions observed by the apparatus caused it to closely resemble in warmth, form, and mode of suction, the human breast. The inventor's name was Perrett.

Dr. Protheroe Smith exhibited an instrument made to subserve two distinct uses—viz., 1st, to aid the abdominal muscles in parturition; 2nd, to form a fixed point to which pessaries and other appliances might be attached for the treatment of uterine flexions and versions, and by which also a catheter might be retained in the bladder. The advantages he claimed for it when used as an aid to parturition were:—1. That a fixed point is secured for the exercise of mechanical force by means of, as it were, an artificial pelvis, the immobility of which is secured by two pads—one sacral, the other pubic, retained in their respective places by lateral springs which embrace the pelvis below the crista ilii. 2. Attached to the sacral pad are one horizontal and two vertical levers, the former of which is a strong spring buckled to a belt, closely adjusted to the abdominal walls. During parturition this belt may be tightened or slackened as may be desirable, and after delivery it may be used to maintain a steady uniform pressure. During parturition, too, the pressure of the sacral pad effectually sup-

plies that which is usually supplied by the nurse's hand. Thus, when the power of the abdominal muscles has been impaired by the constraint of dress, or rendered deficient under the influence of anæsthetics, it supplies artificially a force which simulates that of the abdominal muscles in a normal state. In a recent case of anteversion, as in many others, he had also found this instrument during labour of the greatest possible assistance. For the mechanical treatment of uterine ailments, this instrument acts in the following way:—The pubic and sacral pads, fixed by the lateral connecting springs, tend by their mutual reaction to alter the plane of the pelvis, if too horizontal, to one more oblique, and therefore more natural, and are aided in this by the shoulder straps. From the pubic pad, and attached to it by a movable rackwork, a curved steel spring passes into the vagina, and can carry at its extremity any desired form of pessary. The advantage of such a uterine support is that, its *point d'appui* being the pelvis itself, the various motions of the body cannot in any way displace it. It had often struck him that in the majority of instances of displacement of the uterus not arising from structural disease, they occur chiefly in women deficient in normal curvature of the lumbar vertebræ in whom the sacrum stands vertically in relation to the body instead of projecting at an angle posteriorly. With a view to rectify this, a prone position had often been adopted by obstetric Practitioners, among others by the late Dr. Rigby. This instrument, the result of many experiments, by creating a firm *point d'appui*, allowed sufficient force to be gradually applied to the lumbar spine to alter the position of the pelvis from the horizontal to the oblique, and that without necessitating the confinement and constrained position of the prone couch and similar appliances.

Dr. Heywood Smith gave particulars of a long-standing case of Procidentia Uteri, which he had successfully treated with this apparatus, and spoke of its advantages in other cases of displacement of the uterus.

Dr. Edis exhibited a Hydrocephalic Fœtus, the head measuring 18½ in. in circumference. The first confinement of the mother occurred February 16, 1868; the child was hydrocephalic, and Dr. Edis had had to complete delivery by perforation. The second occurred on February 10, 1869, and she again proved to be in labour with a hydrocephalic child (the one exhibited), and Dr. Edis had again to deliver after perforation. The points of interest in this case were:—1. The coincidence of hydrocephalus in two succeeding pregnancies; 2. The fact of the husband being phthisical; 3. The influence of past experience in any succeeding pregnancies in resorting to interference before rupture of the uterus, a by no means infrequent consequence, took place.

Dr. Edis also exhibited a four and a half months' fœtus with encephalocele, the occipital bone being bifurcated, and allowing the brain to protrude into a membranous cyst as large as the fœtal head itself.

Dr. Lawson Tait read a paper on a case of reduction of Chronic Inversion of the Uterus by sustained pressure. The patient, aged 31, had had two children. On the third day after her last confinement, which was seven months ago, inversion of the uterus followed a straining effort at micturition, accompanied by a profuse discharge of blood. It was reduced by a Medical man, but soon recurred, and continued, accompanied by an almost constant loss of blood, aggravated at the monthly periods, until May 6, when Dr. Tait first saw her. She was then extremely weak and anæmic, and suffered from repeated attacks of syncope. On May 7 Dr. Tait made a prolonged but unsuccessful attempt to reduce it. Various plans of procedure were considered, but ultimately, on the recommendation of Dr. Barnes, Dr. Tait determined to try the effect of sustained pressure by elastic bags. On May 14 he therefore introduced an elastic dilator into the vagina, and injected water into it until the patient complained of pain, which was relieved by the hypodermic injection of a quarter of a grain of morphia. On the 15th and 16th this was repeated, and during those three days the bladder was regularly emptied by the catheter, and the patient kept recumbent. On the morning of the 17th she said she had felt severe pain during the night, and had vomited a good deal. On removing the bag, Dr. Tait found the inversion reduced, and that the os readily admitted three fingers. The patient looked very exhausted, and had quite the appearance of having undergone a serious operation. She rallied then, but towards evening symptoms of fibrinous deposit in the heart supervened, and she died in forty-eight hours from the time at which the reduction was effected. A post-mortem examination could not be obtained, but the author was certain that neither laceration nor peritonitis had occurred. In conclusion, the author expressed his opinion of the high value of the elastic dilator, and his conviction that no case of inversion could resist it.

Dr. Barnes was sure that Dr. Tyler Smith must be gratified at hearing this case. That the sustained elastic pressure was not the cause of the woman's death appeared certain. Her condition before operating seemed hopeless. Dr. Barnes, in a paper recently read before the Medico-Chirurgical Society, had collected six cases treated successfully on Dr. T. Smith's plan, and since then another had been published by Dr. Schröder, of Bonn. He felt certain that very few cases would resist this treatment. When it was insufficient, then the proceeding which he himself had carried out—viz., of relaxing the constricted cervix by longitudinal incisions—would enable sustained elastic pressure to be applied successfully. In this way he felt confident that the necessity of resorting to the barbarous practice of amputating the uterus would be abolished.

Dr. Protheroe Smith said that in a case in which in 1853 he had reduced an inverted uterus which had existed for thirteen months, he had, after gaining a rim of cervix by continued pressure, overcome the resistance by means of a dilator which he had exhibited to the Society on a former occasion. He thought his method a preferable one to that of Dr. Barnes in so far as that his left the organ entire; and that it had produced no evil result was evident from the fact that his patient had since given birth to two children.

Dr. Braxton Hicks thought that it would have been of great assistance in Dr. Tait's case if the exact cause of death had been ascertained. He thought that in these cases there may be adhesions of old standing broken down in and about the uterus which might cause interperitoneal hæmorrhage or peritonitis. From the state of depression immediately after operation in Dr. Tait's case it was quite possible something in the neighbourhood had been rent by the uterine action at the moment of restoration.

Dr. Westmacott then read a paper on the use of the Whalebone Loop. The author apologised for bringing before the Fellows such an old-fashioned and trifling-looking instrument, but he did so, being convinced from experience of its usefulness. For the last fourteen years he had made use of an improved loop having two screws with nuts on one side of the handle, which, permitting one end of the whalebone to be removed, allowed it easily to slip over the head of the child. The author then gave a full description of the instrument and its mode of application in the various cases to which it was applicable. He had never met with any accident in its use. He did not wish to place it in opposition to the forceps, but he considered it might be of much value in country practice and in manufacturing districts, where time was of so much importance to the Practitioner, especially as its use was both easy and safe. The paper was illustrated by large diagrams, showing the loop *in situ* during the passage of the child's head through the pelvis and outer parts.

Dr. Barnes said the loop was much used by several Practitioners in the east of London. He demonstrated, by reference to Dr. Westmacott's diagrams, that the true action of the loop was that of a lever. For example, when the loop was applied upon the occiput to draw this down, the forehead was fixed against the opposite side of the pelvis, forming a centre around which the occiput revolved. The whole head did not come down at once.

Dr. Protheroe Smith said that he formerly had frequently used the loop, but had discarded it in consequence of the difficulty often experienced in disengaging it—a difficulty, however, which, in Dr. Westmacott's instrument, would appear to be obviated.

Dr. Playfair said the obvious risk of all sorts of fillets was that, if strong traction were made, they might seriously injure the child. One such case was recorded by Merriman, where the head had actually been separated from the body, the fillet having been passed over the chin. It was clear that when placed over the face, or under the chin, very serious results might ensue from strong traction if a good hold had been obtained, and, if it were not, the instrument would infallibly slip, and be useless. For these reasons the loop appeared to him to be much inferior in every respect to the forceps.

A paper was then read by Dr. Selby Norton, on Teething. In this paper the author advocated the opinion that the maladies usually attributed to teething are due to the wide-spread and unphysiological practice of feeding infants on starch foods. He showed that starch was non-digestible by the infant stomach, partly because no minute division of the starch granules could be effected in the infant's mouth, and partly because, from the mode of feeding, the greater part, at all events, of the starch is passed at once into the infant's stomach without being rendered-

soluble by the ptyalin of the saliva. The diseases usually ascribed to teething—diarrhœa, convulsions, and bronchitis—in the author's experience never occurred in a naturally fed child; and, on the other hand, they occurred sometimes in the first month, where the teeth obviously could exercise no baneful influence, and they occurred, too, when the gums were quite cool and natural. After considering these diseases at some length, and showing how often they could be directly traced to the irritation of bowel produced by starch food, he concluded by condemning altogether farinaceous food for infants, and advocating the sole use of cow's milk diluted with water.

The PRESIDENT, after remarking on the practical character of Dr. Norton's paper, said that as the subject of the paper was closely allied with the general subject of infant mortality, the discussion on which had been adjourned from the last meeting, it would be convenient that the discussion should now include both the present paper and the report read at the last meeting.

Dr. T. BALLARD said he was pleased to see some one come forward to support the "heretical" doctrine that teething was not a cause of infants' disease—a doctrine he had advocated many years ago. While so far, however, agreeing with the author of the paper just read, he could not coincide in his view that starch was such a patent cause of disorder. He did not think starch, *per se*, was harmful, though, of course, it was not a substance on which an infant could be reared. With respect to the general subject of infant mortality, he thought that practical good would result from the inquiry if the Society could agree upon some formula of dietary for general recommendation of a simple and intelligible character. He would also lay much stress not only upon the importance of sufficient food, but on the importance of not allowing the bowels to act more than twice in the twenty-four hours. This could be effected by attention to the mode of giving the food; by not allowing an infant to suck without obtaining the food it craves for (fruitless sucking), or to suck too hard to obtain it. In either case the bowels became disturbed, and diarrhœa was the result. Should this occur while the child is at the breast, the too frequent motions indicate the necessity of some supplementary feeding; or, if the infant be fed entirely from the bottle, there is probably some defect in its construction or action. Where maternal milk in sufficient quantity could be obtained, of course no other food was requisite. Next to this came the milk of some other animal, and, where circumstances required it, to this might be added some preparation of wheaten flour.

Dr. PHILLIPS could not agree with Dr. Ballard, as he considered it injudicious to give any farinaceous food to an infant under six months old. The practice was as physiologically incorrect as it was practically found to be hurtful. The paper read had not convinced him that no evils were ever caused by teething; but he quite believed that the evil effects ascribed to teething were often caused or increased by improper feeding. At the Children's Hospital instructions "How to bring up Babies" had been distributed with the best effect.

Dr. BRUNTON said that he also objected *in toto* to giving a child farinaceous food up to six or eight months. Up to that age where suckling could not be carried out, he gave cow's milk and water sweetened, increasing the proportion of milk as the child grew older.

Dr. ROUTH said that on no point was there more evidence than against the use of starch for infants before they had teeth. For—1. The assimilation of starch depended on its conversion into sugar by the saliva, but infants secreted no saliva for the first two or three months; 2. In infants dying after the use of starchy food, examination showed that it passed through the alimentary canal unchanged; 3. The alimentary canal of a baby was that of a carnivorous animal; 4. The food supplied to purely herbivorous animals recently born was animal. *Ergo*, starchy food should not be given to infants until, at all events, the appearance of teeth. He could not agree with the recommendation of cows' milk diluted with water as a good food for infants. The milk, before it was purchased, was generally watered, deficient in cream, acid, and wanting in sugar of milk. If used at all, it must be mixed with lime-water, and sugar of milk added in the proportion of half to one ounce of lime-water, and a teaspoonful of sugar of milk to every half-pint of milk with one-third water. It should be begun early, even from birth, in all cases where it was clear beforehand that the mother could not nurse long. The idea that it was wrong to mix two milks was fallacious, and his experience had proved to him that the earlier it was begun the more readily the child's stomach bore it, and in nine cases out of ten a child so prepared could be weaned readily and with safety. To one other point only would he refer—the congregation of infants in nurseries. This was a most dangerous practice. The atmosphere generated under these conditions was most baneful, probably from the quantity of ammonia generated from the urine, as well as sulphuretted hydrogen and other noxious gases from the stools. Children required air, and pure air especially. Their respiration was more rapid than adults. Such congregation of infants was always, therefore, a great cause of infant mortality. Malignant thrush, *muguet*, and contagious diseases spread like fire in such atmospheres.

The PRESIDENT commented upon the practical character of the discussion and the great importance of the subject. He expressed a hope that by the further efforts of the Committee, in conjunction with the Fellows generally, some steps might be taken to bring the subject to some permanently useful issue.

The Society then adjourned until October.

CLINICAL SOCIETY.

FRIDAY, MAY 28, 1869.

Mr. PAGET in the Chair.

DR. MORELL MACKENZIE exhibited a male patient, aged 53, in whom considerable Dyspnœa accompanied with Stridulous Breathing of several years' duration was apparently due to a morbid growth occupying the upper part of the anterior mediastinum. The principal facts which presented themselves on examining him were the following:—Fulness with dilatation of the veins at the root of the neck, prominence of the upper part of the sternum, with slight separation of the manubrium from the rest of the bone; dulness of the projecting part on percussion, extending about three inches on either side of the manubrium; absence of the physical signs of aneurism or of disease of the heart or lungs. The general health of the patient is good, and has always been so. In his youth he resided in Derbyshire, and formerly was affected with bronchocele.

Dr. CHOLMELEY brought under the notice of the Society a case of Œdema of one inferior extremity with Lymphorrhagia now under his care in the Great Northern Hospital. He exhibited the chylous discharge from the surface of the affected limb, and requested that a committee might be appointed to report on the case. The President nominated the same gentlemen who had reported on the similar case communicated at a former meeting by Dr. Day.

Dr. PAVY again presented the Diabetic patient exhibited by him early in the session as having been successfully treated by opium without restriction of diet, and demonstrated, by testing the patient's urine in presence of the Society, that it was not saccharine.

Dr. PAVY then communicated a second case of Diabetes. A man aged 29 was admitted into Guy's Hospital, under Dr. Pavy's care, on November 18, 1868. He had been suffering from diabetes for nine months, and during the first few days after admission, before being placed upon a restricted diet, passed as much as from ten to thirteen pints and a half of urine per diem, containing from upwards of 7000 to 12,000 grains of sugar. Under a restricted diet the urine was reduced to from five to six pints, and the sugar to about 3000. He was medicinally treated first with a fixed carbonated alkali and ammonia, and then with ozonic ether, but the urine failed to undergo any further improvement. According to the notes of the case, on January 9 he passed 115 oz. of urine with a sp. gr. of 1035, and containing 3076 grains of sugar. He was now ordered one grain of hydrochlorate of morphia daily, the dose being gradually increased during the next three weeks. By the twenty-fifth day of treatment the sugar had entirely disappeared, the quantity of morphia taken daily being five grains and a quarter. This treatment was continued till March 4, the urine remaining free from sugar. Seven days after leaving off the morphia it again became saccharine, and on the 13th he was discharging 1667 grains in twenty-four hours. He was thereupon ordered opium, the daily dose of which was gradually increased up to thirteen grains and a half, by which time the urine again became free from sugar. During the whole period of treatment as yet referred to the diet was restricted, it having been found that the slightest deviation produced a falling back of the urine. The dose of opium was still further increased, twenty-two grains and a half per diem forming the quantity at present administered, and he is now able to take four ounces of bread daily without occasioning any appearance of sugar in the urine, the amount of which averages one pint and a half for the twenty-four hours. In this case the daily discharge of urea has been also determined, and found to be natural. The

patient has gained in strength, weighs sixteen pounds and a half heavier than upon admission, and has experienced no constipation or other ill-effect, except sometimes a moderate amount of drowsiness from either the morphia or opium.

Dr. Sanderson reported that his case continued to improve. The dose was now twenty grains a day.

Dr. Murchison related a case of Cholera which had been treated by him in the Middlesex Hospital during the epidemic of 1866 by injection into the veins of a saline solution at a lower temperature than that of the blood. The patient, a pregnant woman, aged 43, was admitted in complete collapse of several hours' duration. She had cramps, vomiting, and whey-like alvine discharges, which had first come on nine hours previously, the diarrhœa having existed more or less for several days. As no improvement resulted from other treatment, excepting in so far that the vomiting and purging had ceased, it was resolved (five hours after her admission) to have recourse to saline injection, the patient being still profoundly collapsed, and having a temperature of 96·8° in the axilla and 100·2° in the rectum. The process of injecting lasted forty-five minutes, the quantity used being two pints. Its temperature was not more than 100° at the beginning of the operation, and no means were used to maintain it. By the time that half the quantity had been introduced, the pulse, which was before imperceptible, became distinct, the breathing easier, and the countenance more natural. The improvement, however, was transitory. No sooner was the injection completed than the watery evacuations returned with greater violence, and shortly afterwards the patient subsided into a state of more profound collapse than before, still retaining consciousness and asking for food. She died two hours and a half after the injection. Dr. Murchison, in commenting on the case, indicated its bearing on the views entertained by a well-known Physician as to the pathology and treatment of cholera, who attributes the extraordinary effects of saline injections in restoring patients for a time from collapse to the high temperature of the liquid injected. In the present case, the effect could not be due to its temperature. He also pointed out that the subsequent relapse was preceded by purging, from which circumstance he thought it might be inferred that there was a closer relation between watery evacuations and the algid state than some persons were willing to admit.

Dr. Murchison further related a case of Gastro-enteritis from local irritants, simulating cholera, and occurring twice in the same individual. The patient, a woman, aged 51, was admitted into the Middlesex Hospital on April 10, 1867, suffering from vomiting, purging, and cramps, which had come on suddenly, and had lasted for the preceding fourteen hours. When first seen she was collapsed, the pulse being almost imperceptible, and the axillary temperature 96·8°. These symptoms gradually subsided, no urine, however, being passed for the first 36 hours. In a few weeks she was dismissed convalescent, but on July 23 was again admitted with similar symptoms—viz., watery evacuation, cramps, suppression of urine, followed by temporary albuminuria and collapse, which subsided gradually, as before, under appropriate treatment. The first attack was apparently brought on by partaking of cheese in an unusually decomposed state, the second by eating a preserved lobster. Dr. Murchison proceeded to observe that the completeness of the correspondence between such cases as the one he had related and those of cholera appeared to him to afford a further confirmation of the opinion he had already expressed, that the condition of collapse is brought about in exactly the same way in cholera as in the gastro-enteritis which is produced by certain irritant poisons—in short, that, in both cases, it is a consequence of the profuse discharge of liquid from the intestinal mucous membrane.

Dr. Greenhow said a lady took half a drachm of croton oil by mistake. Sickness and purging followed. Two hours after she was exactly as in a state of cholera collapse—he would have said she was suffering from cholera—and she died in ten hours.

Dr. Symes Thomson said that the observations as to salines recalled to his mind a conversation with Dr. Stevens, who was so fond of them. He considered temperature to be a matter of little importance. They might give rise to a return of the evacuation, but there was no reason for leaving them off.

Dr. Church had only once seen salines used; latterly the temperature must have been below 100° F. Whatever was the cause of cholera, he believed gastric irritation to be the prime cause. During last epidemic a man in St. Bartholomew's Hospital who had gone through the crisis of the disease fell back and died, apparently from having eaten two imperfectly boiled potatoes.

Dr. Greenhow said they must endeavour to separate the true cause from any error of diet. He remembered, in 1852, certain cases brought on by aperients.

The Society then adjourned till Friday, October 8.

ARMY MEDICO-CHIRURGICAL SOCIETY OF PORTSMOUTH.

May 5, 1869.

Deputy Inspector-General C. A. Gordon, C.B., in the Chair.

Two cases of Cerebro-spinal Fever which have lately occurred among the troops in garrison were brought before the Society. The first, described by Assistant-Surgeon J. Ross Murray, R.A., was that of a driver, aged 18, with five months' service, of temperate habits, and well conducted. He was admitted to Hospital on April 15, 1869, complaining of lassitude, anxiety at præcordia, and slight febrile symptoms. An eruption of a petechial character having appeared on the legs an hour or two after admission to his battery Hospital, as a precaution he was removed the same afternoon to the infection ward at Portsmouth. He stated that on the day previous he had been drinking with a comrade (since dead from the same disease) in a public house in a low and dirty part of Portsmouth. On the morning of the 16th, when seen for the first time by Dr. Murray, to whose care he was transferred, he had passed a restless night from severe and continual vomiting of a dark-green bilious matter, and frequent purging; he was slightly feverish. A diaphoretic mixture was now prescribed. On the 17th symptoms had developed which left no doubt as to the nature of the case. Delirium had set in, with intervals during which he was very apathetic, but answered questions rationally. There was now well-marked retraction of the head (opisthotonos), great pain in the muscles of the back, extending down to the lumbar region, and muscular debility of the lower extremities, almost amounting to paralysis. Pulse 84; temperature in axilla, 100; skin moderately cool and moist. Quinine gr. iv., calomel gr. ij., opium gr. $\frac{1}{4}$, were now ordered in two pills every second hour. Ice to be applied to the head, a blister to the nape of the neck, and dry cupping along the spine. At evening visit the delirium was found to have increased, the retraction of the head was more marked, and the pulse had risen to 120. There was conjunctivitis of the right eye. Temperature in axilla 101°; respiration 23. On the 18th he was semi-comatose; the right cornea had become quite opaque; the eruption had commenced to fade, but the retraction of the head was still well marked. Some urine obtained for examination showed a sp. gr. of 1006, was slightly deficient in chlorides, but gave no trace of albumen. He got gradually worse towards evening, and was evidently sinking; pulse 92; respirations 23; temperature 100°. On the morning of the 19th complete coma had set in; the pulse was very rapid (152), small, and thready; temperature 105°; respirations 41; tongue dry, brown, and glazed. In addition to the petechiæ on the legs, a bruised appearance of the skin of the lower extremities showed itself. He died at 3.40 p.m. on the 19th, the 5th day. On post-mortem examination, twenty hours after death, the spinal sub-arachnoid space was found filled with a layer of greenish-yellow lymph, which clothed the spinal cord from the medulla downwards; the substance of the cord itself appeared normal to the naked eye. On reflecting the dura mater cerebri, an extensive deposit of greenish yellow colour, closely resembling pus as seen through the arachnoid, but proving, when cut into, to be firm lymph, followed closely the vessels of the pia mater, which were themselves much congested with fluid blood. The lateral ventricles were distended with serum, and the crura, pons Varolii, and optic commissure were covered anteriorly by a thick greenish, gelatinous-looking lymph, which extended along the right optic nerve for about a third of an inch. A layer of lymph coated the anterior surface of the iris of the right eye. A water-colour drawing by Dr. Lamprey, 67th Regiment, was exhibited, showing very exactly the appearance of the cerebral lobes when the dura mater was reflected. The second case read to the Society, by Dr. Park, Royal Artillery, was that of a driver of the 11th Brigade, a comrade of the former man, aged 29, service nine years, whose habits were temperate, and conduct good. He had been absent in Portsmouth for three days, the greater part of which was spent in his company at the same public house. He returned to Hilsea on April 15, and was punished for absence by seven days' confinement to barracks. He reported sick early on the morning of April 20,

as he was unable to attend stables at half-past five in the morning, and complained of general feeling of malaise, with pains in the lower extremities, slight sore throat, pain at præcordia and extreme restlessness. His symptoms resembled those of the cold stage of ague, with marked "cutis anserina," eyes suffused, quickened pulse, and tongue coated with a whitish fur. A cathartic dose of infusion of senna and sulphate of magnesia was given, and the throat was swabbed with a solution of nitrate of silver. Two hours afterwards, at 9 a.m., there was very great exhaustion; pulse 130, small, and wiry. He complained of coldness of lower extremities and great frontal headache; there was no eruption. At 3 p.m. he was still more prostrated and was more covered with large black patches of ecchymosis, the general hue of the skin being a dusky yellow. He was perfectly conscious and rational until about 20 minutes before his death, which took place at 5.20 p.m. rather suddenly. Just before death he ejected some bloody mucus from the mouth and nose. At 9 a.m. 5 grains of calomel were prescribed, and ordered to be followed by 5 grains of quinine every two hours. Beef-tea and brandy were given. Post-mortem examination, forty-two hours after death, showed the membranes of the brain and spinal cord intensely congested and the sinuses enormously distended with dark fluid blood. There was considerable effusion into the sub-arachnoid space, and the cerebral ventricles contained an ounce of pinkish serum. The brain and upper part of the spinal cord showed numerous red points on section. The lungs were gorged with blood; the right side of the heart contained fluid blood, while the left was empty. The blood was everywhere fluid, of a dark colour, and apparently disorganised; it continued to ooze out for some hours after the post-mortem was completed.

The Honorary Secretary read a paper by Assistant-Surgeon Wales, R. H. Artillery, on a peculiar form of Arthritis.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 20th inst.:—

Allchin, William Henry, Bayswater, of University College.
Archer, Thomas Brittin, Ely, Cambridgeshire, of St. Bartholomew's Hospital.
Barraclough, George, Streatham, Surrey, of Guy's Hospital.
Bdham, James, L.S.A., Westbourne-park-place, of St. Mary's Hospital.
Budd, Samuel P., L.S.A., Plymouth, of the Sheffield Hospital.
Ellis, Ellis Henry, L.K. and Q.C.P. Ire., Bangor, North Wales, of Dublin.
Furnivall, Henry Wallace, Hutton, Somersetshire, of the Manchester Royal Infirmary.
Hallam, Arthur, L.S.A., Sheffield, of the Sheffield Hospital.
Hitchcock, Henry Knight, L.S.A., Market Lavington, Devizes, of the Sheffield Hospital.
Hood, Donald William Charles, Croydon, of Cambridge and Guy's Hospital.
Leckie, Walter James, L.R.C.P. Edin., Euston-road, of the Sheffield Hospital.
M'Andrew, James John, Castlebar, Co. Mayo, of the Charing-cross Hospital.
Mackenzie, Stephen, Weymouth-street, Portland-place, of the London Hospital.
Meagher, Joseph Stanislaus, Dublin, of Dublin.
Miller, Frederick Montague, Stoke Newington-road, of St. Thomas's Hospital.
Morrish, Richard Alfred, L.S.A., Ledbury, Gloucester, of St. Mary's Hospital.
Owen, Simeon Holgate, Manchester, of the Manchester Royal Infirmary.
Parker, Robert William, Ilford, Essex, of the London Hospital.
Price, Thomas, L.K. and Q.C.P. Ire., Bangor, North Wales, of Dublin.
Pritchard, Verban, L.S.A., Highbury, Middlesex, of Guy's Hospital.
Roberts, Arthur, L.S.A., Staleybridge, of the Manchester Royal Infirmary.
Shipman, George William, L.R.C.P. Lond., Grantham, Lincolnshire, of Guy's Hospital.
Sloman, Samuel George, Farnham, Surrey, of St. Bartholomew's Hospital.
Thomas, David William, L.K. and Q.C.P. Ire., Festiniog, Merionethshire, of Dublin.
Tomes, Charles Sissmore, Cavendish-square, of the Middlesex Hospital.
Wallis, Frederick M., L.S.A., Bexhill, Sussex, of Guy's Hospital.
Williamson, John Gover, Halford-square, W.C., of St. Bartholomew's Hospital.

It is stated that four out of the twenty-four candidates examined failed to acquit themselves to the satisfaction of the Court, and were consequently referred to their Hospital studies for a period of six months. The following gentlemen were admitted Members on the 21st inst.:—

Anningson, Joseph William, Burnley, Lancashire, of Manchester.
Amsden, George, L.S.A., Highbury, Middlesex, of King's College.
Andrews, Arthur, Hertford, of St. Bartholomew's Hospital.
Ashby, Alfred, L.S.A., Staines, Middlesex, of Guy's Hospital.
Baxter, Evans B., L.S.A., Gate-street, Lincoln's-inn-Fields, King's College.
Broughton, R. N., Ruyton, Salop, of Birmingham and St. Bartholomew's Hospital.
Cufaude, Frank, Acle, Norfolk, of Edinburgh.
Griffin, James, L.S.A., Banbury, Oxon, of University College.
Guy, Frederick George, Plumstead, Kent, of King's College.
Herbert, Samuel Lymas, L.S.A., Demerara, of King's College.
Mason, Hugh Herbert, Burton-on-Trent, University College.
Rawlings, John Adams, Swansea, of Birmingham and Guy's Hospital.
Smith, Jas. Adolphus, Winchcombe, Gloucestershire, St. Mary's Hospital.
Thomas, Andrew Appleby, Jamaica, of Guy's Hospital.
Thorne, Frederick la Coque, Leamington.
Wills, Charles, Narborough, Leicestershire, of the Middlesex Hospital.
Urquhart, John, Forres, N.B., of Newcastle-upon-Tyne.

Mr. Frederick Hall, L.S.A., of Leeds, was admitted to examination under the old regulations, and, having passed to the satisfaction of the Court, was also admitted a Member of the College. It is stated that four out of the twenty-five candidates examined failed to satisfy the Court, and were referred for six months for further professional study.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, July 15, 1869:—

Appleton, Robert Carlisle, Southampton-street, W.C.
Attwater, Arthur William, Kilburn.
Kesteven, William Henry, Holloway.
Leigh, Herbert Sidney, Bagaley, Northenden.
Owen, Robert Humphreys, Carnarvon.
Smith, Frederick, Grimsby.
Smith, Richard Thomas, Hebden-bridge.
Wheatcroft, Samuel Hanson, Sheffield.

As Assistants in compounding and dispensing medicines:—

Beasley, Frederick, Canterbury.
Bennett, Henry, Rotherham.
Emson, William Nicholls, Dorchester.
Sandiland, Robert Burgess, jun., Winslow.
Talbot, Thomas Henry, Cullumpton.

The following gentlemen also, on the same day, passed their First Professional Examination:—

Berry, Walter, King's College.
Hosegood, Samuel, Guy's Hospital.
Mayo, Alfred Charles, King's College.
Priestley, Henry, Sheffield.
Walsham, William Johnson, St. Bartholomew's Hospital.
Wayman, C. P. Scott, St. Bartholomew's Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

CREE, EDWARD HODGES, M.D.—Deputy-Inspector General of Hospitals and Fleets on the retired list.

TAIT, LAWSON—Assistant-Surgeon to the Clayton Hospital.

BIRTHS.

BEATSON.—On June 21, at Nagpore, Central India, the wife of W. B. Beatson, M.D., Civil Surgeon, of a son.

COOMBS.—On July 20, at Castle Carey, the wife of C. P. Coombs, M.B., of a daughter.

DICKSON.—On July 12, at 33, Albany-street, Edinburgh, the wife of Francis K. Dickson, L.R.C.P., the Square, Buxton, of a son.

GORDON.—On July 15, at Southesk House, Southsea, the wife of London Gordon, M.D. Edin., of a son.

KNAGGS.—On July 15, at No. 5, Upper Craven-place, Highgate-road, the wife of Sydney Herbert Knaggs, M.R.C.S., of a daughter.

LINDSAY.—On July 14, at Hanwell, the wife of J. Murray Lindsay, M.D., of a daughter.

MOFFITT.—On July 13, at Woolston, near Southampton, the wife of Andrew Moffitt, L.R.C.S.I., Staff Assistant-Surgeon, of a son.

SHAW.—On July 17, at Bedford, the wife of James Shaw, F.R.C.S., late Principal Inspector-General H.M.'s Madras Army, of a son.

SMALL.—On July 18, at Colville-square, Bayswater, the wife of D. H. Small, L.R.C.S., on the retired list of H.M.'s Indian Army, of a son.

SUTCLIFF.—On July 16, at Wandsworth, Surrey, the wife of Edward Sutcliff, M.D., of a daughter.

TOWNE.—On July 19, at 354, Kingsland-crescent, the wife of Alexander Towne, M.R.C.S., of a daughter.

TURNER.—On July 12, at 53, Devonshire-street, Islington, the wife of Duncan Turner, L.R.C.S., of a daughter.

WORGER.—On July 19, at 35, Chiswell-street, Finsbury-square, the wife of Thomas Hewlett Worger, M.R.C.S., of twin sons.

MARRIAGES.

PORTEOUS—WAY.—On July 15, at the parish church of Foxley, Wiltshire, by the Rev. Lewis A. M. Way, brother of the bride, H. W. Porteous, Esq., Inspector-General of Hospitals, H.M.'s Madras Army (Retired), to Henrietta Charlotte, fifth daughter of the late Rev. George Way, of Tours. No cards.

STEVENS—POWER.—On July 14, at the parish church, Minchinhampton, Gloucestershire, George Gauntlett Stevens, second surviving son of the late William Stevens, Esq., of Tutshill Lodge, to Eliza Mary, eldest daughter of the late J. J. Power, M.D., of Maidstone.

DEATHS.

JONES, WALTER DAVID, Fellow of the College of Physicians, J.P. and D.L. for the counties of Pembroke and Cardigan, at his residence, Lancych, Pembrokeshire, on July 17, in his 78th year.

PEREGRINE, ELIZA, widow of John Pryor Peregrine, M.D., formerly of Half-Moon-street, Piccadilly, on July 16, at 1, Westbourne-terrace, St. Saviour's, Jersey, aged 79.

STEPHENSON, JAMES, M.R.C.S., L.S.A., at 461, Mile-end-road, on July 14, aged 42.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

DORSET COUNTY LUNATIC ASYLUMS.—Assistant Medical Officer; must be duly qualified and be registered. Applications and testimonials to the Committee of Visitors of the Dorset Lunatic Asylums, on or before the 31st inst.

HAY UNION.—Medical Officer; must be legally qualified. The gentleman appointed will be required to reside in Hay. Applications and testimonials to Mr. C. Griffiths, Clerk to the Guardians, on or before August 4, election on August 5.

ISLE OF MAN HOSPITAL AND DISPENSARY.—Resident Medical Officer. Information may be obtained by applying to the Hon. Sec., Mr. John Moore, to whom testimonials must be sent on or before August 11.

SUNDERLAND GENERAL HOSPITAL.—House-Surgeon's Assistant; must have passed his primary examination and have completed his third year of Medical study. Applications and testimonials to C. D. H. Drury, Esq., House-Surgeon, on or before July 24.

UNIVERSITY COLLEGE.—The Professorship of Medical Jurisprudence will be vacant at the end of the present session. Further information may be obtained of the Secretary.

WHITEHAVEN AND WEST CUMBERLAND INFIRMARY.—House-Surgeon; must have both Medical and Surgical qualifications. Applications and testimonials to W. Wilson, Esq., Hon. Sec., Whitehaven, on or before July 30.

WHITEHAVEN AND WEST CUMBERLAND INFIRMARY.—House-Surgeon; must have both Medical and Surgical qualifications. Applications and testimonials to Wm. Wilson, Esq., Hon. Sec., Whitehaven.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Plomesgate Union.—Mr. Charles J. Grellett has resigned the Orford District; area 21,302; population 3277; salary £65 per annum.

Tiverton Union.—Mr. Frederick Marsdin has resigned the Thorverton District; area 8126; population 1810; salary £31 per annum.

APPOINTMENTS.

Alderbury Union.—Humphrey P. Blackmore, M.D. St. And., M.R.C.S. Eng., L.S.A., to the Sixth District.

Ashby de la Zouch Union.—Christopher John B. Johnson, L.F.P. and S. Glas., L.R.C.P. Edin., to the Whitwick District.

Dewsbury Union.—Wm. F. Watts, M.R.C.S. Eng., L.S.A., to the Dewsbury District.

Great Boughton Union.—Wm. Charles Watson, M.R.C.S. Eng., L.R.C.P. Edin., to the Workhouse.

Manchester Township.—George Bowring, M.R.C.S. Eng., L.S.A., to the Workhouse Hospital and the New Workhouse.

Pembroke Union.—John Watts, M.R.C.S. Eng., L.S.A., to the Fourth District.

West London Union.—Alfred B. Thompson, L.R.C.P. Edin., M.R.C.S.E., L.S.A., to the South District.

UNIVERSITY OF CAMBRIDGE.—There will be an examination in natural science at Sidney College for two scholarships, of the value of £40 a year each. The examination will be open to any students who have not entered at the University. Information can be obtained from the Rev. J. C. Ellis, tutor of the college.

THE General Lying-in Hospital will receive £400 under the will of Lord Henry Seymour.

THE next "House dinner" of the Medical Club at the club will take place on Wednesday, July 28, on which occasion Edwin Saunders, Esq., will take the chair.

TWO bakers were fined on Saturday last, at the Southwark Police-court, for having furnaces so constructed as not to consume the smoke.

MR. CLEWS, of Wolverhampton, has resigned his appointment as Surgeon to the People's Family Assurance Company. The summons against him for "falsely pretending to be a Surgeon was withdrawn." There is no doubt that the Medical Act is sufficiently clear on one point—that of "falsely pretending to be registered." Recent decisions have shown this.

THE annual business meeting of the members of the National Association for the Promotion of Social Science will be held at 1, Adam-street, Adelphi, on Friday, the 30th inst., at four o'clock, p.m., to receive a report from the Council on the financial and other business of the Association, and to elect the officers and standing committees for the ensuing year.

THE INTERNATIONAL MEDICAL CONGRESS.—Dr. B. W. Foster, of this town, has been elected delegate member for England of the Medical Congress of All Nations, to be held in Florence, in September next.—*Birmingham Daily Post.* [*** With all respect for Dr. B. W. Foster, we cannot help asking—By whom has he been elected?]

SMALLPOX IN SUFFOLK.—This disease is raging in the neighbourhood of Wickham Market, Suffolk, and it is said that a visit from Dr. Seaton, the Government Inspector, has laid bare an imperfect condition of vaccination amongst the population.

THE St. Andrews Medical Graduates' Association had a delightful day out on Tuesday at St. Alban's. By the kindness and hospitality of their colleague, Dr. Lipscombe, they found, on arriving at their destination, the most perfect arrangements for their comfort and pleasure. All the principal objects of interest in the district were visited, including the ruins of the mansion where Lord Bacon lived and wrote many of his works. The abbey was another centre in which two or three hours were spent, Dr. Lipscombe acting as antiquarian guide so ably that we doubt if the Society of Antiquaries, which is about to meet in the same place, will easily find a more competent leader. After the excursions, between thirty and forty of the graduates and their friends dined together at the Peahen Hotel, the President, Dr. Richardson, in the chair, and Drs. Seaton and Day-Goss vice-chairmen. The dinner passed off merrily, and the visit altogether was a success which will not soon be forgotten by those who were present.

HEALTH OF ST. MARYLEBONE PARISH.—Dr. Whitmore, in his quarterly summary, states:—"In the thirteen weeks of the second quarter of the year ending on the 26th ultimo, the number of births registered in the parish was 1241—viz., males 610, females 631; in the same period the number of deaths registered was 982—viz., males 499, females 483. These were distributed over the six parochial districts as follows:—In All Souls they amounted to 213, of which number 66 occurred in the Middlesex Hospital, in Cavendish-square to 51, in the Rectory to 267, of which number 110 occurred in the Workhouse, in St. Mary's to 125, in Christ Church to 173, and in St. John's to 153. Amongst children under 5 years of age they amounted to 375, between the ages of 5 and 20 years to 48, between 20 and 40 years to 150, between 40 and 60 years to 174, and from 60 years upwards to 235. The annual death-rate of the quarter, allowing for increase of population, was 24·09 per thousand, being 1·8 per thousand less than that of the winter quarter, but 1·7 per thousand above that of the spring quarter of last year.

THE LONDON HOSPITAL MEDICAL COLLEGE.—PRIZE-LIST, SESSION 1868-69.—Clinical Medicine: £20 Scholarship (given jointly by the House Committee and the Medical Council), Mr. Ashley Wm. Barrett; Gold Medal (given by the Governors, and deferred last year), Mr. Edmund Vialls. Clinical Surgery: £20 Scholarship (given jointly by the House Committee and the Medical Council), Mr. Stephen Mackenzie; Honorary Certificate, Mr. Oswald Baker. Clinical Obstetrics: £20 Scholarship (given jointly by the House Committee and the Medical Council), Mr. William Leapingwell. Practical Medicine and Surgery: Duckworth Nelson Prize, value £10 10s., Mr. George Ernest Herman. Practical Midwifery: Special Certificate (given by the House Committee for attendance on more than 100 cases of Midwifery), Mr. George Salt, Mr. William Leapingwell. Dressers' Prizes (given by the House Committee for zeal and efficiency): £15 prizes, Mr. John Butler Edis, Mr. Arthur J. Moore, Mr. Alfred H. Parker; £5 prizes, Mr. Lionel Beech, Mr. John W. Fordham, Mr. Charles W. Vickers. Osteology: £20 Scholarship (given by the Medical Council), Mr. W. L. Morgan; Honorary Certificate, Mr. Lewis Mackenzie. Anatomy, Physiology, Chemistry: £25 Scholarship (given by the Medical Council), Mr. Lewis Mackenzie; Honorary Certificate, Mr. W. L. Morgan.

QUACKERY SERVED OUT.—DOCTOR AND PATIENT BOTH DEAD.—A Kafir in the service of Mr. Otto, of Meiringspoort, fell sick some days ago, and by the advice of a friend took some castor oil, which seemed to do him some good. But his father and brother, hearing that there was a coloured doctor in the neighbourhood, went to fetch him for their relative. The doctor was quite prepared to undertake to cure the patient, and at once proceeded to give him a decotion of *Kenidje-roer-my niet* and the root of the "Klappes-tosh," the dose being half a cupful. Instead of being cured, the unfortunate patient was in two hours a corpse. The father and brother began to suspect that there was something wrong, or at least that the medicine was not the sort a doctor ought to administer. So they sent again for old Jopper—that was the doctor's name—told him they suspected his medicine was nothing but poison, and nothing would satisfy them but that he himself should drink as much of the decotion as the dead man had drunk. The doctor did his best to get out of the fix, but nothing could avail

him; he had to drink his physic, and in an hour he was dead. The last heard of the matter was that the district Surgeon had been directed to hold a post-mortem examination of the bodies.—*Graaff-Reinet Advertiser.*

Boston Registration Returns for 1868.—It is stated that, with a population of about 240,000, there were only 7102 live children (3590 males and 3512 females) born in 1868, the ratio being one birth to every 33·79 living persons, a birth-rate lower than that of any European nation except France and Belgium. There were also 482 still-born children during the year. The Registrar remarks that when it is remembered that in 1851 there was one birth to every 26 persons, and that now there is only one to every 33·79, the fact is one well deserving of more attention than it has received. The number of deaths was 5519—2861 males and 2658 females. The death-rate in Boston is 1 to 43·48, in New York 1 to 44·19, and in Philadelphia 1 to 59·74.—*Boston Medical Journal*, June 10.

Brussels Registration Returns for 1868.—The population of Brussels on January 1, 1868, consisted of 170,318 inhabitants, 82,492 males and 87,826 females, and by December the population had risen to 174,678 (84,651 males and 90,027 females). During the year 5903 births were declared (2991 boys and 2912 girls). There were 1505 illegitimate, the sexes being equal, and 4398 legitimate, the twin-births amounting to 116—67 males and 49 females. During the year 1695 marriages were celebrated and 18 divorces pronounced. The mortality for the year amounted to 5215 (2709 males and 2536 females), including 429 children born dead, being a diminution of 575 deaths in the annual mean of 1862-67. The births therefore exceeded the deaths by 658. The number of persons dying at their own abodes was 3725, among whom 1417 are returned as indigent. The remaining 1520 died either in the Hospitals or prisons. The annual movement of patients in the four principal Hospitals was as follows:—Patients remaining on January 1, 1349; admissions, 19,993; discharged, 18,610; deaths, 1365.—*Bull. de l'Acad. de Méd. de Belgique*, No. 5.

Vaccinal Syphilis.—The difficulty of identifying this affection, of which we hear so much from the Continent and see so little here, was exemplified at the last meeting of the Académie de Médecine. M. Alphonse Guérin, who, as being Surgeon to the Lourcine, must be considered as one of the first authorities in this specialty, presented a little girl whom he declared to be the subject of vaccinal syphilis. One of some forty children who were vaccinated at the same time, two out of three of the punctures which were made followed the normal course. The third was followed by a large deep excavated ulcer, with a deeply indurated base. It was accompanied by roseola and glandular engorgement. The child was also said to have had variola eight or ten days after vaccination. In some days' time the chancre and induration disappeared, and, indeed, had done so before M. Guérin saw the patient; but they have been followed by soft condylomata (*plaques muqueuses*) of the vulva, with characteristic ganglionary engorgement. In M. Guérin's opinion, there can be no doubt that this child is the subject of syphilis, and that the primary accident was produced at one of the points punctured; but whether the contamination was produced by the lymph employed, or occurred subsequently, he cannot affirm, although in this latter case the short period of incubation becomes still more difficult of explanation. A great number of the members present, however, protested strongly against M. Guérin's conclusions, seeing in the child no signs of syphilis, and only the results of dirt and carelessness. As the child had not been as yet submitted to any specific treatment, they requested that this might be abstained from, anticipating a speedy cure without its aid.—*Gaz. des Hôp.* July 15.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Dr. Kane's interesting case of poisoning shall be inserted as soon as possible.

Dr. Alcock's paper on the Medical and Meteorological History of Fyzabad, Oude, has been received, and shall be inserted as soon as possible.

Dr. Spender's paper has been received, and shall be inserted as soon as we can find space.

The cases from the Driffield Cottage Hospital are in type, and shall be published directly.

Dr. Richardson's concluding Lectures on Electricity are in type, and shall be published immediately.

Dr. Bishop, Sackville-street.—We are glad to hear of your return. Please send in your paper.

X.—Pray send us your notes on the lead colic. The subject is of immense interest.

A. L. does write badly indeed. A proof shall be posted to him, provided the printers can decipher his address.

Erratum.—At page 59 of our journal, in the table furnished by Sir Dominic Corrigan, an error occurs not, we believe, of Sir Dominic's making. The column of the Army Returns headed "Holders of Degrees in Medicine and Surgery" should have been headed "Qualifications," since the Army Board sends in a return not of the number of candidates, but of the number of qualifications examined.

Berry Defence Fund.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—You will oblige the Committee of the above Fund by inserting the following list of subscriptions:—Amount acknowledged, £21 13s.; H. Hancock, Esq., £1 1s.; F. Hind, Esq., £1 1s.; R. Barwell, Esq., £1 1s.; Dr. Essex Bowen, Birkenhead, £1 1s.; Dr. Dowse, 10s. 6d.; E. Dyer, Esq., Clerkenwell, 10s. 6d.; Peter Marshall, Esq., 10s. 6d.; W. Pretty, Esq., Croydon, 10s. 6d.; Dr. Airey, Camden-town, 10s. I am, &c.

10, Charles-street, Soho, W. E. Sandwell, Hon. Sec.

A. B.—The double qualification is necessary.

Liber.—The case is recorded in the fifth volume of the *Transactions* of the Royal Medical and Chirurgical Society.

General Practitioner.—The contract is binding on both parties, notwithstanding the informality alluded to.

N.—The College authorities have the power to admit the memorialist to examination.

A New Spring Pessary.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Allow me to draw the attention of your readers to the new spring pessary which is noticed in your impression of the 3rd inst., as it seems to fulfil all requirements. I have since used it in two instances, both patients expressing their surprise at its lightness and comfort. It appears to be a steel spring covered with india-rubber tubing. At first I encountered considerable difficulty in the attempt to remove it; but this was soon obviated by the application of a stout endless white silk ribbon, such as is used for binding flannel, slipped over each lower extremity, and worn with the instrument.

The repeated use of oily substances to india-rubber articles soon causes them to decay. Arrowroot made with water may be used as a substitute in introducing this. Patients say that a globular air pessary will not last longer than three months. The above, though costing somewhat more (about 6s.), will doubtless be more durable.

It is unwise to attempt its use continuously at first. The spring being firm, a little careful pressure is requisite while applying it, to avoid giving pain. If this be done, it will be found to turn and slide into its position without difficulty.

I have taken the liberty of drawing attention to these points, as there appears to be a needless prejudice on the part of many Practitioners against the use of such instruments, and yet the relief given by their proper use is so marked that it behoves us not to despise a valuable aid, and probably ultimate means of cure, because our first few trials may have been too prolonged. Two hours is often sufficient for the first day or two, or even less. I am, &c. J. Fenn Clark.

18, York-terrace, Leamington, July 21.

A Friend is thanked. The subject shall receive attention next week.

Student can obtain the information he requires by application to Dr. Carpenter, Secretary of the University of London.

Dr. R. Lawrance.—The name is fictitious. The real offender has been struck off the Medical Register. The circulators of such abominable pamphlets should be prosecuted. It is not the duty of the Medical Council to institute proceedings; and, in the absence of public prosecutors, the offenders escape.

Ants in Tropical Practice.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Can any of your respected readers inform me how does a horse or cow's hair rope act as a protection from the invasion of wild ants and keep them away from a patient's bed?

The following case may illustrate the question:—On the night of April 10 last a man was taken to the Charity Hospital of this city, to which I am both Physician and Surgeon. This man had arrived that night from Fumaco, where he had suffered, judging by what he said, a typhoid fever of a bilious form, which terminated in a bilious diarrhœa, which was so copious the night of his arrival that he often passed his fæces without being conscious of it. He was extremely weak before he left Fumaco, and his object in coming here was to get some Medical assistance. But there was another misfortune in ambush for him on the road. One day, as he was getting out of his canoe to land near a house, his right foot, still in the canoe, and the left ashore, the latter was entangled in some way; his endeavours to free it caused the discharge of a fowling piece that was in the canoe loaded with small shot, and he received a wound which shattered to pieces all his left knee-joint. This accident happened two days previous to his arrival here.

As there was no spare bedstead in the Hospital, all being occupied by the dysenteric patients (it is the time now for this epidemic scourge in this town), he had to be placed on his own mattress spread on the floor. That night and two or three others more he suffered horribly from the bites of wild ants which took possession of his bed. There was not a single ant to be seen by daytime. We used kerosine, turpentine, and everything that we thought would prevent these night visitors, but nothing could keep them

away. One morning, as I was dressing the patient's wound, an Indian man hinted to me that the best way to keep away the ants from any place was to surround it by a horse or cow's hair rope. At first I paid no attention to the suggestion; but as I never despise any indication whatever that may be of some good to relieve our fellow-creatures' sufferings, I resolved to make the trial, and I did so that night. I surrounded the man's bed with a long horse-hair rope at about 5 p.m., and not a single ant molested him during the night. So far as ants are concerned, the poor man had a good night and a few others more until he died of gangrene some eight or ten days afterwards.

I have watched the ants as they approach the rope, which they do not avoid—on the contrary, they try to climb across it to get access to that which attracts them or where their instinct guides them—but the great flexibility of the many loose and long hairs that hang around the rope does not allow them an easy and steady grasp, and the consequence is that they either slide down or desist climbing, and are all night in a constant movement from one place to another and making frequent attempts to cross the rope. This is the only reason I find for the protection that a horse or cow hair rope may give against the wild ants. No doubt other Medical gentlemen may have another explanation, or, being equally situated in a tropical country full of these tedious insects and under similar circumstances, may reap some benefit from so trifling an indication.

The rope is to be taken away from the bed every morning, and, after it is well shaken to drive out any other noxious insects that might be in the rope, is to be spread again on the evening before dark around the bed with the two ends meeting. I am, &c.

Barbacoas, South America, May 30, 1869. Felix G. Rubio, M.D.

E. B.—It is a mistake to suppose that Dr. John Harley was a candidate for the lately vacant office of Professor of Physiology in King's College, London. We said that it would be an act of grace on the part of the Council to elect him, inasmuch as he had done good service to the College, and displayed in his researches on narcotics a great amount of the true experimental spirit. But we never said anything which would lead to the supposition that Dr. J. Harley had offered to serve again under masters who had proved so insensible to good service.

Dr. Edwards Crisp probably has strong grounds of complaint, but, like every wise man, he will doubtless cease to parade a grievance when all hope of redress is in vain. *Que diable allait-il faire dans cette galère?* is the question which most men will ask regarding his original entry into the competition; and "It is of no use throwing good money, time, or trouble after bad" is a proverb that might well deter him from useless attempts for the redress of what he considers a wrong.

COMMUNICATIONS have been received from—

Dr. H. S. Kane; Mr. Nathaniel Alcock; Dr. Whitmore; Sir Dominic Corrigan; Dr. Richard Lawrance; Aliquis; Mr. R. A. S. Prosser; Dr. Young; Dr. Spender; Messrs. Letts and Co.; Dr. Charles Kidd; Dr. Lory Marsh; Mr. T. Bryant; Mr. W. H. T. Power; Mr. C. P. Coombs; Dr. E. Sandwell; Mr. Gaitskell; Mr. Shipman; Mr. Maynard; Mr. J. Fenn Clark; Dr. Mackaye; Dr. Protheroe Smith; Dr. Edwards Crisp; Mr. Tufnell; Inspector-General Gordon; Mr. J. Hutchinson; Mr. J. Chatto; Dr. Morell-Mackenzie; Dr. Gervis.

BOOKS RECEIVED—

Somerset County Pauper Lunatic Asylum Report—Report of the Hospital for Diseases of the Skin, Belfast—De la Contagion, par le Dr. Drognat-Landré—The Advance of Transcendentalism.

NEWSPAPERS RECEIVED—

Birmingham Daily Post—Medical Press and Circular—The Rock.

VITAL STATISTICS OF LONDON.

Week ending Saturday, July 17, 1869.

BIRTHS.

Births of Boys, 1030; Girls, 1021; Total, 2051.
Average of 10 corresponding weeks, 1859-68, 1914·8.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	685	628	1313
Average of the ten years 1858-67	680·0	607·2	1287·2
Average corrected to increased population	...	...	1416
Deaths of people above 90	...	...	...

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-cough.	Typhus.	Diarrhœa.	Cholera.
West	463388	...	3	6	1	5	3	18	...
North	618210	1	5	14	1	17	14	27	...
Central	378058	...	6	14	1	8	2	14	...
East	571158	...	9	29	1	21	10	22	...
South	773175	1	12	14	...	26	13	21	...
Total	2803989	2	35	77	4	77	42	102	...

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	30·037 in.
Mean temperature	66·9
Highest point of thermometer	89·0
Lowest point of thermometer	49·4
Mean dew-point temperature	57·7
General direction of wind	Variable.
Whole amount of rain in the week	0·14

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, July 17, 1869, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the year 1869.	Persons to an Acre. (1869.)	Deaths. Births Registered during the week ending July 17.	Deaths. Corrected Average Weekly Number.	Deaths. Registered during the week ending July 17.	Temperature of Air (Fahr.) Highest during the Week.	Temperature of Air (Fahr.) Lowest during the Week.	Temperature of Air (Fahr.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3170754	40·7	2051	1462	1313	89·0	49·4	66·9	0·14	14
Bristol (City)	169423	36·1	99	76	*55	85·2	44·5	63·2	0·08	8
Birmingham (Boro')	360846	46·1	224	175	120	86·3	48·2	65·3	0·03	3
Liverpool (Boro')	509052	99·7	343	295	253	...	...	...	...	...
Manchester (City)	370892	82·7	247	210	*182	89·5	47·0	63·9	0·00	0
Salford (Borough)	119350	23·1	76	60	53	87·8	45·7	61·9	0·00	0
Sheffield (Borough)	239752	10·5	159	126	96	85·0	48·0	63·3	0·00	0
Bradford (Borough)	138522	21·0	115	71	55	80·3	51·2	62·8	0·00	0
Leeds (Borough)	253110	11·7	165	129	101	82·0	49·0	63·1	0·01	1
Hull (Borough)	126682	35·6	78	59	48	...	...	...	...	...
Nwestl-on-Tyne, do.	130503	24·5	78	69	42	80·0	52·0	60·9	0·00	0
Edinburgh (City)	178902	40·2	129	86	115	76·7	48·0	60·9	0·00	0
Glasgow (City)	458937	90·6	312	268	236	81·0	47·3	60·8	0·08	8
Dublin (City, etc.+)	320762	32·9	148	158	103	82·3	43·0	64·8	0·00	0
Total of 14 large Towns	6546587	35·5	4224	3244	2772	89·5	43·0	63·2	0·03	3
Paris (City)	1889842	...	...	...	797 Week ending July 10.	..	..	...	...	...
Vienna (City)	560000 (1863)	...	...	..	...	..	...	.	...	...

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 30·037 in. The barometrical reading decreased from 30·24 in. at the beginning of the week to 29·89 in. on Monday, July 12.

The general direction of the wind was variable.

Note.—The population of Cities and Boroughs in 1869 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous.

* The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

+ Inclusive of some suburbs.

APPOINTMENTS FOR THE WEEK.

July 24. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 1½ p.m.

26. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 1½ p.m.; St. Peter's Hospital for Stone, 2½ p.m.

27. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.

28. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.

29. *Thursday.*

Operations at St. George's, 1 p.m. Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

30. *Friday.*

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

ORIGINAL COMMUNICATIONS.

ON DISEASES OF THE JOINTS CONNECTED WITH PROGRESSIVE LOCOMOTOR ATAXY.

By BENJAMIN BALL,
Professeur-Agrégé at the Paris Faculty of Medicine.

(*Continued from Vol. II.* 1868, *page* 557.)

Before bringing this paper to a close by a *résumé* of the principal conclusions which flow from the observations we have brought together, it will be well to communicate certain new cases of this malady to which our attention has been called.

The number of cases on which our general description is founded amounts already to eighteen—a sufficient proof that affections of the articulations in connexion with progressive locomotor ataxy are by no means so uncommon as might be supposed. Further researches will, in all probability, add to the number of cases, with which we are already familiar.

Case 12.—*Locomotor Ataxy of Five Years' Duration—Affection of Left Knee.*

M. G., aged 50, has been suffering for five years from progressive locomotor ataxy, characterised chiefly by darting pains in the upper and in the lower extremities. The disorders of the power of locomotion, which now exist in a very marked degree, have been principally developed since the month of September last, at which period a very sudden aggravation of the principal symptoms of the disease took place. It was also towards the commencement of September that a considerable tumefaction, completely indolent in its character, manifested itself in the left knee. The leg and thigh both became swollen also. No known external cause could account for this. The right knee sympathised, to a certain extent, with its fellow. Professor Verneuil gave it as his opinion that the patient was suffering from hydarthrosis of the two knee-joints.

Five months after this date (January 20, 1869), on being called to attend this patient, we diagnosed the following:—There still exists a little general tumefaction of the left inferior member. The hydarthrosis is still evident, though it has greatly diminished during the last few weeks. A little puffiness exists also in the right knee. The patient having measured the circumference of the two joints at the end of last month, we are in a position to compare their present dimensions with those that existed at that epoch. These results are as follows:—

	December. Inches.	January. Inches.
Circumference of right knee	$15\frac{1}{2}$	$14\frac{3}{4}$
Circumference of left knee	$18\frac{7}{8}$	$15\frac{3}{4}$
Diameter of right patella	—	$2\frac{5}{8}$
Diameter of left patella	—	$2\frac{4}{5}$

It is evident that in this short lapse of time a notable diminution in the volume of the affected joints had taken place. It is also evident that both were simultaneously affected, though in a different degree; we see, in short, that the patella of the right side was more bulky than that of the left, and had consequently shared in the increase of volume of the entire knee. In addition to this, the bones had also shared in the hypertrophy, for the left femur presents an abnormal development near its inferior extremity, very much the same as that which we noticed in Case 2. The superior extremity of the tibia is also hypertrophied. The patient experiences, when walking, a very well-marked cracking in the joint, especially in the left one. This peculiarity is easily produced by passive flexion and extension of the affected joint. There exists neither lateral mobility nor deviation of the leg. We learn from the patient that the hydarthrosis was neither preceded by a blow nor a fall, and that he has experienced no pain, no fever; but, like many other patients labouring under locomotor ataxy, the pulse exhibits a sensible increase (108), and this without any augmentation of the temperature.

Case 13.—*Progressive Locomotor Ataxy—Affection of Left Knee.*

M. S. was received January 2, 1869, into the ward of M. Sée at Bicêtre (Salle Prosper 15), suffering from ataxy of three years' and a half duration. In the month of June, 1865, he was seized, according to his own account, with a voluminous swelling of the left knee, without redness, and without any symptoms of reaction. This was followed by the impossibility of walking. At the present moment the patient experiences cracking sounds in the left knee. So far as external inspection goes, there is no difference in the two knees, the articulation formerly diseased being no larger than its fellow.

Case 14.—*Locomotor Ataxy—Affection of Right Shoulder—Rapid Atrophy of the Superior Extremity of the Humerus.*

M. M., aged 46, entered July 4, 1865, the Hospital Salpêtrière (Salle Ste. Cécile 6) in the service of M. Charcot. The patient seems to have experienced the first symptoms of locomotor ataxy seven years before her admission. Without entering into minute details of the history of the case, we shall content ourselves by remarking that the inferior members present well-marked disorder in their movements, and that the superior are affected also, though in a less degree. The patient is subject to gastric attacks extremely painful in their character, which recur from time to time. On November 15, 1868, she first perceived that the right elbow was swollen, as was also the superior portion of the fore-arm. She admits, however, that, for eight days previous, she had had cracking sounds in the shoulder. The dimensions of the superior members, when compared, give the following:—

	Right. Inches.	Left. Inches.
Circumference of arm on a level with axillary depression	$11\frac{7}{8}$	$8\frac{3}{4}$
Circumference of arm above bend	$9\frac{1}{2}$	$7\frac{7}{8}$
Circumference of forearm at upper third	$8\frac{1}{4}$	$7\frac{1}{8}$

The circumference of the two wrists is identical.

Thus we see from the foregoing figures that there exists a swelling of the upper third of the right forearm, while at the same time the arm itself, in its entire length upwards, is swollen in a more marked degree, and more especially at a point corresponding with the level of the shoulder. The axillary depression is in part effaced; the shoulder is rounded; the supra- and infra-spinous regions are swelled, as is also the anterior border of the armpit. The skin is deadly white; veins imperceptible; no pitting on pressure of the tumefied parts; no painful sensation is experienced on pressure or movement. The arm seems to the patient abnormally heavy. Pulse 100, small and regular; no heat appreciable to the touch. The temperature of the armpit, taken in the evening, 98·8° Fahr., that of the rectum 100·3° Fahr.

On November 16, the œdema, which is not remarked on slight pressure, becomes very evident under a more considerable one, and it is easy to observe the depression produced on the hand being withdrawn.

17th.—Cracking noises in the right shoulder and elbow are experienced; nothing of the kind on the left side.

20th.—The inferior half of the right forearm is distinctly swollen. The right wrist gives a circumference of six inches and a quarter, the left one five inches and three-quarters. A few days previous their dimensions were identical. The movements of the right side had been perfectly normal till the commencement of the affection of the articulations. The left arm, on the contrary, was affected with a well-marked ataxy. At this latter date the right arm in its turn exhibits irregular and disordered movements.

27th.—The swelling of the right wrist and of the forearm has almost entirely disappeared as seen by the present measurement; but there exists a tension more and more marked around the right shoulder, especially below the deltoid, at which level fluctuation is distinctly perceptible. The cracking persists, and may be, so to speak, felt at each movement.

30th.—The swelling of the arm has almost completely disappeared, but there exists a very considerable tension of the synovial membrane around the scapulo-humeral articulation which forms two salient points—one in front towards the anterior border of the deltoid, the other behind. Fluctuation very distinct. On passive movements of the arm being effected, dislocation of the head of the humerus forwards or backwards is remarked, according to the kind of movement given. The head of the bone returns to its place very easily, but not without emitting a loud cracking sound. The accompanying plate (Fig. 1) illustrates very accurately the appearance of the affected joints at this epoch.

May 1, 1869.—We again saw this patient under the care of M. Charcot. All swelling has disappeared, both from arm and shoulder, but there exists a permanent dislocation of the humerus backwards; it can be reduced with the greatest facility, but is reproduced immediately on the hand being withdrawn.

Below the integuments the superior extremity of the bone, irregular in shape and partially destroyed, is felt.

Fig. 1.

Case 15.—*Progressive Locomotor Ataxy—Affection of both Knees—Enormous Hydarthrosis.*

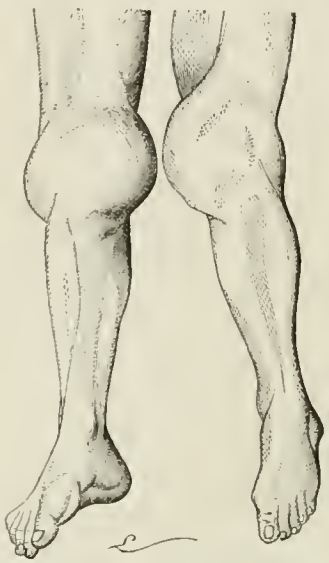
Anne P., a widow, aged 63, porteress, was admitted to the Hospital Salpêtrière July 10, 1865. The patient, whose mental faculties are greatly impaired, can give but a vague and loose account of her antecedents. All that can be gathered from her is that her husband, who was a house-door porter, had been obliged for three years past to nurse her as if she were paralytic. For a very long time she had scarcely been able to walk, and her husband used to take her in his arms to convey her from her bed to her chair. It is difficult to ascertain whether disorder in the movements has existed in this case, but she describes very clearly the darting pains, the first of which dates very far back.

Actual state April 27, 1869. The sight is good, the speech distinct; the patient is subject to gastric attacks attended with vomiting, occurring at irregular intervals, and which are generally accompanied by an aggravation of the darting pains. In the superior members the articulations are in a normal state, as are also the movements. In the inferior members, on the contrary, the movements are greatly disordered. It will, however, be well to state that, in spite of the great change which has taken place in the knees, the patient can move the legs with ease. The patient is insensible to any change made in the position of the limbs; sensibility slightly diminished; pulse 115; no increase of temperature. In fine, we have to do with a case of locomotor ataxy in a very marked degree. Both knees are very voluminous, forming two swellings irregularly rounded. The circumference of these two tumours is much greater than that of the thigh, as the following figures will show:—

	Right. Inches.	Left. Inches.
Circumference at the level of the popliteal space	15½	13¾
Do. immediately above the condyles of femur	11⅜	10⅝
Do. immediately below the tumour (upper portion of the tibia)	9⅞	10⅝

On the right side, the patella is in front of the tumour, and is very mobile. A distance of an inch and three-quarters separates it from the tibia. The articulation is filled with a considerable number of foreign bodies varying in size, the largest being of the volume of a walnut. There is complete dislocation of the tibia backwards, and movements of laterality are easily effected. Generally the leg is directed inwards; it can, however, be moved outwards so as to form a straight line with the thigh. The leg may be bent inwards to such a degree as to form a right angle with the thigh, although, when turned outwards, it never exceeds the straight line. The movements, whether spontaneous or not, occasion no pain, but are accompanied by frequent crackings. On the left side the tumour is not so large, and the articulation contains fewer foreign bodies. The tibia is not dislocated backwards, and the knee is less deformed than is the right one. The attitude of the left limb differs slightly from the right; the leg is carried outwards, so that the two knees when brought together form two obtuse angles, the sides of which are parallel; they seem, as it were, adapted to each other. It is scarcely necessary to state that considerable liquid effusion fills up the two articular cavities. Fluctuation very well marked. The extremities of the bones which form the two diseased articulations are evidently thickened, and the patella even seems to have increased in volume. We do not, however, recognise any bony ridges around either knee.

Fig. 2.



The preceding observation presents the highest degree of arthropathy among persons afflicted with locomotor ataxy which we have had occasion to observe up to the present moment. It is very annoying that the woman's weakened intelligence renders it quite impossible for us to ascertain exactly either the origin of the malady or its progress. But it is impossible to attribute the disease of the articulations to any other cause than progressive locomotor ataxy.

We must remark that if the two knees are affected the right one appears much more diseased than does the left one. It is therefore probable that the first-mentioned of these articulations has been attacked at an earlier period than its fellow.

We also observe the complete conservation of voluntary movements, in spite of the enormous deformity of the diseased joints. In a word, it is interesting to notice in the two articulations such a great number of foreign bodies.

As regards the diagnosis, it is curious to remark that this woman had sojourned nearly five years in the Salpêtrière without the slightest suspicion of her being under locomotor ataxy. How was it, indeed, possible to recognise such a malady in a woman condemned to pass her life in bed, and who, besides, was incapable of giving any precise account of her past existence?

We see from this how easy it is to overlook articular affections associated with locomotor ataxy, and to confound them with diseases of the joints of a totally different nature.

(*To be continued.*)

Congress of German Naturalists and Physicians, 1869.—Professors Rembold and von Barth, of Innsbruck, the managers of the forty-third congress, have just issued the programme. It is to be held during the 18-24th days of September. Only those who have written on natural history or Medical subjects can be members with votes; but all who are theoretically or practically engaged in any of the branches can be associates. All subscribe three thalers. The whole of natural and Medical science is embraced, seventeen sections having been formed. To some of these ladies are admitted, and musical entertainments take place on some of the evenings. Applications should be addressed post free to Professor Rembold, Innsbruck.

EXCISION OF ARTICULAR EXTREMITIES OF TIBIA AND FIBULA, AND OF THE OS CALCIS, ASTRAGALUS, AND SCAPHOID BONES.

By J. FAYRER, M.D., C.S.I., F.R.S.E.,
Professor of Surgery, and Senior Surgeon Medical College Hospital, Calcutta.

A DELICATE-LOOKING lad named Keramut, a Mahomedan, aged 9 years, was admitted into the Medical College Hospital, on July 27, 1868, with extensive disease of the right ankle-joint of five months' duration, the result of a sprain some time previously. The joint was much swollen, the swelling involving the lower extremity of the leg and the foot as far forward as the metatarsal joint. It was full of sinuses, and a probe passed into the disorganised joint, and into softened and diseased bone. The limb was wasted, and the general health much impaired. There was a profuse purulent discharge of a strumous character from the sinuses. With the object of improving his general health, he was ordered a generous diet, cod-liver oil, and ferruginous tonics. The ankle was placed at rest in a splint, and dressed with the usual carbolic acid and oil dressing. He improved considerably in general health, and the pain, swelling, and discharge from the ankle abated; but as the disease was too extensive to admit of any hope of recovery, I proposed an operation, which was assented to, and performed on February 17, 1869, with the assistance and sanction of Mr. Cuteliffe, Civil Surgeon, of Dacca, who was present. The boy had by this time improved very much in general health, and seemed quite capable of undergoing the operation. Two incisions were made, one on either side of the ankle-joint posterior to the malleolus, about five inches in length, and curved in direction. The tendons being exposed were turned out, the fibular malleolus first sawn off, the foot then turned inwards, and the ends of tibia and fibula removed to the extent of about half an inch, so much being diseased. The astragalus, being found softened and diseased, was next dissected out, and on exposing the articular surface of the os calcis it also was found to be extensively diseased. A vertical incision was accordingly made over the tendo Achillis and heel, and the os calcis having been exposed was also dissected out. The scaphoid was next removed, as it also was much diseased. The other tarsal bones appeared to be free from disease. The wounds were stitched up with horsehair sutures, and dressed with the carbolic oil dressing, and the leg placed in a splint to keep it at rest.

During the operation no vessel of importance was divided, and though the oozing from the vascular and diseased parts was excessive, no ligature was needed; neither was any tendon injured. The ligamentous structures were so much softened, if not disorganised, by the disease, that very little difficulty was experienced in exposing and removing the bones. The little fellow has done very well since the operation. About a fortnight ago two small exfoliations took place from the ends of the tibia and fibula. The operation wounds have healed, the sinuses are closing, the discharge is diminishing, and the thickened tissues about the ankle are gradually resuming a more natural appearance. He is able to put his foot to the ground, and to bear considerable weight on it. He lifts his leg and foot from the bed without aid, and moves the toes and the foot generally with comparative freedom. He takes cod-liver oil, iron, and a good diet, and is in good spirits and gradually improving health. Should no unfavourable symptom arise, he is in a fair way to make an excellent recovery, and it is remarkable how little the shape of the foot is altered by the loss of so much of its substance.

Excepting a case referred to by Dr. Hodges, in which the ends of the tibia and fibula, the astragalus, part of the os calcis, and the three cuneiform bones were removed, I do not know of any in which so much of the foot has been removed as in this case.

HORSE-MEAT.—605 horses were consumed by the hippophagists in Paris between April 1 and June 30.

THE druggist who sold arsenic to the woman Fanny Oliver, who has just been sentenced to death at Worcester for poisoning her husband, was brought before the Dudley magistrates on Saturday last, and fined £1 and costs. His name is Charles Hazard Gare.

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Medical Times and Gazette.

SATURDAY, JULY 31, 1869.

REPORT OF THE COMMITTEE ON THE AMENDMENT OF THE MEDICAL ACTS, AND THE FUTURE OF THE GENERAL MEDICAL COUNCIL.

THE more we examine the report of the Medical Acts Amendment Committee and the proceedings of the Medical Council with regard to it, the more do they astound us, and the more do we wonder what effect the Medical Council expect them to produce on the mind of the Lord President of the Privy Council. His Lordship does not enjoy the reputation of being one of the strongest and most able members of her Majesty's Government, but he has ever at his elbow two decidedly able and strong men—viz., Mr. W. E. Forster, Vice-President of the Committee of Council on Education, and an advanced Liberal, and Mr. Simon, the Medical Officer of the Privy Council; and these gentlemen are not likely to lose any opportunity of helping his Lordship to form an opinion as to the value of a body that, after eleven years' experience as a Council of Medical Education, and of the working of the Medical Acts, could do no more in reply to the letter he addressed to them this session than send him this unadopted report. Nor will they be slow to draw his attention to the discussion on the report, and to point out that, even of the adopted clauses, but one or two were adopted with anything like unanimity.

The report itself was given at page 70 of our number for July 17, and deserves some notice. The committee first recommend that all the clauses which they have formerly agreed upon as desirable amendments of the Medical Act shall be adhered to, with the exception of that referring to the registration of foreign and colonial qualifications. And instead of the existing clause on this point (Clause 11), they recommend the substitution of a permissive clause, investing the Council with the power of relaxing or dispensing with any, or all, of the regulations of the Act "in favour of persons applying to have their names entered on the *Medical Register* in virtue of foreign or colonial diplomas or degrees." This new clause the Council adopted, and we venture to question their wisdom in so doing. The immense number of foreign and colonial diplomas and degrees, and the extreme difficulty of obtaining accurate knowledge as to their value, make it highly important that their admission to our Medical Register should be guarded with great care and jealousy, while the ignorance and the prejudices of the public regarding Medical education and knowledge might lead to very inconvenient pressure being applied to the Council in favour of possessors of only questionable

foreign or colonial degrees. We cannot think the Council wise in seeking the power and responsibility that this clause would confer; and we greatly doubt whether the Profession has confidence enough in them to be willing to trust such a power in their hands.

The committee next agree with the Lord President in considering the Medical Act "seriously defective in that it allows a minimum qualification in Surgery to be registered without any qualification in Medicine, and similarly a minimum qualification in Medicine without any qualification in Surgery." They point out that they had no power to refuse this, but show what they have done in endeavouring to remedy it, and they recommend that in any amended Act power should be given to them "to refuse registration to any one who has not been sufficiently examined in both Medicine and Surgery." This clause also the Council adopted, though, as in the former instance, by no means unanimously. It will, however, no doubt, command very general approval.

Nearly all the rest of the report is devoted to the consideration of the question, suggested by the Lord President, as to the desirableness, in the event of new legislation, of any change in the constitution of the Council. In discussing this matter, the committee start with great boldness and force, for they at once enunciate one "obvious and indisputable principle"—viz., "that the constitution of the Council should be such as may best fit it for the discharge of its duties, whatever these may be;" and we should think that even the Council had not much difficulty in accepting this principle, and with unanimity. The committee then proceed to state that the Council have admirably discharged two of the duties imposed on them—viz., the registration of the Profession and the publication of a National Pharmacopœia. The third duty of the Council is "a certain judicial function," and the committee do not say whether this has been well performed or not, but they observe that a Council elected by the suffrages of the Profession would be entirely out of harmony with the constitution of other courts of justice in the United Kingdom, or indeed in any European state whatever," a remark which appears to us rather gratuitous, as we are not aware that it has ever been proposed by any body that the entire Council, or even a considerable part of it, should be elected by the Profession at large.

The committee then come to the consideration of the fitness of the Council, as at present constituted, for the discharge of the fourth duty—the supervision of Medical education—and it appears to be the opinion of the committee that, as the licensing bodies—*i.e.*, the universities and the Medical corporations—have to test the acquirements of persons seeking to enter the Medical Profession, their nominees are the fittest judges of the manner in which they perform that work! For this reason, and because the licensing bodies are "in a certain sense and degree governed by the Medical Council," they are, the committee opine, entitled to be represented in the Council. The committee also consider that Crown nominees are a requisite element in such a body as the Medical Council. And the conclusion come to is "that the Council, as constituted by the Medical Act, is well and suitably constituted for performing the functions with which it was invested by that Act." This opinion was endorsed by the Council by nine votes to five, several of the members having no opinion at all worth mentioning on the matter. Having expressed their perfect satisfaction with the fitness of the Council, as at present constituted, to work the existing Act, the committee and the Council further stated that, in their opinion, if the Legislature should see fit "to invest them with extensive powers and fresh duties, by which the Profession at large would be brought more under the direct influence of the Council," then the Profession at large ought to have more direct influence in the appointment of members of Council; but the committee offered no opinion as to what extent this influence should be carried, or how it should be exercised. They did, however, most unhappily as we think, proceed to deliver an opinion against the idea that the Profession is taxed by the Council, and has therefore the right to be represented in it. They "would remark that there can be no difference of opinion as to the principle that liability to taxation entitles to representation in the taxing body. But they would further remark that the fee paid once for all by Medical Practitioners for entering their names on the Register cannot, in the ordinary sense of the word, be called a tax, and that the Council possesses no power whatever of taxing the registered Practitioners." This appears to us simply puerile. We would remark that we must suppose that if Practitioners paid a few shillings a year for registration instead of a composition fee "once for all," then the Council would allow that they were taxed! And we would further remark that the principle quoted with approbation by the Council means, if it means anything, that those who pay the funds by which a governing body is carried on have a right to representation in that body.

About the report, it only remains to be said that when the resolution to adopt it was put, eight voted for and eight against it; all the rest of the Council feeling unable to express an opinion either way.

After all this, who can imagine that the Medical Council will in the future have much influence on the course of Medical legislation, and who can help more than suspecting that in any amended Medical Act produced by Government the constitution of the Council will be considerably altered? The question is, what kind and degree of alteration will be most for the advantage of the Profession and the public? And here we would, for our own sakes, that we could speak with anything approaching the magnificent certainty and assurance of the British Medical Association and its representatives. It would be so comfortable to have implicit confidence in our own wisdom, to be able to map out, without the slightest hesitation, a new constitution without a flaw—to provide "perfect" machinery for carrying it into effect—to feel that we have a right to declare the mind of the Profession, "to a man," on even any one subject—and to be able to set forth all this in language equal to the sublimity of the occasion. But, alas! such greatness is not for us; and we must content ourselves with the much more humble *rôle* of giving, and very briefly, only an outline of what we think desirable.

In the first place we hold that the Medical Council must consist of Medical men, and of Medical men only. A rumour has been heard of some proposition to abolish altogether the present Medical Council, and to appoint in its stead a Government Council, consisting mainly of members not belonging to the Medical Profession. But we cannot believe this: the failure of the present Council to do all that has been expected from it would be no excuse or justification for such a change.

Next, we think that the Council might, with great advantage, be considerably reduced in number. And the two other principles we should be inclined to insist on most would be, that some of the members should, as now, be Crown nominees, and that the principle of grouping the licensing bodies for representation should be carried to a much greater extent than at present.

The Committee of the Council on the Amendment of the Medical Acts went out of their way, we think, to defend the principle of Crown nominees sitting in the Council, for we are not aware that a single voice has been raised against it. We see no great objection to their constituting even a larger proportion of it than they at present do—viz., one-fourth; but we insist on their all being members of the Medical Profession.

To what extent exactly the grouping of the universities and the Medical corporations should be carried we are hardly yet prepared to say. But we would suggest giving one representative to the Universities of Oxford and Cambridge, one to London and Durham, one to the Scottish, and one to the Irish universities, making four representatives for the universities

of the United Kingdom. Then comes the question of the Medical corporations—how should they be grouped? At present they return three representatives in each division of the Kingdom, and we see no great objection to grouping together the Physicians, Surgeons, and Apothecaries in future to return one representative in England, one in Scotland, and one in Ireland. Of course many objections may be made to such a plan, and one would probably be that whereas at present the representatives of the corporations are to the representatives of the universities as 9 to 8, according to the above scheme they would be only as 3 to 4. Well, we are by no means sure that the change would be a bad one, and we are quite sure that the benefit of contracting the Council would outweigh very many small objections to the mode of doing it.

Suppose, then, that the universities and Medical corporations return seven members of the Council; add to these four Crown nominees and a president, and we get a Council of twelve, and this would be, we are inclined to believe, a much more practical working body than the present Council of twenty-four. We should indeed prefer its reduction to a still smaller number—as few as eight, or even six.

But, it will be said, "where are the representatives of the Profession at large?" We must confess that we are disposed to think that the Profession, or, if the phrase tickles the ear more, "the Profession at large," is not quite unrepresented even in the present Council by the Crown nominees, who are all members of the Profession, or by the representatives of the universities and corporations, to which bodies every member of the Profession belongs. But we think that the influence of the universities and Medical corporations, as such, might be advantageously weakened, and the influence of the Profession increased, by the system of grouping, and by enacting that the representatives of each group shall be returned by all the members of the bodies included in it, instead of by their senates or councils only. We think, as we have already said, that the argument of the Medical Acts Amendment Committee against the application of the representation-according-to-taxation principle is deplorably weak; but we are not therefore prepared to insist on the perfectness and beauty of representation of the Profession independent of the universities and Medical corporations. We are greatly disposed to think that such a scheme would only result in the return of noisy orators and busybodies—of mere Medical politicians—instead of useful, practical, experienced men—men of administrative and organising power, such as are needed in the Council. Every member of the Profession is a member of at least one of the licensing bodies; we would form these bodies into only a few groups, give to each group one representative, and to every Medical man who is a member of any body in a group a voice in the return of its representative. To say that such representatives would represent only the licensing bodies, and not the Profession, appears to us mere *doctrinaire* nonsense.

THE LONDON WATER-SUPPLY QUESTION AGAIN.

As a kind of reply to the strictures contained in the "Report of the Water-Supply Commission," the Registrar-General has thought it right to issue a supplement to his weekly return, containing some comments on the question and a long letter from Dr. Frankland. The Registrar-General shows how important a chemical examination of drinking-water is at all times, and how much good our improved water supply has wrought. He tells us how the system of examination was introduced, and how it is carried on, and defends the plan of reporting employed by Dr. Frankland. The letter from Dr. Frankland constitutes, however, the most important part of the circular, and he defends himself on two counts of indictment—that of using the words "Total solid impurity" and the expression "previous sewage contamination."

With regard to the former of these, Dr. Frankland says that the term was not introduced by him, but by his predecessors, Dr. Dundas Thomson and Dr. Hofmann; still he assented to the principle, and endorsed its employment. He says he regards all solid constituents as impurities—first, because they are useless; secondly, because they act injuriously in several of the processes for which London water is employed. It is in connexion with this part of his subject that Dr. Frankland makes the following extraordinary statement:—"It must be remembered," he says, "that but a very small proportion of the water supplied to London is used for drinking purposes. A very large proportion is employed for washing, and a considerable one for manufacturing purposes." Surely, if this were so, the manufacturers might safely be left to look after themselves; as for the washing, that only implies the expenditure of a little more soap. But it is exactly this small proportion, as Dr. Frankland calls it, or that all-important portion, as we call it, which is used for drinking purposes, which renders such reports as those of Dr. Frankland desirable; and it is this portion which renders the other phrase contended for by Dr. Frankland, that of previous sewage contamination, either desirable or admissible. It is not desirable to confound all solid matters together—some are noxious, others harmless; they can be easily kept apart, and ought to be so. If it were a good action to frighten people at the Thames water, the registration of so many tons of solid impurities weekly might be useful; but this, in the meantime at all events, should be avoided. By all means let the impurities be registered, but let the deleterious be separated from those which are harmless to human life.

The term "previous sewage contamination" has also been objected to as an expression justly, as the expression of a fact unjustly. The term itself is liable to misconstruction; but the fact that a certain proportion (varying at different periods) of nitrogenous material is frequently found in potable water is worthy of all attention. We are agreed with Dr. Frankland that nitrates are the products of animal detritus, at least to a very great extent, and that their presence in water always lays that water open to suspicion of having at some time contained animal refuse, and which may at any time bring down that animal substance in a death-dealing form. Still, sewage is not the only source of nitrogen in river or well water, for manures of various kinds, such as are now so extensively employed for agricultural purposes, contain it in large quantity. It would therefore be preferable were the mere presence of nitrates in the water stated in the weekly returns, with, of course, their varying proportions. Scientific men would know what their presence meant, and could interpret the importance of their presence or absence; and, upon the whole, this is better than blazoning abroad the thing to all the world. Notwithstanding these remarks of ours, we are of opinion that Dr. Frankland has received but a scant measure of justice at the hands of the commissioners. It is notorious that the views of Dr. Letheby have been almost universally adopted to the exclusion of those of men at least equally able to judge on matters of chemical analysis. As to the returns of Dr. Frankland and those of Dr. Letheby, which are here contrasted, there cannot be a doubt about the superior exactness of Dr. Frankland's. Indeed, were Dr. Frankland to dispense with certain ambiguous phrases and express himself in plain terms, the value of his tables would be so incontestable that no one would for a moment think of assailing them. As it is, his fault lies in expression, not in fact.

THE WEEK.

TOPICS OF THE DAY.

We congratulate the Poor-law Medical officers of Ireland on the safe passage of their Superannuation Bill through the Upper House. It is true that it found enemies in that august assembly, but it did not lack defenders. If Lord Redesdale condescended to call it "the greatest job he had ever witnessed"

—a remark which, assuming for an instant his Lordship's estimate of Medical services and the opportunities of Medical men to be true, would show his Parliamentary experience to be a limited one—the Earl of Longford deserves thanks for the manner in which he vindicated the claims of the Irish Doctors. Lord Redesdale's picture of Irish dispensary Doctors coming and going when they please and engaging in private practice—as if it were the easiest thing in the world to obtain a moderate income in the Medical Profession—must have been painted from "the balloon" of which we have heard so much lately. It is scarcely worth while, however, after the battle is won, to endeavour to enlighten one of our hereditary legislators upon the hardships, privations, and services, in consideration of which Parliament has granted superannuation. Lord Longford might well describe the pay of the Doctors as a starvation allowance. The victory gained for the Irish Medical men is a proof that the influence which the Medical Profession can bring to bear on the House of Commons is increasing. We hope that next session an attempt at least will be made to obtain the same justice for the English Poor-law Medical officers.

Since the trial and execution of Catherine Wilson, whose guilt, from a scientific point of view, was at least doubtful, no case of poisoning has raised so much discussion as that of the woman Frances Oliver, who now lies under sentence of death for the murder of her husband by means of arsenic. The toxicological inquiry instituted in this case has been conducted by Dr. Alfred Hill, the Professor of Chemistry and Toxicology in Queen's College, Birmingham. Dr. Hill's evidence, and the letter he published in the *Daily Telegraph* of July 24, will leave no doubt upon the minds of any who have ever engaged in chemical investigation that he obtained from the liver of the deceased man Oliver a sufficient quantity of arsenic to produce, by Marsh's process, several metallic spots on white porcelain, and, by heating the glass tube through which the arseniuretted hydrogen was conveyed, a distinct metallic mirror. Of course the quantity of arsenic sufficient to give these results might be almost infinitesimal—so delicate is the process. But that the metal was present, it seems impossible to deny. Dr. Hill seems to have taken every precaution possible to insure the purity of his materials, and we think that the chemical proof of the existence of a minute quantity of arsenic in the body of the deceased man is as strong as the evidence of any one expert could make it. On the other hand, that the quantity of arsenic present was very small was proved by the fact that Reinsch's test failed to detect it. The circumstantial evidence is most conflicting. The woman Oliver bought arsenic, but then she was in the habit of using it in her business of bonnet making. She had corresponded with a former lover, but it does not appear that she was wanting in affection to her husband, nor is it proved that there was anything positively criminal in her relations with her former admirer. During her husband's illness she, of her own accord, preserved the vomited matters for the inspection of the Medical attendant. The strongest point of circumstantial evidence against her, in our opinion, is that when she purchased the arsenic she gave a wrong name, that of the man with whom she had corresponded. The connexion of the purchase of arsenic with the assumption of a false name and the subsequent finding of arsenic in the husband's body is a chain of facts which must bear strongly against the accused. On the other hand, how are we to account for the very small quantity of arsenic found, and what are the chances it was introduced accidentally?

The House of Commons, by a very large majority, have rejected the Bill for the Abolition of Capital Punishment, and there can be no doubt that, in thus doing, they have truly represented the will and the opinion of the nation. But we wish that our legislators would devise an equitable law for the punishment of child murder, which, by stopping short of the infliction of death, should, nevertheless, mark the heinousness of the offence, and should permit judges to sum up, and juries to give their verdict, according to the evidence. A young woman, a schoolmistress at Wimborne, Dorset, "of most respectable character," has just been sentenced to two years' imprisonment with hard labour for "concealment of birth," although there was ample evidence that she had killed her new-born child by cutting out its tongue and beating it with a stone. We know well all that can be said to mitigate the punishment of infanticide, and we give full weight to it; but there is neither mercy nor justice in acquitting a woman of a crime which has been fully proved against her, and in finding her guilty of, by comparison, a light offence. The fact that she would be hanged if the truth were acknowledged may reveal a very deplorable blot in our jurisprudence, but the fact that in a British court of justice clear evidence is purposely, and with full intent, disregarded both by judge and jury, seems, in the interests of society, no less deplorable.

It is proposed to divide the duties of the Clinical Surgery Chair at Edinburgh amongst the various Surgeons. The *Edinburgh Daily Review* of July 27, however, publishes a paragraph contradicting the statement that Professor Syme has resigned. At a recent meeting at the Royal College of Surgeons, Professor Turner is reported to have announced, on behalf of Professor Syme, not only that he has not resigned the Chair of Clinical Surgery, but that he has so far recovered as to have again engaged in practice. All must rejoice that Mr. Syme is regaining health, but it is pretty certain that the Government must have considered the chair vacant, or they would not have received applications from candidates.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

The annual dinner of the "Poor-law Medical Officers' Association" was held at the Freemasons' Tavern on Wednesday evening last. Dr. Rogers, the President of the Association, was in the chair, and was supported by Dr. Brady, Dr. Brewer, Sir John Gray, Mr. W. H. Smith, Mr. Corrance, Mr. Torrens, and other members of Parliament. About sixty gentlemen sat down. After the usual loyal toasts the President gave the toast of the evening, "Success to the Association." He showed that, from a small body of 20 or 30 three years since, it now numbered 800 members. He stated at some length the objects of the Association (these are familiar to our readers), and concluded an able and eloquent address in calling upon Poor-law Surgeons throughout the country to unite in carrying out the reforms in the Poor-law which were so much needed. Several gentlemen addressed the meeting; amongst the more prominent were Mr. Corrance, Mr. Torrens, Dr. Brady, and Sir John Gray. They all cordially supported the objects of the institution, and promised their aid in Parliament to carry them out. What was wanted was unity and a reform of the corporate bodies, which presumed to be the rulers of the Profession, but never lent a helping hand in defence of their members, however and wherever they might be oppressed.

NECESSITY FOR COMPULSORY REGISTRATION OF BIRTH.

A remarkable case has occurred in the neighbourhood of Liverpool, showing the importance of making the registration of infants, whether stillborn or otherwise, compulsory. A woman was delivered by her own mother of a child, which was taken to the sexton of a neighbouring parish and buried in a mustard-box for its coffin as a stillborn child. The sexton, acting upon the authority of a certificate purporting to be that of a midwife who had attended the woman, buried the corpse without consulting the clergyman belonging to the church. Some suspicion having been excited in the neighbourhood on account of the secresy of the burial, inquiries were instituted by the police, the result being the exhumation of the body and the holding of a coroner's inquest upon it. It was elicited at the inquiry that the child had been born alive and had died

from suffocation, that no midwife had attended, the certificate being forged, and that the mother of the parturient woman was a skilled nurse, and not ignorant of the measures that were necessary to be taken to preserve the child on its entrance into the world. The jury brought in a verdict that "the child died from suffocation, but how or by what means there was no evidence to show." After the inquest, Mary Harrison and her mother were taken into custody on suspicion of causing the death of the child and for obtaining its burial by means of a false certificate.

ARMY MEDICAL BOARD.

We observe in the *Daily Telegraph* that, on the 26th inst., "Mr. Cardwell, in answer to Sir R. Anstruther, made a statement relative to the length of service of the members of this Board and the nature of their appointments, but he was inaudible in the gallery." On reference to the notice papers of the House of Commons, we find that the questions put by Sir R. Anstruther originally stood in the name of Viscount Bury, and were to the following effect:—

"1. To ask the Secretary of State for War what are the names and length of service of the members composing the Army Medical Board, with the periods passed by each at home and abroad since 1858.

"2. Whether the several appointments of the officers so employed are of a permanent nature, or in accordance with the system of staff appointments in the army.

"3. Whether the Medical officers so employed at home have during their period of employment obtained any steps of promotion like other officers who are sent abroad in their regular turn of duty, or are in receipt of a rate of pay above the rank which they hold, and whether such increased rate of pay is specified in the army estimates; if not, for what special service such increased rate of pay has been awarded to them, or upon what authority?

"4. And whether Surgeon-Major Crawford and Staff-Surgeon Fitzgerald have not been promoted to higher ranks while employed at the Army Medical Board, and whether the latter officer has been on foreign service since the termination of the Crimean campaign."

These questions contain allusions to matters which have for a long time been known to us as of very considerable interest to the officers of the Army Medical Department. Their proposer will scarcely be content with a reply inaudible to the reporters, and if the matter be again brought before the House we trust that the Secretary of State for War will have recovered his voice, or the reporters their powers of hearing.

REMUNERATION FOR MEDICAL SERVICES.

A case of some importance to the Medical Profession came before Vice-Chancellor James on Monday last. The case came before the judge in the form of a summons to vary the chief clerk's certificate, by which a claim for Medical attendance upon the testator was not allowed. The testator, General da Pontes, during his last illness in February, 1865, was at Ryde, in the Isle of Wight, in the power of persons who were comparative strangers, and he expressed a great desire to have with him his old friend, Dr. Macloughlin. This gentleman was telegraphed for, as the patient seemed *in extremis*, and he accordingly went down to Ryde, and remained with the general from February 20 to March 31. During this time he attended upon the patient night and day, and performed many kindly offices for him. It came to the knowledge of Dr. Macloughlin on March 11 that he was left by the will of the patient £1000, and was one of his executors. Dr. Macloughlin felt a delicacy in going on with the case, and insisted upon sending for Dr. Burrows. Dr. Burrows accordingly came, and agreed in all that had been done. The testator expressed a strong wish to be buried at Orleans, and that Dr. Macloughlin should attend his funeral. This was done, and for the journey to Orleans Dr. Macloughlin had claimed, and been paid, £84. He now claimed his fee of £52 10s., and £10 10s. a day from February 19 to March 31, 1865, as his remuneration upon the ordinary scale for Medical attendance upon the testator. The claim was opposed upon the ground that Dr. Macloughlin had been summoned and went down to Ryde as an old personal friend of the testator, and not in his Medical capacity. At the bar Dr. Macloughlin, by his counsel, did not insist upon the charge of ten guineas a day after March 11, when Dr. Burrows, of London, was brought down to see the testator. Upon what grounds Dr. Macloughlin waived his claim in this particular we are at a loss to understand. The charge was strictly moderate, and that in law and equity he was entitled to make it we are fully convinced. The Vice-Chancellor overruled the certificate of the chief clerk, and said: "If a rich man chose to send for a poor Medical man, and took his advice, and kept him at his bedside to the exclusion of all other practice, the Medical man was entitled to be paid for his services. The claim must be allowed for £273 (being the fee of fifty guineas and ten guineas a day from February 19 to March 11 inclusive)." This case is suggestive of the hardships to which Medical Practitioners are occasionally exposed in being regarded merely as "friends," and not in their Professional capacity. Mr. Liston was in the habit of relating a case which occurred to himself illustrative of this point. Liston was fond of hunting, and occasionally in early life accepted an invitation to "a mount" and a run with the hounds. On one occasion he was "done." His "friend" took advantage of his visitor's presence, and got him to crush a stone in the bladder. The friend forgot to give Liston his fee, and, when applied to, coolly remarked that he regarded the mount and the run with the hounds as a legitimate "set-off" to Liston's claim. Liston never afterwards accepted an invitation of this kind.

PARLIAMENTARY.—COUNTY CORONERS—MEDICAL OFFICERS' SUPERANNUATION BILL—VOTES OF MONEY TO LEARNED SOCIETIES AND UNIVERSITIES—THE GENERAL MEDICAL COUNCIL—DISTRICT ASYLUMS IN IRELAND—CONTAGIOUS DISEASES BILL—CAPITAL PUNISHMENT ABOLITION BILL.

In the House of Commons, on Wednesday, July 21, the County Coroners Bill was withdrawn.

In the House of Lords, on Thursday, July 22,

The Medical Officers' Superannuation (Ireland) Bill passed through Committee.

Lord Redesdale, in reporting the Bill to the House, expressed his opinion that the Bill was the most monstrous job that he had ever witnessed. It could not be contended that Medical officers, who could come and go when they pleased, and who could carry on a private practice, were in any case entitled to superannuation allowances.

The Earl of Longford felt convinced that the Bill only did justice to a deserving body of men, who frequently did good service in return for what was merely a starvation allowance.

The House of Commons in Committee on Supply voted £12,300 for the learned societies. In the discussion which arose upon this item, the grant was supported amongst others by Dr. Playfair, Mr. Dalrymple, and Dr. Brewer. £9449 for the University of London, £18,337 for the Scottish universities, £3210 for the Queen's University (Ireland), and £4265 on account of the Queen's Colleges were also voted.

The Contagious Diseases (Animals) No. 2 Bill was read a third time and passed.

The Criminal Lunatics Bill was read a second time.

On Friday, in the House of Lords,

The report of amendments in the Medical Officers' Superannuation (Ireland) Bill was brought up and agreed to.

In the House of Commons,

The Metropolitan Poor Act (1867) Amendment Bill passed through Committee.

On Monday, in the House of Lords, the Medical Officers' Superannuation (Ireland) Bill was read a third time and passed.

In the House of Commons, Mr. Graves gave notice of his intention to call attention to the constitution of the British Medical Council, established by the Medical Act of 1857, with the view of giving to the graduates and licentiates of the universities and Medical corporations the power of electing their own representatives on that Council, next session.

Mr. Blake asked the Chief Secretary for Ireland whether he had any objection to state if the Irish Government, in making appointments to the office of Resident Medical Officer of district asylums, would give a preference to candidates who could show that they had acquired a practical knowledge of the treatment of insanity, provided that they were in other necessary respects as fully qualified as their competitors.

Mr. C. Fortescue did not think it advisable to lay down any absolute and sweeping rules, which generally did more harm than good; but his hon. friend might rest assured that the Irish Government, whenever there was occasion to make such appointments, would not lose sight of the fact that practical knowledge was of the last importance in such cases. He had certainly never contemplated the possibility of making any such appointment without reference to that consideration.

Lord Northbrook proposed the second reading of the Contagious Diseases Bill. It having been found impossible to carry out in their integrity the recommendations of the Select Committee of this House which sat last session, a committee of the House of Commons was appointed this session, which had recommended certain amendments in the existing Act and its extension to other military stations, the expense of which was provided for in the Estimates.

The Bill was read a second time.

On Wednesday, July 29, Mr. Gilpin's Bill for the Abolition of Capital Punishment was rejected by 118 to 58.

BRITISH MEDICAL ASSOCIATION.

THIRTY-SEVENTH ANNUAL MEETING,

HELD IN LEEDS, JULY 27, 28, 29, AND 30, 1869.

THE Leeds meeting of the British Medical Association has been a very successful one. How highly these annual gatherings are valued for the combined pleasure and instruction to be obtained at them is proved by the large number which a meeting, even in so prosaic a place of business as Leeds, can attract. On the second day of meeting as many as 407 members had recorded their advent at the rooms of the Association. The one cloud over the meeting has been the sad bereavement which has overtaken the President, Dr. Chadwick, who was summoned away immediately after the delivery of his address, the cause of his leaving having been the illness of his daughter, which, we deeply regret to add, terminated fatally on Wednesday. The President-elect for next year is Dr. Charlton, of Newcastle-on-Tyne. The farewell of the retiring President, Dr. Acland, the highly practical address of the President, Dr. Chadwick, and the admirable addresses of Sir William Jenner in Medicine, and of Dr. Farr on State Medicine, which we publish this week, will be best introduced by the following letters, which have been forwarded to us from the scene of action by well-known contributors:—

WEDNESDAY, July 28.

(*From an Occasional Contributor.*)

It is an easy thing to promise to send you a literal and minute account of a meeting like the present; but when one comes to attempt it the crowds of old friends who turn up from all quarters, the new friends to whom one gets the honour of introduction, the whirl of talk, and the profusion of hospitality, render it more than difficult for any but the strongest head to follow the proceedings, much less to steal a few quiet minutes to report them. Altogether this meeting may be pronounced quite successful. Three hundred and fifty-seven members have entered their names up to noon to-day, and the arrangements for their reception made by the municipal authorities, and the amount of hospitality exhibited by the resident Physicians and Surgeons, are beyond all praise.

Of Leeds itself it is not needful to say much. I know not whether it boast of a British, Roman, or Saxon foundation. Let it be as you please. Business and not beauty seem to have presided over its original organisation. Red and black are the prevalent colours; buildings of deep red, streets, roads, and, I am afraid I must add, sky, all black. The population certainly not a handsome race, so far as the working classes are concerned; many with wooden shoes, some with no shoes, the factory girls without bonnets, the middle-aged women coifed with coloured cotton kerchiefs, conveying an impression very different from that of the smugger but equally squalid artisans of Lambeth. Why the British workman should not hold up his head and attempt a cleanly decent garb, I can't divine. It is evident that there is an undercurrent of business energy; new buildings are rising on every side, new streets, emulating those of London in their various and ornamental architecture, whilst the neighbouring hills are dotted with the villas of the merchants, where wealth and taste reign supreme.

The head-quarters of the present meeting of the British Medical Asssociation are at the Philosophical Hall, a handsome building, containing a spacious theatre, in which the chief addresses are delivered, a reception and writing room, and a museum. Whether it is that one does not use the British Museum *because* one lives in London, I cannot say, but certain is it that one often finds in smaller collections like the present just the very objects which one is looking for, bearing on some of the latest questions of the day. For example, I know of few topics more fascinating, or on which probably your readers may have felt their imagination more excited, than the speculations as to the early existence of man, and the evidences of his primeval state afforded by the fossil remains from caverns in various parts of the world. Well, here there meet us, on entering the Leeds Philosophical Collection, a set of cases containing specimens of the breccia from the caves of the Dordogne, with bones and teeth of reindeer and wild boars, and rude flint and bone implements of man, together with a capital collection of specimens from the Lake dwellings in Switzerland, portions of piles, bones, domestic implements, pottery, and remains of textile fabrics. These I mention as having struck my eye at first, and as being objects showing that the Leeds people are fully alive to the most advanced ideas. The Town Hall is also placed at the disposal of the visitors, and is this evening to be the scene of a reception by Dr. Chadwick—that is, if circumstances permit; for Dr. Chadwick was suddenly summoned away from the general meeting in the Philosophical Hall last evening, in consequence of the alarming illness of a member of his family. All the institutions in Leeds throw their doors open; most of the leading manufacturers, as Messrs. Croft, Fairbairn, Greenwood, Kitson, and Marshall, give free access to their workshops; the ruins of Kirkstall Abbey, a few miles up the Aire, transport one in imagination to a very different social and political epoch, whilst the annual museum opened at the Medical School contains a most useful exhibition of the material evidences of the advance of modern Medicine. Dr. Clifford Allbutt, Messrs. Teale, Nunneley, Wheelhouse, S. Smith, and Hey, besides many others, exhibit photographs, casts, and preparations, and stones extracted by lithotomy; new preparations of drugs and articles of food are shown by Harvey and Reynolds, Gibson, Brady (of Newcastle), Hopkin and Williams, Duncan and Flockhart, and Yewdall; Messrs. Southall show their very useful Materia Medica specimens; Mayer and Meltzer, Matthews Duncan, Leeming, Ernst, and Jung, exhibit new instruments; so also do Harvey and Reynolds, whose firm seem to be engaged in photographic, microscopic, general scientific and Medical instrument-making, as well as in the preparation of drugs and extract of meat. New books are exhibited by Longmans, Churchills, Macmillan, and Williams and Norgate; whilst, as a *souvenir* of the past, Mr. Hemingway exhibits Wiseman and Heister.

The new Infirmary of course attracted a great number of visitors, not only from the grandiose merits of the building itself, one of the first of its kind to which the modern Gothic revival has been applied, but because it was made the subject of a few singularly touching remarks by Dr. Acland, and furnished Dr. Chadwick with the greater part of the material for his address. I will not go over the President's description, which, if it were difficult for him in a long paper without a plan, is impossible for me in a few lines. Suffice it to say that it is a building on the pavilion or detached block plan, and one story high—*i.e.*, there are two tiers of wards one over the other, and no more.

Forasmuch as the President's address consisted mainly of a defence of the "palatial," as distinguished from the cottage, style of Hospital, and a pretty sharp criticism of Sir J. Y. Simpson's revolutionary notions on hospitalism, considerable interest was felt when Sir James visited it this afternoon, in

company with a body of gentlemen who were acutely criticising it with Sir James. As for the general effect of the old English or so-called Gothic style, it was admirable; the slightly arched roof, the graceful windows, and the power which this irregular style of architecture gives of having the closets and lavatories entirely cut off, being placed in angular turrets, excited general admiration. The chapel, which is said to owe much to the munificence and care of Dr. Heaton, is beautiful. So is a quadrangular court, roofed over with glass, which is to serve as a winter garden. But still I doubt if the essential is attained —viz., that no patient shall be able to damage another by communicable disease. *The beds are too thick by half;* two stand by every window pier, and of these one should be removed. It was demonstrated that air could pass from one ward through the connecting corridors into another. There are close stools in the wards for patients who need them, but no earth-closets, which I hold to be the most sanitary improvement of the day. Spite of oak floors, polished walls, and ingeniously opening windows, I doubt if the sanitary state of the new Infirmary is perfect.

(*To be continued.*)

(*From another Contributor.*)

Leeds, July 28.

The invasion of the town by the members of the British Medical Association commenced yesterday. During the day 263 arrivals were entered. The Philosophical Hall in Park-row, a spacious and commodious building, has been given up for the use of the Association. Each member on arriving inscribes his name in the address-book, and receives a card entitling him to various privileges during his stay in the town. One very convenient arrangement is the provision of a room, with writing materials, to which members may drop in, and where they may carry on their correspondence. It was in the theatre of this institution that last night's opening proceedings took place. At eight o'clock two or three hundred members assembled. Dr. Acland first occupied the chair. In a brief address he put into contrast the circumstances of the meeting of last year and the present. Last year it took place at Oxford, amidst the calm influence of a university town, and its deliberations were necessarily more or less dominated by the *genius loci*. This year it meets amidst the evidences of material and physical progress in a busy manufacturing town. Yet even here he observed that intellectual progress was not neglected, while there were evidences in the public buildings of the town of the high place assigned to art and architecture in the estimation of the authorities. Dr. Chadwick, the President for the year, commenced his address at about twenty minutes past eight. He remarked that if the spirit of the Oxford meeting was naturally more or less speculative, it was equally natural that in a town such as Leeds it should partake more especially of a practical character. He desired to give this tone to his own address, and, as the most recent event in the town associated with our Profession had been the opening of the new Infirmary, he should take the subject of Hospital arrangement and administration as that best fitted for this occasion. The President, who read his address with great rapidity, first undertook the defence of what have been termed "palatial" establishments as against smaller and humbler establishments, such as Cottage Hospitals, for the treatment of the sick. He maintained, first, that a town site was not only convenient, and even necessary where, as in Leeds, a Medical school is attached, but that by its adoption alone could the present arrangements of an honorary staff of the most distinguished Practitioners of a town be maintained. If the Hospital be situated in the country, it could not be expected that men whose position is such as to make them in demand among the public could devote the necessary time to attendance there, and the result would be injurious to the interests both of the institution itself and of the poor who should resort to it. The staff, if still honorary, would consist entirely of juniors; or if paid, the remuneration would not be such as senior Practitioners could accept. Dr. Chadwick next entered into a long and, to the minds of some present, a somewhat tedious description of the new Leeds Infirmary, in which he pointed out some of the reasons which have led to a departure from the strict pavilion plan of arrangement and distribution of the wards. One advantage of a large Hospital he considered to be the greater economy with which it could be conducted than a small one. He did not think that palatial Hospitals should be condemned upon evidence drawn from buildings constructed many years ago, but that the subject should remain *sub judice* until it be seen whether erysipelas, pyæmia, and other Hospital diseases cannot be avoided by modern modes of construction and ventilation, by antiseptic treatment in Surgical wards, etc. One practice which Dr. Chadwick commended highly is that of periodically and successively holding vacant one ward in a Hospital—not only the ward, but the furniture also, being held vacant for some months. He admitted, however, that at present they had been unable to compass this at Leeds. He then entered upon a panegyric of the out-patient system of our Hospitals as not only most advantageous to the poor, but as calculated to advance therapeutical knowledge. This was quite a new ground of defence to us who are too conversant with the hasty manner in which much of this practice is knocked off in some out-patient rooms in the London Hospitals. The argument of Dr. Chadwick was mainly this—that where amendment in symptoms of an out-patient took place it could not be dependent upon any of those circumstances to which it might be attributed in an in-patient—such as judicious dietary, improved hygienic conditions, and so on—but must be due to the drugs employed, for it could be due to nothing else, as all the surroundings of the individual are unaltered. He took this opportunity of expressing his satisfaction at what he conceives to be a return to the good old ways, and to a greater confidence in drugs as agencies in the treatment of disease. At the conclusion of the address Dr. Chadwick was unhappily compelled to quit the hall, in consequence of the serious illness of a member of his family, and he stated that it was doubtful whether he would be able to fulfil his duties as President during the succeeding days. This event has thrown a gloom over the meeting. Dr. Sibson acted as chairman on the retirement of the President. The report of the Council was then read. It gave rise to a good deal of discussion, especially that part of it which relates to the financial administration of the Journal. At one time the character of the meeting verged upon the stormy, but the good sense of the majority prevailed over the disturbing elements. After the disposal of the report, Captain Galton and Dr. Brown-Séquard were elected honorary members, and, being present, were admitted as such by the acting chairman. The report of the Medical Benevolent Fund was then read and adopted, and the business of the first meeting came to an end about half-past eleven. To-day Dr. Jenner is to deliver the address on Medicine.

The bill of fare for the sections which commence their meetings to-day is promising. In the Medicine Section for to-day we are promised a paper by Dr. Sanderson, on the Artificial Production of Tubercle; by Dr. Russell Reynolds, on the Treatment of Rheumatic Fever by Perchloride of Iron; and by Dr. Fox, on Clinical Thermometers. In the Physiology Section Dr. Hughes Bennett promises a paper, which apparently is to be supplementary to the Report on Mercury read last year at Oxford, on "Experiments to determine the Effects of Mercurial Preparations and various Irritants to the Origin of the Gall-duct in the Duodenum."

The public breakfast which came off this morning in the fine Town Hall was well attended, and a success. To-night there is to be a *soirée* at the same place. The annual museum, an important feature of the meeting, is being held at the Leeds School of Medicine, and contains many objects of great interest.

1 P.M.

Sir William Jenner has just concluded one of the most admirable addresses ever delivered before the Association. Taking as his subject the progress of Medicine, he set himself to prove this proposition—that not only has Medicine made progress as a science, which all readily admit, but that during the past twenty-five years its progress as a practical Medicine, as an art, has been second to none. The illustrations which he adopted of this proposition were:—1. The separation now made between chronic degenerations and diseases, the former being of the character of changes naturally occurring with advancing age, and the improvements which this separation has introduced into our practice. 2. The recognition of elevation of temperature as the only test of the existence of pyrexia, enabling us, for instance, to recognise latent typhoid fever, and so to prevent, by judicious treatment, some of those fatal hæmorrhages and perforations which used formerly to occur when persons were merely regarded as more or less out of health. Another example of the practical value of this test is found in the recognition of acute tuberculosis. 3. The appreciation of the mechanical consequences of primitive diseases—*e.g.*, fibrinous deposits on the valves of the heart and embolism. 4. The improvement of our acquaintance with fluid blood poisons—*e.g.*, septicæmia, pyæmia, etc. 5. The greater care with which special diseases have been described and so defined. Diagnosis is the gainer here by the separation of diseases formerly con-

founded. 6. The definition of diseases formerly unknown—*e.g.*, Addison's disease, and the recognition of parasitic diseases of the skin. 7. A better acquaintance with the natural history of diseases—that is, of the course of diseases, of the difference between the course of acute sthenic pneumonia and tubercular pneumonia, for example. 8. The better knowledge of the relation of local lesions to constitutional conditions. In all of these respects the increase of our knowledge has led to improvements in the practical art, direct and undeniable. 9. Our art has advanced also through the use of special instruments. Sir William illustrated this by examples drawn from the application of the microscope, the thermometer, laryngoscope, ophthalmoscope, sphygmoscope, and balance. 10. The clear notions we have attained of the meaning in our use of the word "cure," and the better distinction that is drawn between curing the patient and curing the disease. Sir William then alluded to the advances made in preventive Medicine, referring especially to our recognition of fouled drinking water as a cause of cholera and of typhoid fever, and of dampness of soil as a cause of phthisis. In both these cases the public has undeniably gained by being put in possession of a mode of preventing both of these diseases. Our knowledge of drugs also has increased. Not only have new drugs come into use, such as bromide of potassium, which has proved so valuable in the cure of epilepsy, carbolic acid, sulphurous acid, and sulphites, etc., but our acquaintance with old remedies has also improved. Lastly, he showed how our advances in pathological knowledge have led to improvements in the rational treatment of disease, so that the routinist has become converted into the Physician. The address was listened to with rapt attention, and concluded amidst a burst of well-merited applause.

Dr. Acland, Regius Professor of Medicine in the University of Oxford, the retiring President, opened the proceedings with the following address:—Gentlemen, members of the British Medical Association.—The period for which you were pleased to appoint me your President has now come to a close. It remains for me only most gratefully to resign into the hands of that most esteemed person, Dr. Chadwick—(loud applause)—the presidency of this Association. I only trust you will permit me to say a few words in expressing a hope that nothing on my part in the year that is gone has checked your high and useful aspirations—(applause)—and that as the meeting at Oxford did not fail in the great objects, both social and scientific, of the Association, so the meeting in Leeds will far outstrip in its results that and all other previous gatherings of this institution. (Applause.) I believe—I do not know it—but I believe some of our brethren from the other side of the Atlantic are present. (Loud applause.) I have at all events a pleasing letter informing me that that would be the fact from Professor Gross, and wishing you all success at Leeds, and that letter I shall place in the hands of the President-elect in a few minutes. (Applause.) Before, however, I retire, I feel that I owe it as a matter of respect and duty to you to allude to one or two circumstances in the previous year which, although not affecting directly Medical science, still affect Medical administration in this country; and these are the appointment of a commission to consider the laws which affect the public health, and the promise of the Government to reconsider very fully the provisions of our Medical Act; and bearing in mind the deep interest which this Association has taken in both these questions—considering that, being for the time your President, I thought it my duty to do the best I could under the circumstances of the case, and I do not think you will hereafter have reason to consider that this present year has been unfruitful of means likely to be useful to us as taking part in the social administration of the country. (Applause.) I am not aware that anything of special moment has occurred during the year of my office. I do not know that any great change has taken place which should be recorded in the course of our Medical literature which would have turned our thoughts into any greatly new channels, or given to us any new special powers for observation, and I don't think, in the present state of knowledge, it is necessary. It is not in every epoch that great discoveries like those of Bell, or Swan, or Barry, or great gifts like those of chloroform or quinine, are vouchsafed to mankind, or that any exceeding great steps are taken in modern Hospital administration. But it may be said that every year—now such is the state of our knowledge—that every year, in its large and honest as well as reckless criticism, some errors are exposed, some fallacies are detected, and some principles are reinvestigated; and thus, by this process of mingled construction and repair, that the whole edifice of pathological knowledge is silently under our hands building up like the first temple of Palestine—

> "No workman's steel or ponderous hatchet rings,
> But like some tall palm tree the noiseless fabric springs."

(Applause.) Therefore, gentlemen, it is not the duty of a retiring president to chronicle in detail that which he leaves for the higher and fuller elucidation of his successor. Associations such as ours do great good, or may do great harm, in the direction of the progress of knowledge. They may advance it by concentrating our powers and attention on objects of utility and in the pure search after truth; they may retard it if they diverge away to more evanescent topics. May this never be the case with an association whose brotherhood is in the wide world—whose sympathies are those of our common nature—who have a common language and a common literature, and common bonds of union, wherever culture and civilisation are known—and who know no other brotherhood but the common material welfare of the human race. (Applause.) And now it remains for me only, after thanking you with a deep sense of gratitude for the honour which you bestowed upon me most unworthily more than two years ago in appointing me to succeed our eminent colleague, Professor Stokes—it remains for me only to resign the chair to our common friend, Dr. Chadwick. And in doing so we cannot but remember that we are strangers come from all parts of the kingdom, and I have no doubt from other countries besides. Some of us may have come from places redolent with abstract questions and ancient controversies, and, as many in this age are wont to think of bygone prejudices, but as I would rather say of a place, not willing to throw aside the light which has heretofore lighted the world. (Applause.) But be these opinions what they may—and I shall be pardoned for holding my own—we come to one of the great world centres of industry and activity—one of those centres which some persons think to be too much given over to material progress and commercial enterprise. I will detain you only to enter my protest against any such opinion, and to say that in centres of mental activity and material progress, such as that in the midst of which we are now situated, I, as a stranger, can at once appeal to this hall as evidence of the interest, of the world-acknowledged interest, of this hall as a centre of scientific progress and instruction. (Applause.) I can further, before I sit down, appeal to that æsthetic taste residing in this place, and carried out in the selection of the mediæval architect Scott to decorate for them the new, well-considered hygienic Hospital—(applause)—and thereby to set an example of appreciation of culture in works of manifest utility, which, I believe, has not yet been followed, and will not soon be imitated, in other towns of the country. ("Hear, hear," and applause.) And if I turn to another question, which I, as a stranger, may refer to before Dr. Chadwick, if I wanted in Great Britain an instance of advanced philanthropy on the part of a merchant prince, I should send a stranger to examine the small village, in your neighbourhood, of Saltaire. (Applause.) Therefore, I resign with the utmost anticipations of increased success on the part of the Association, and of greater lustre than it was in my power in a smaller place to impart to it—I resign the chair in confidence and in hope to your esteemed, and I believe here I may say your beloved, friend Dr. Chadwick—(loud applause)—in whom I feel assured we shall find a respected and worthy successor to the names of Smith, of Hey, and of Teale. (Loud applause.) Thanking you for your kindness, I now resign to Dr. Chadwick the future conduct of the chair. (Applause.)

PRESIDENT'S ADDRESS,

By Charles Chadwick, M.D., F.R.C.P.,
Physician to the Leeds Fever Hospital and General Infirmary.

Gentlemen,—I offer you a cordial welcome to this our annual gathering; and I do this more readily, because I give it in the name of the entire Profession of this town. In many instances, being of a partial character, the welcome has lost its heartiness, through the easily recognised absence of some of the notabilities of the place giving a degree of coldness to the otherwise cordial reception.

We are fortunately unanimous in our desire to do honour to our brethren, who will be, for a few days, our visitors; and, in honouring them, to recognise the high value and importance of the Association to which we all belong. The exceptions to this remarkable unanimity are so singularly few, and, when existing, in nearly every case on sufficient ground, that I feel it an

imperative duty to give the fact an emphatic prominence. There has been no party or individual jealousy; and, whether we fail or succeed in the object we have ardently desired, all have frankly co-operated to deserve success. In the name, then, of the unanimous Profession of Leeds, I bid you welcome.

I will not waste the precious moments which can be given to this address by speaking of myself. You, all of you, according to the direction of your mental activity, form some estimate of the impress these meetings produce on the advancement of your common and individual interests, and so you may imagine how I regard, at once, the honour and the responsibility of presiding over you, and leading your councils. But few of you, and those only who have been recently similarly circumstanced, can know the anxiety with which we have prepared for this momentous week. The growing interest and the augmenting reputation and influence of the Association, and the natural desire, on our part, that this reception should not fall behind, or suffer in comparison with, those which have immediately preceded it, will readily occur to you. You will have fresh in your memories the delightful visits recently paid to two of the most celebrated seats of learning of the empire—the quiet and repose so congenial to, and productive of, thoughtful generalisation, and the remarkable addresses there delivered, taking their tone from the *genius loci*—so full of deep reflection and close reasoning, so well appreciated by their attentive auditory. When I remember these, the felicitous description of the Latin poet comes to my mind—

"Conticuere omnes, intentique ora tenebant"

—as indicating alike the worth of their matter, and the enlightened estimate with which they were received. Neither will you have forgotten the cordial welcome, the kind and generous hospitality, which everywhere greeted your coming. In the course of events another annual assembly comes round, and you select for its locality a very different scene. Here you find activity and energy—the great and prevailing features of the busy community you visit. The steam-engine is the actual and figurative type of our condition, when fact is, in such rapid succession, pressing upon fact, that thought and generalisation become almost impossible, as in the former instances to which I have referred. So our proceedings here will, in a measure, take their character from the locality; the practical, as distinguished from the theoretical, will characterise the present meeting.

Among the many objects which these meetings contemplate, none is more important than the estimate and record of our Professional advancement; and in no department has a forward movement been, of late years, more distinctly illustrated than in the construction, arrangement, and working of our Hospitals. You are all aware of the fact that in this town there has recently been completed a new General Hospital; and this, with the recent construction of some others in different parts of the country, constitutes an era—a marked and distinct step in advance in this important matter. Therefore, in the selection of the subject of my presidential address, I seemed to have no choice. It was forced upon me by the coincidence of the recent opening of the Hospital with our meeting here; and the vast moment and general interest in the subject seemed to demand that due and prominent attention should be given to it. As a further warranty of the correctness of my choice, your Council have very wisely invited Captain Galton, than whom no one is more competent, to give a fuller and more exact detail of the subject, from his own point of view, than I could have either the power or opportunity to compass. In the discussion which will follow Captain Galton's address on Thursday, the subject, in all its bearings, will find a complete elucidation. But this is not all; in one of the sections, we shall be favoured with a paper by Dr. Crichton Browne, of the Wakefield Lunatic Asylum, on Hospital furniture, to which very necessary part of the general subject he has paid much attention; and I know we shall obtain much valuable knowledge from him. In consequence of these arrangements, my original design has undergone considerable modification. I propose to offer you a simple demonstration of what we have here accomplished, being, as I believe it to be, in exact accordance with the most improved principles of Hospital construction as yet arrived at. I shall here and there permit myself some comment on the more striking and interesting features of the building, and shall embrace certain opportunities of digression when subjects of collateral interest arise. I must, from the very nature of the subject, aim only at plain practical statement; anything like dazzling brilliancy is inconsistent with its description. You must expect little that has not, in one form or another, been said before. There is nothing but what a more ambitious man might have considered trite and common-place; and if, in these digressions, anything should appear out of date, and thus offend more advanced theory, it must be remembered that the practical is what I aim at.

Contrary to a somewhat prevalent (fashionable, I had almost said) opinion, we have erected our Hospital within the precincts of the town. In regard to the site itself, as a suburban one, it could not, under the circumstances, have been more favourable. It has a gentle southerly declension, the exact nature of which will be particularised when I speak of the building itself. So far as regards our prevailing winds, it is situated to the windward of the town, at the gorge of a valley running directly east and west, and, in its elevation, is exposed to a free current of air, blowing directly from the neighbouring moorlands, continuous with the hills whereon we find the most salubrious atmosphere of our district. At times the force of the wind may be somewhat over-energetic; but there is thus secured a purity which few town atmospheres can boast. I do not venture to dispute that, other things being equal, so far as purity is concerned, a country site would have advantages over this. But this is really the only valid argument in favour of a country over a town location, except, perhaps, the cheapness of land; whilst the preference which we have given to the latter is supported by a multitude of advantages which far outweigh the admitted potency of the other. In arriving at this conclusion, we were mainly influenced by centrality in the district whence the patients are derived, the immediate proximity to a railway station affording facile communication with every part of those large hives of industry which principally supply the Infirmary with inmates.

The convenience of the honorary Medical officers, and the opportunities here afforded for Professional instruction, were not forgotten. In reference to the former, I think you will unanimously discard the insinuations to be found in writings—deservedly exercising great influence on the public mind, but where such views should not have been propounded—that the degree of talent brought to bear on Hospital treatment is of little moment compared with other requisites, such as country site, perfect ventilation, and efficient nursing. To each of these I would give their due importance, but never by underrating our constant self-denying and invaluable services. Fortunately, so long as these services are rendered gratuitously, the staff of any given Hospital will continue to embrace a large proportion of the Medical and Surgical talent of the town or district in which it is located. Remove the Hospital to the country, and the whole plan of arrangement must be changed; honorary Hospital attendance must cease; the fully occupied, and therefore—it is fair to presume—most able officers will no longer attend. Adopt the alternative which has been proposed, and pay them for their services, and, the remuneration being necessarily inadequate, the same result will follow—a lower grade of Professional talent will supply the place, to the detriment alike of the public and of the Profession. Strongly I deprecate this possibility; much of the honour and influence which we have is due to the long-continued services we have rendered to these institutions, and therefore I dwell upon it with confidence in combating a general resort to country sites. I would adopt, as will afterwards be seen, all the appliances which modern philanthropy has devised, and a wise liberality has given, whereby the difficulties of town Hospitals may be lessened.

Much that has already been said applies with equal force to the hindrance of Professional instruction. It has been said that, in attendance upon country Hospitals, the students would be less distracted by various allurements than in over-crowded cities. The tendency to pleasure or to vice, when given way to, unfortunately overcomes all such obstacles as would thus be afforded, and the temptations of the neighbouring city would be little likely to lose their attraction when only a few miles distant. The party really deserving consideration, the painstaking and diligent student, would have all the difficulties of his education materially augmented,

But we have here a very momentous question to encounter, which, unless answered satisfactorily in the negative, involves a very serious dilemma—Are these palatial Hospitals, as they have somewhat derisively been designated, a mistake? are they as detrimental to successful practice as, relying upon authentic statement, would at first sight appear? The objection to them is not new. Brocklesby, the friend of Johnson and Boswell, the successor of Sir John Pringle, clearly entertained the notion that, at least for military purposes, in tents or hastily constructed huts, more satisfactory results could be effected for the sick and wounded than by the same practice carried on in regular or temporary Hospitals. The idea has long been entertained in

respect to civil Hospitals, and has again been recently revived by a distinguished Fellow-Associate. His name alone gives an importance and authority to any opinions he may adopt—opinions which it would be rash enough for us to disregard, except after the most satisfactory investigation. I do not mean to assert that we are prepared to negative his conclusions, but I do believe that there is sufficient to warrant a suspension of our judgment, and to prevent the public from adopting so extreme an idea, until proved to rest upon incontrovertible data.

Sir James Simpson has arrived at the utter condemnation of large Hospitals, relying on the military experience already referred to, and upon the more recent results of Hospital treatment during the Crimean war. He also attaches great importance to the difference between the mortality in civil Hospitals, particularly as regards amputations, and that from the same operations performed in the houses of patients, however humble or circumscribed, or in those village Hospitals which are springing up so abundantly throughout the land. Sir James, writing in the *Scotsman* of Tuesday, January 12, says: "I have collected the reports of 1000 and odd limb-amputations in country and provincial practice. Out of the 1000, the proportion of deaths was nearly 110, or 1 in 9. But, out of 1000 similar amputations performed in the large Hospitals of Edinburgh, Glasgow, London, etc., the proportion of deaths is generally above 300, or about 1 in 3. For example, Mr. Liston told me that for years after he was transferred from Edinburgh to the charge of the new Surgical Hospital at University College, London, his success appeared to himself to be astonishing. Mr. Potter published the statistics of the amputations in University College Hospital for the first five or six years after the Hospital was opened. The deaths amounted to 1 in 6 or 7 of those operated upon. In the last returns which I have seen published (1855-57), the deaths had more than doubled, for they had increased to above 1 in 3. In 1752, the first Professor Monro published the results of the first 99 or 100 limb-amputations performed in our own infirmary here. Of the 100, only 8 died, or 1 in 12. The last tables published show a death-rate from the same operations of about 30 in 100, or 1 in 3."

Now, regarding this question as one of much graver moment than as it affects the erection of a single Hospital at Leeds, though for us it is a sufficiently momentous consideration, it demands from this Association a very careful and a very candid investigation. We must not allow the operation of local interests, or the bias which may be engendered through personal prejudices, to influence our decision. We must remember that the country looks to us for an impartial verdict, as the consequences of that verdict may be the utter condemnation of all existing Hospitals, and the waste of a large amount of money expended recently, and now being expended, in the erection of several noble and carefully designed structures of the so-called palatial class. We will grant that the proportion of deaths after amputation is, to the full, as large as stated by Sir James in such Hospitals already contaminated through the protracted operation of agents which we shall afterwards describe. We will adopt his statement of the diminished mortality in cottages and cottage-hospitals as he has given it; we will not just now insinuate that there may exist some serious fallacy in the way these statistics have been taken, nor will we at present quote some singular exceptions to these statements which we have met with in our inquiries. We know that the mortality has been very large. Nor will we, even good-humouredly, hint that the results of practice, whether private or public, stored up only in the memory of the Practitioner, and not reduced to the exactitude of recorded figures, cannot be implicitly relied on, with whatever good faith the statements may be made. We will admit that there seems to be made out a very strong case in this amputation test, and that the attempted explanation through a more careful analysis of these cases, as to their primary and secondary character, has failed, so far as this argument is concerned.

We do not believe, however, that the question can be decided in this manner; and we must first inquire whether the improved principles, upon which Hospitals are now constructed, may not be the turning-point of the whole question. We use, therefore, as an important argument, the admitted superiority of Hospital results, during the earlier years of their history, as established by Sir James Simpson. We accept the statement of the late Mr. Liston, which he quotes, without question, believing it to be true; and we regard as historical Monro's record of the first hundred amputations performed in the Edinburgh Hospital, with the mortality of one in twelve; and we ask, with considerable confidence, if these results, and better than these, may not be anticipated with the larger cubic space in which the Hospital patient now breathes, and the wider superficial area upon which he lies. Will not, likewise, the more perfect ventilation, the non-impregnation of the less absorbent materials employed in the construction of ward-walls and floors, contribute to the same results? And upon this we will venture to assert that this large mortality, as it does not occur in the earlier years of the Hospitals, cannot be an inherent element of Hospital practice, and that the happier results, as exhibited in the experience of Mr. Liston and in the statements of Mouro, will no longer be confined to the first few years of the Hospitals' history, but will become a continuous and characteristic result of their statistics. To maintain the uncontaminated condition of the new Hospitals in perpetuity seems to be the great *desideratum*; and may we not look to the great improvements in Surgical science—for I still concern myself with the amputation test—to contribute to this end, as well as those other improvements in construction and management to which I have already referred? And thus will be brought about a gradual assimilation of Hospital results with those obtained in private practice, in whatever grade of life.

I have referred to the improvements in Surgical science; and amongst many others to which I might refer, the antiseptic treatment of Mr. Lister, of Glasgow, occurs to me as the most apposite. I would have it remembered that the large proportion of open suppurating wounds in a Surgical ward may be a powerful aid to the contamination of its atmosphere; and thus necessarily the more potent, the older and more deteriorated the ward itself has become. Now the treatment of Mr. Lister, as I understand it, entirely does away with this fertile source of mischief; and he assures me "that some of the most unhealthy wards in the kingdom have become, through its adoption, all that could be desired, being quite free from pyæmia, erysipelas, and Hospital gangrene."(a) Make what allowance you please for enthusiasm as to our own practice, and return upon me the argument I have already used as to the personal record (non-tabulated) of our own practice; still it must be admitted that the absence of these *opprobria* of the Surgical wards warrants the expectation of a greatly diminished mortality.

Supporting the same line of argument, I might refer to the report of Dr. Bristowe and Mr. Holmes on the Hospitals of the United Kingdom; at page 609 of which, I find a reference to the results of practice in the Leeds Old Infirmary, where the mortality is much less than in other Hospitals of the same class; and these gentlemen go into an inquiry to explain the startling difference. For my present purpose, it is sufficient to find that, even in so imperfect and contaminated a Hospital, so marked a difference could exist. It proves that something more than the Hospital, its form, and its condition, has to do with the results obtained within it.

I have also referred to the improved management of wards. The system of using wards in rotation will, if strictly carried out, prove a means powerfully preventive of contamination. By this I mean the plan of having at least one ward always vacant—not only the ward itself, but its furniture likewise. In our old Hospital we long ago adopted the theory, but were never able to put it in practice: the same wards, the same beds, and the same furniture might be in constant occupation, and without an interval, for years. What I contemplate is that, every six or seven years, every ward in its turn shall be left vacant for six or twelve months.

Until we have put these anticipations and agencies to the test of experience, I must not join in the wholesale and premature condemnation of these palatial erections.

I have preferred in the above remarks confining myself to the Surgical illustration, simply because it has been so strongly relied upon; but I might have found, in reference to other cases, a stronger support of our present form of Hospital: I might have referred to the smaller mortality, the safer and more convenient management of many Medical cases, than can be effected in their own homes. Let us simply refer to scarlatina, typhus, and typhoid fevers, rheumatism, etc. These do not suffer, but the contrary, from Hospital treatment; but time will not allow me further to prosecute the illustration. And if I have thus made out a case for suspension of our condemnation of the present form of Hospital, then indeed my arguments will have additional force, from their greater convenience and their less costly management. In the cottage Hospitals, spread over a large extent of surface, which could only be effected at a distance from a town, every species of attendance

(a) I have pleasure in being able to state that Mr. Lister proposes shortly to publish the results of his antiseptic treatment, as bearing upon the question of hospitalism.

must be more difficult and expensive; supervision would be impossible; the labours of the resident and honorary staff largely augmented; and Hospital instruction almost impracticable. I anticipate for a moment the objection which will shortly be taken to small wards, and which exactly applies to cottage Hospitals. They are, in fact, whether in one or two compartments, small wards; if the latter, only the more objectionable. Angles and corners must necessarily preponderate in their internal space, and consequently stagnant air will be the normal condition of these corners, save by the employment of a forced ventilation, through the agency of strong currents, which, however harmless in other climates, can never with safety be adopted in our own.

Now let us for a moment inquire what are the sources of this Hospital deterioration, of which we have heard so much. It is, I think, beyond dispute that, as Hospitals have hitherto been constructed and managed, they do, in process of time, undergo contamination. This arises mainly from continuous imperfect ventilation, and the concentration of morbific elements (gaseous and solid)—the latter contained in the vapoury exhalations from the lungs and cutaneous surface of diseased subjects. These have, over and over again, been demonstrated; the solid animal matter being separated from its solvent, the watery vapour, when condensed upon the windows and walls of the ill-ventilated wards. Little attention having been paid to the selection of non-absorbent materials for construction, the results cannot be wondered at. Another fertile source of contamination is the imperfectly constructed floors, and the improper methods employed in cleansing them. On floors of deal, the planks badly jointed, and being constantly soaked with water, there are collected, in process of time, large accumulations of solid animal and vegetable matter, which are deposited in the interstices of the planks. The walls, themselves absorbent, carelessly whitewashed, and seldom submitted to efficient scraping, likewise become fertile sources of Hospital contamination, and, under favouring circumstances, give off morbific emanations, which, in addition to those which are regularly produced from the injured bodies of the inmates, cannot but prove seriously detrimental to the salubrity of the ward atmosphere.

I might also with propriety include under this head the neglect of the very necessary precaution of throwing out of use in succession one of the wards—allowing it, both as regards furniture, bedding, and the ward itself, to lie fallow (to use an agricultural term) for a lengthened period, and thus securing a very efficient method of renovation.

This and the Herbert Hospital at Woolwich are the first complete Hospitals built in England on the pavilion principle. I do not put it forward as an exact and perfect adoption of the pavilion plan; but it so very nearly approaches to it that, for all essential purposes, it may be fairly so denominated. To have made it perfect, however, would have involved us in many difficulties—the increase of our already expensive site, and the sacrifice of much facility of working. The pavilions here are not completely isolated; and this constitutes the difference between it and the true pavilion structure, as originally designed for and seen alone in the splendid Hospital at Bordeaux. This plan was first proposed about seventy years ago by a French commission. The wards are approached by external arcades, and you pass directly into them from the open air, both on the ground and the upper story. The Bordeaux Hospital, besides being the first, is also the most exact specimen of the kind with which I am acquainted; indeed, it was built from the plans recommended by the commission to which I have referred. The Lariboisière at Paris, and the St. Jean at Brussels, so closely approach this, that it might be difficult to draw any marked distinction. In reference to this principle, Mr. Gwilt, in the "Cyclopædia of Architecture," remarks:—"One of the conditions prescribed by their programme was the complete insulation of each apartment, as well as easy communication by covered galleries round the building; and these were required to be of most extended dimensions, that the air around should be unobstructed and circulating in every part with freedom, thus affording a wholesome promenade for the patients." One of the great defects of the Bordeaux Hospital is the small space between the pavilions, though I have not been able to find an exact measurement. Another defect, to which we shall afterwards advert, is the extreme height of the wards—viz., thirty feet.

The Hospital is arranged on the normal plan of a cloistered quadrangle in the centre, from which the pavilions branch out north and south. The width of the ground only permits three pavilions on each side of the central court; and administrative requirements, other than the special objects of the Infirmary, necessitated the use of one of the southern spaces, so that the Hospital really consists of five pavilions. The site slopes twenty-five or thirty feet from north to south of the central axis—*i.e.*, in the direction of the length of the pavilions. This introduces a peculiar and unusual feature, that the most convenient point of entrance is not at the end of the central court, but at the lowest end of the ground, where the central southern pavilion would have been erected but for the valid reasons already furnished: hence the public entrance is placed in what would, in the usual arrangement, be the flank of the building, and on a level one story lower than that of the ground floor of the pavilions, so that, whilst the floor at the northern end of the site is on the natural ground level, it runs out at the opposite end to a height twenty or more feet above the level of the grand entrance. There is, as usual, a gateway leading into the central court; but this becomes a secondary entrance, all comers to the Hospital using that in the centre of the flank just referred to, and proceeding thence, by a bold corridor, to the great staircase, which rises to the flank of the central court, and thence, by the upper cloister, conducts to the pavilion floor. It will be seen that this arrangement gives to one-half of the building an extra ground story of full height.

This is appropriated mainly to the several purposes of administration, including on one side of the central corridor the dispensary department and the extensive provision for the out-patients, to be afterwards particularly noticed; and, on the other, the culinary and domestic offices, with the apartments of the resident Medical officers, matron, etc. This arrangement actually isolates these departments for all desirable purposes; yet they are, as for convenient working they should be, brought into practical contiguity through the operation of the hoists which are attached to each pavilion.

The cloister which surrounds the central court is repeated on this lower floor, for the purpose of carrying food and other requisites from the kitchen, and administrative departments generally, to the hoists. Through this corridor, also, patients entering by the main door or through the out-patient department, may be conveyed to the lifts, whenever carrying them upstairs would be hurtful. There are also on this floor, and adjoining the central corridor, small wards for the immediate reception of accident cases. Here the seriously injured may remain, at the option of the Surgeon, until some important operation has been performed, or until he has sufficiently rallied from the shock of his accident; or, in case of slighter casualties, he may be immediately removed to the wards by means of the nearest hoist.

It may be named, in passing, that the board-rooms and other offices for the use of the governing body are placed near and over the main entrance. Remembering the situation of the out-patient department, the kitchens, etc., it becomes at once apparent that those only who are concerned in the treatment of the sick need go up to the Hospital floor, while those who have to do with the administration proper need only visit those parts which are completely severed from the Infirmary. The result of this is that, on reaching the Hospital level, the entire space is devoted to the actual uses of the patients, and no culinary or other administrative work is transacted on this floor.

The central space, occupied by the cloistered quadrangle, has been covered over by a light and elegant glass and iron roof, which may form a winter garden. This covered area presents itself as a striking feature of the institution, and may efficiently subserve its important purposes. The strictest care has been taken to secure its proper ventilation, so that it cannot form a medium for the transmission of contaminated Hospital atmosphere from one pavilion to another. This winter garden, though not an original portion of the design, now forms one of its most attractive characteristics, promising, besides its intrinsic beauty, to become, if successfully managed, an important adjuvant in the treatment of the sick. Some have feared that the lofty glass roof would seriously interfere with that due circulation of air around the exterior of the pavilions which forms a distinctive element of the system. Any one who will inquire into this objection, on visiting the upper part of the Infirmary, will find that no extra corners or angles have been created; and, bearing in mind the normal currents of air in this elevated position, will be satisfied that no detriment of this kind need be apprehended. My own conviction is that, if any effect be produced by it, the influence is beneficial, rather than otherwise, for the objects supposed to be interfered with. At one end of the winter garden is an entrance gateway, before referred to, over which, and on either side, are the dwellings of the superintendent of nurses and her staff. This presents another important feature of the Hospital deserving comment, in which our architect has successfully complied with his

instructions, and again illustrates the excellence of the design in the complete isolation of its different departments. I now refer to the very desirable separation, in all similar institutions of the nurses from the other domestics of the administrative department. This arrangement, I believe, will materially facilitate the satisfactory working of the institution.

Our nursing staff at present consists of one lady superintendent, sixteen head nurses, ten probationers, and four scrubbers, with one extra occasionally. Six wards only are as yet opened, containing beds for 180 patients, of which 60 are Medical cases and 120 Surgical.

At the end of the winter garden, and opposite to the nurse house, is a very handsome chapel, in perfect keeping with the general architectural features of the Hospital, and liberally furnished and decorated by several generous benefactors.

From the northern flank of the central quadrangle branch out three pavilions; and from the southern flank, two. The central space in the last-named side is occupied by the grand staircase and central corridor leading from the south entrance. Behind the top of this staircase, and over a portion of the central corridor, is the operating theatre, upon which, both as to its lighting and general arrangement, our Surgeons have expended much careful consideration. The pavilions are of two stories, and one ward only occupies the entire length of a pavilion. We have placed our wards one above another, though quite prepared to admit that Hospitals of one story possess many advantages. The non-transmission of Hospital atmosphere from one story to another is the main advantage realised in these erections. With the perfect ventilation which we have secured, and with our spacious staircases, the objection is reduced to its minimum of force; and various reasons, economical and otherwise, might be adduced in justification of this selection. In fever Hospitals, particularly, single stories have still stronger claims for adoption; and I do not hesitate to affirm that in the neighbouring town of Bradford there is now in course of erection the most perfectly designed Hospital of this class in the country. In the new portion of the Oxford Hospital the same principle is adopted; and I do not doubt that our friends who practise there will find many palpable advantages in a single-storied building. It must be remembered, however, that this principle is only applicable in the case of small numbers; the expense both of construction and of maintenance will forbid its adoption in the larger Hospitals.

The exact measurements of our wards are as follows:—

	Beds.	Height. ft. in.	Length. ft.	Width. ft. in.	Cubic feet per bed.	Area per bed, sq. ft.
Upper South	32	19 0	122	27 6	1992	104
Lower South	32	16 6	122	27 6	1870	104
Upper North	28	19 0	112	27 6	2555	108
Lower North	28	16 6	112	27 6	1782	108

In our ward construction another prominent feature of our plan is manifested—large wards are preferred to numerous small ones, mainly on the following grounds:—1. They are more easily ventilated. 2. They are more effectually and more economically administered. First, then, nothing is easier than to ventilate a small ward, either by natural or by artificial means, no regard being had to the strength of current you employ, or, in other words, to the draughts to which the inmates are continually subjected. But, when the comfort and safety of the occupant are studied, in the gradual and almost insensible introduction of fresh air, the angles and higher portions of the apartment are not affected; air stagnates in them, and gradually contaminates the whole. It becomes, therefore, important that angles and corner spaces should bear as small a proportion as possible to the entire cubic contents of the ward; and this is most readily secured in large wards. In these, when windows are opposite, not too widely separated, and capable of being sufficiently opened, the most perfect ventilation may be kept up without any undue disturbance of the atmosphere of the ward by currents or draughts. I should not recommend a wider space between the windows than thirty feet; and even a somewhat smaller measurement may be allowed, as in our own Hospital, with advantage. Beyond thirty feet it has been satisfactorily proved that, between opposite windows, natural ventilation will not carry, save under exceptional circumstances; and, if a wider ward be adopted, some artificial method of ventilation must be employed. If, as is desirable, the head of the bed stand a short distance from the wall, and with the ordinary length of bed, ample breadth of central passage is secured to permit other requisite ward furniture to be arranged conveniently. The height of the wards is a more important element than at first sight appears. From sixteen to twenty feet may be mentioned as appropriate to wards of 120 to 130 feet in length, and of a breadth of about 30 feet. This affords an ample floor area for each bed. I cannot help regarding the wards of the Bordeaux Hospital as much in excess in regard to height, being, as before stated, thirty feet high. I should fear difficulties arising from this height in the ventilation of the upper portion of the ward. The most striking instance of excess in this direction that I know is in the Hospital at Ghent. There I found an old church, or monastic hall, converted into a Hospital, consisting of one large ward. Its dome-like roof, at first sight, makes a strong impression on the visitor, in the belief that each bed must have a very large cubic space; yet, when he finds, in order to compensate for this, the beds crowded together so closely that purity of atmosphere cannot possibly be maintained, the illusion vanishes. This defect is further aggravated by the beds being divided from each other by high wooden partitions, constituting closed boxes, which cannot possibly be ventilated. I dwell particularly on this illustration in order fully to assert the equal importance of area with cubic space in ward-construction.

In the second place, large wards are more efficiently and economically administered. This question is altogether distinct from the force required to nurse a ward large or small. It will not be disputed that whoever is responsible for the management of a given number of patients must have constantly under her eye the entire area of her work. This cannot be the case if 28, 30, or 40 patients be distributed in four or six wards; and, allowing for waste of force in simply passing from one room to another, more subordinates will be needed when the patients are thus placed in several wards. It is pretty well understood that one head-nurse may properly carry out the care and oversight of from thirty to forty patients. And wards of this size, on this account, amongst many others, should be generally preferred; and, though I would not assert that small wards can altogether be dispensed with, their use should, for efficient management, be reduced to a minimum. A light screen, placed around the bed, will, in many instances, secure all the needful quiet and privacy required, and thus answer most of the intentions of a small ward. If these arguments are admitted to have the force which much thought and inquiry have given them in my mind, I need not refer to the difficulties which will embarrass Professional teaching in small wards and other minor objections which might be raised against their general adoption. I am aware, however, that some few cases, such as delirium tremens and certain cases of diseases of the eye, imperatively demand separation; and no well-arranged Hospital should be entirely without smaller wards.

The large amount of window-space in this and in all modern structures affords a striking and advantageous contrast with those of earlier construction. The more correct principles now recognised call for a freer admission both of air and of light. Vigour of growth and perfection of structure and function are in the animal, as in the vegetable, economy associated with the presence of light; and though there may be a few cases elsewhere instanced which require its exclusion, many more benefit by its abundant admission. Cheerfulness of the patients is a material element in their successful treatment, and this cannot be expected in a dark and gloomy ward. Moreover, the error, if it can be so denominated, is in the right direction. It is very easy to moderate exuberance of light on the few days when, in our gloomy climate, it will be complained of; but we cannot, by any contrivance, improve its opposite, when due to faulty construction and insufficient window-space. There are eight windows on each side of the southern, and seven upon each side of the northern, wards, and one large window at the end of each. These are all divided by mullions, and so contrived as to admit of opening and shutting as the need for ventilation demands. The side ones reach from about three feet above the floor to within one or less than one foot from the ceiling. They are opened on the hopper principle, rebated together at the closing points, each set being joined to a weigh-bar by levers and connecting links. There is a toothed segment on the centre of each weigh-bar, which is acted on by a worm-wheel fixed on a vertical rod or tube. This rod and the tubes are arranged on the telescope principle, and are carried on the centre mullion, the moving part being brought down to the sill level, so that each or any one of the tiers of lights can be opened to the required extent, and are held there by the screw. For this ingenious contrivance, which regulates the opening and closing of the windows, we are indebted to the Chairman of the Building Committee, Mr. Kitson, who has kindly favoured me with the above graphic description of its mechanism. I gladly avail myself of this opportunity of saying how much the charity has benefited from his unwearying attention to its

interests during the entire period of the erection, and from the many intelligent suggestions he has afforded in every department. In addition to these freely opening windows, there are ventilators in the ceilings communicating, by transverse channels, with the open air, on each side of the pavilion, and likewise grates, capable of being closed at will, upon the floors under the beds, for the admission of air to this frequently unventilated region. It will be seen, therefore, that we rely solely upon the open windows and these other means for ventilation. We have not adopted any suction or extractive apparatus, however simple; and the only approach to artificial ventilation will be described in speaking of the ward stoves. Foul air we get rid of by constant displacement, or dilution, through abundance of fresh air admitted, likewise by the stove chimneys. Ordinarily, likewise, the ceiling apertures should favour its escape; but I have not sufficient faith in these, believing that they are inconstant in their operation, even when aided by patented inventions. At times they admit air, at others they become the medium of its escape—the relative temperature of the outer and inner air, to a great degree, explaining the uncertainty.

So far as our experience has warranted a conclusion, the most perfect condition of ward atmosphere may be maintained with the means already adopted; and others for extraction, as by suction or other processes, for extra admission by various forms of ventilators, or for moderation of force, as by perforated zinc plates, may easily be resorted to when a conviction of their necessity arises.

Standing in the central line of the wards are two detached and open stoves, by which alone the warming of the wards is effected; they have descending flues, which pass into chimney shafts within the walls. They have been carefully constructed in every particular, and, having a large radiating surface, are well calculated to effect their purpose. By the use of hollow fire-bricks, a constant supply of warmed air flows through their perforated jackets into the wards. This is the only approach to artificial ventilation which we have entertained.

The water-closets, sinks, lavatories, and baths are situated at the terminal extremities of the wards, and their arrangement differs considerably from that of any others that I know. The angles of the ends of the wards are canted off to a form resembling a portion of an octagon, and the projecting wings, for the above-named purposes, spring diagonally from these canted corners. I regard this design as most felicitous. It establishes, with many other instances which I might adduce from the building itself, the superiority of the Gothic style for erections of this character, admitting, as it allowedly does, great latitude of adaptation. In this particular case, a striking external beauty is utilised for a positive advantage in the internal economy of the institution. In every case, a passage runs between the conveniences contained in these wings and the wards, which is thoroughly ventilated from end to end, and it is found, practically, that the ward atmosphere does not suffer from their contiguity. I have frequently observed that the portion of the wards nearest these conveniences is as free from smell as any other part.

The pavilions are approached from the cloisters of the central court by means of lofty, well-proportioned halls, having the staircase on one side, the ward-nurse's room and scullery on the other. These halls, as I before explained, should not exist in an exact specimen of pavilion Hospital. The pavilion should terminate or commence at the door of the ward, approached by an arcade or staircase. Constructed as these halls are, however, there is little chance of Hospital atmosphere, generated in the lower ward, contaminating that of the others. The floors are made of well-jointed oak, which, being waxed and dry rubbed, will yield a striking advantage over the deal washed floors of the old Hospital. There we shall, I trust, escape one of the most fertile sources of Hospital contamination. The walls are faced with Parian or Keen's so-called non-absorbent cement. Almost universal consent gives preference to this kind of wall-covering, and warrants the superiority claimed for it, on the ground of its slight absorption of malarious matter, and its capabilities for being readily cleaned. My own preference would be for polished tiles, but they cannot be efficiently jointed. The spaces between the pavilions are about seventy-three feet wide, and looking into these are day-rooms and small wards; and more of these latter are found on an upper story adjoining the pavilion staircases. Altogether, the small wards are ten in number.

The drainage has been carefully designed, running entirely outside the building, and no important outlet from the wards or other parts of the Hospital proper crosses under the building itself.

The external features of the Hospital, which may safely be pronounced of an elegant and striking character, are furnished by a free adaptation of mediæval architecture; and, amongst the architect's many and important works, will not least serve to substantiate his claim to the very highest rank in his profession. To say that he has handled his subject with consummate skill is doing little to explain the difficulties with which he had to contend. The site, previously pronounced by competent authority to be thoroughly unmanageable, he has bent to a very useful and efficient purpose, furnishing a very characteristic feature of the whole. In the form or plan of the building, whose peculiar excellence consists in the separateness of its various parts, he has, with consummate skill in the arrangement and concentration of the particular departments, secured efficient practical contiguity; so that, in the widely separated pavilions, he maintains the needful purity of atmosphere, yet keeps in view, as far as it is possible, and by the means I have already indicated, a large amount of administrative convenience.

I direct your attention to the out-patient department with considerable satisfaction. I cannot but regard this as a very important element in the operations of a charitable institution like our own; and your inspection will, I anticipate, result in a verdict running up very closely to perfection. Irrespectively of the palpable fitness of its different parts to their special uses, I find in its isolation from the rest of the Hospital a very striking feature. There can be no contamination of the Hospital atmosphere by the large numbers periodically congregated here; nor can the in-patients be, in any sense, disturbed by the noise and bustle necessarily occurring. Irrespectively of the absolute benefit to the community by out-patient work, and the field it affords for the selection of proper cases for clinical treatment and instruction, I attach a higher value, in a scientific point of view, to this part of our labours than is ordinarily given. I know that it is the fashion to deny its usefulness and to doubt the reality of the results. Notwithstanding the short time that is or can be given to the investigation of the cases treated, a very large measure of success is attained. I do not contend that, in the necessarily short examination of the individual case, a minute diagnosis can be formed; but in the first interview a general diagnosis may be arrived at, sufficiently accurate to direct successful treatment; and this, so far as the patient is concerned, is the great point. I further assert that a large proportion of these cases recover, allowing largely for phthisical and other instances of organic disease, having a necessarily fatal tendency. Of the curable cases, a very large proportion do well, and this is abundantly proved by the avidity with which our large population seek dispensary assistance. And these results are attained under circumstances confessedly most disadvantageous—the patients still dwelling in the same unhealthy locality, still breathing the same contaminated atmosphere, still subsisting on the same unnutritious or ill-cooked food, and still pursuing the same wearying and exhaustive occupation; the only difference being, so far as I can ascertain, the administration of the prescribed medicine. Now with the school of Practitioners who, as I believe unfairly, decry drugs, it is the fashion to attribute much, if not all, the patient's recovery to the rest and other altered circumstances of improved hygiene, still not hesitating to call to their aid the somewhat antiquated *vis medicatrix*, or restorative tendencies of the system. But in the instances with which I am at present dealing, it is impossible to assert the operation of these agencies in the production of the result; the sole causes capable of favourably influencing the morbid condition of the sufferer are the drugs which are introduced into his system. I am no apologist for over-drugging, but I deprecate the too prevalent weakness, which is seriously detrimental to scientific progress, of hugging too closely the shores of Scylla to avoid the perilous navigation of Charybdis. About the time when Forbes edited the *British and Foreign Medical Review*, a great mistake was made, from the effects of which we are only now recovering. The apothecaries of the previous portion of the century had, no doubt, been guilty of many errors; and the heroic sacrifice of these offenders was mistaken for a return to the true standard of scientific Medicine. Scepticism as to the efficacy of any treatment became more general, and consequently empiricism flourished. Might not the outcry raised against Physic at that time be traced to an unworthy deference to the professors of certain fashionable heresies, and a pusillanimous trimming of our sails to meet, explain, or reconcile the novel and very generally prevailing heresies with our own practice? I am old enough to remember the time, and my opinion then formed has been confirmed by the events of our Profession's subsequent history.

A careful, and I believe an impartial, estimate of the results of out-patient work which has fallen to my lot has impressed me with a firm belief in the importance of its results; and I rejoice to find that this field of inquiry, not merely for therapeutic investigations, but for the more general cultivation of scientific Medicine, is attracting serious attention. One of our most distinguished associates has recently published a most valuable work, derived, I feel I am warranted in saying, mainly from this neglected field of inquiry.(b) I am satisfied that those who can devote the time to its cultivation (and the remark applies mainly to the juniors of our Hospital staff) will reap an abundant harvest. It is merely a question of time, which being granted, equal minuteness may be attained as in any other branch of investigation; and, though the circumstances in which the out-patient is placed interfere much with the therapeutic result, it must be admitted that, when success is attained, the argument is greatly strengthened.

Fortunately, the current so long stagnant, or setting in a backward direction, has resumed its normal flow; and it should be one of the duties, and indeed the privilege, of this great Association to guide and moderate the stream in a legitimate course. Sir Thomas Watson, in his address inaugurating the Clinical Society, struck the true note of this subject when he pointed out the proper direction which Medical investigation must now take. "Certainly the greatest gap in the science of Medicine is to be found in its final and supreme stage—the stage of therapeutics. We know tolerably well what it is we have to deal with, but we do not know so well, or anything like so well, how to deal with it. We want to know distinctly what is the action of drugs, and of other outward influences, upon the bodily organs and functions; for every one now-a-days acknowledges that it is only by conducting and directing the natural forces of the body that we can reasonably hope to govern and guide its diseased actions. To me it has been a life-long wonder how vaguely, how ignorantly, and how rashly drugs are often prescribed."

Our own Association has already done no mean service in its recently completed inquiry into the action of mercury; and although its negative results have not satisfied those who have a firm reliance on the effects of the mineral in legitimate practice, yet, as an investigation simply, it has very high claims on our approval. It needs, no doubt, as many strongly feel, a supplementary inquiry, consisting of an extensive series of carefully conducted clinical experiments. The canine functions are not sufficiently analogous with the human to secure undoubting trust; and the morbid conditions induced in the experiments are felt by all as a bar to implicit reliance. Still, the investigation stands a high credit to our Association, and particularly to those members who so laboriously conducted it; and, as a step in the right direction, and as a stimulus to others to follow in the track, its importance cannot be overrated. I trust it will be by no means the last therapeutic inquiry which our Association will inaugurate or aid. That a portion of our funds may be legitimately devoted to these purposes, is to me more than clear; and I trust, without abating one atom of our support to those objects which we are already prosecuting (I refer here more particularly to the Journal), we shall not neglect or set aside this duty. Our treasurer may permit us, in an improved condition of our finances, to devote no mean sum to the aid of those who are willing to give themselves to these the most pressing necessities of the day. Much, no doubt, has likewise been accomplished through the praiseworthy labours of Drs. Anstie and Lawson, in their enlightened attempt to put this line of investigation upon its proper track. Albeit somewhat over-sensitive to avoid the stigma of patronising drugs, so long as their labours are sustained to the level to which they have hitherto risen, they will command the support and gratitude of our Profession, and contribute largely to some of those important results which I am confidently anticipating from the present direction of inquiry.

No doubt perfection is attained by elevating therapeutic agents from the class of empirical specifics to that of rational remedies; by this, I mean when the known chemical or physiological effect distinctly or approximately explains the therapeutic result. In explanation of my meaning, I would refer to three drugs whose recent more general employment has rested upon these inquiries, or upon the warm discussions which have arisen in regard to them. Their effects in the removal of symptom or disease may fairly be explained by their known chemical or physiological effects, so far as our physiological or chemical knowledge enables us to trace the action of the remedies. It is sufficient for my purpose if they indicate the line of my argument, that a decided step is being made in a forward direction; and though I would not assert that the explanation is invariably perfect, it does not follow that the therapeutist is to blame.

The effect of sulphurous acid and the sulphites in directly checking the formation of all matters characterised by the presence of vegetable organisms, thus removing the symptoms, and it may be modifying the morbid condition in which these organisms originate, as seen in pyrosis and the vomiting of sarcinæ, and their much more extensive applicability which has been advocated by Polli, Lawson, and others forms the first illustration I employ.

I next notice the interesting extension of the use of ergot of rye, founded on its action on the gravid uterus, to the treatment of hæmoptysis and other forms of hæmorrhage, for the efficacy of which my own experience affords abundant warranty. "We may regard the effect of ergot of rye on the parturient uterus as exemplifying, on a very large scale, its principal physiological action, which is its power of exciting contraction of involuntary or unstriped muscular fibre. This variety of muscular fibre we have existing in various parts; and, what I believe is especially important to remember, in the middle coats of arteries. It is probable, I think, that the ergot of rye affects the muscular fibre, found in every one of these structures, in a greater or less degree." So speaks Dr. Meadows, in a highly suggestive paper in the *Practitioner*, and he quotes Brown-Séquard's authority for its use, in all cases of affection of the central nervous system in which it is desirable to diminish the quantity of blood by promoting, I presume, the contraction of these fibres of the vascular coat. To this influence I have attributed its marked effect in a variety of hæmorrhages from lungs, stomach, bowels, bladder, and urinary passages, in which I have somewhat extensively employed it.

The third illustration I shall give you is the now, through continued controversy, well-known alkaline treatment of acute rheumatism, which, by Fuller, Garrod, and Dickinson, and by hundreds of others who have followed more or less exactly in their wake, is proved to have the strongest claim to our consideration both through the statistics advanced by all, but particularly by the last-named of these gentlemen, and also through the scientific explanation which the action admits. In comparison with this plan, and relying upon these, to me, convincing statements, backed by a personal pursuit of the practice for many years, the expectant treatment utterly fails, and the severe blow thus aimed at enlightened medication falls harmless.

That such views will, through these and other agencies, be further established, I entertain the fullest confidence. The method of subcutaneous injection, now universally accepted in reference to some drugs, will find a much wider field of applicability, and, in the greater simplicity of results thus afforded, will tend most effectually to support the opinions I have long entertained. Time will not allow me to prosecute this part of my subject further; but, in reference to this method of medication, I would venture to make one suggestion, which the wreck of many a fair proposal that I have in my experience witnessed warrants me in urging. Do not let us, by a too enthusiastic and indiscriminating employment of the plan, damage its reputation, before we have made ourselves acquainted with its entire claims to our confidence.

No town Hospital will hereafter be considered completely fitted for the discharge of its beneficent functions, unless there be associated with it a convalescent establishment at some distance in a country situation. Hither the recovering patients may be regularly transferred at once to make way for other admissions, and more rapidly to accomplish their own restoration. Convalescent Hospitals may be of two kinds. Some are purely and properly so, depending solely for their results on the renovating influences of purer air. The protracted rest for the patient, recently treated in the town Hospital, in whom the turn to convalescence has been thoroughly established, but who is not yet qualified to face the duties of his everyday life, constitutes another of the advantages afforded by these establishments. The second class is made up of those institutions where it is proposed to supplement the efforts of the Hospital Practitioners by the use of mineral and other baths, or by the internal administration of various medicinal waters.

We are fortunately so circumstanced, that, within comparatively easy distance, we have the justly celebrated springs of Harrogate and Buxton, both highly curative of many internal and external maladies. At Ilkley, in its pure waters and exquisite mountain air, we possess a second Malvern—in no way inferior to its type, in the renovating results produced

(b) "On Chronic Bronchitis, especially as connected with Gout, Emphysema, and Disease of the Heart." By E. H. Greenhow, M.D. London.

upon various forms of ailment. At each of these there are Hospitals for the reception of the poor; and at Scarborough and Coatham we have marine infirmaries, perfectly available for our many purposes. These latter institutions, it has been said, might have rendered unnecessary the establishment of special convalescent Hospitals; but the function of the one class will not be interfered with by the existence of the other; abundant claimants will ever appear for all the accommodation which these, in their separate departments, can afford. Of the former class, we have for some time had a temporary Hospital open, which will now be transferred to a larger and more extensive establishment recently completed. This has been erected within a short distance of the town, in a very healthy locality, at the sole expense of one of our distinguished fellow-townsmen, and by him dedicated to public use. It is constructed to accommodate one hundred convalescents, and is supplied, so far as I can understand, with every necessary appliance. The honest Hospital patient desires as speedy a return as possible to his remunerative toil; and many, no doubt, are tempted, under the pressure of family necessities, too soon to make the effort. Before the sequelæ of disease are thoroughly eradicated, or the consequent debility entirely recovered from, over-exertion favours relapse, or prevents the complete restoration of physical power. It may be that the premature return to the badly ventilated workshop, where our artisan patient endeavours to provide for the wants of those depending upon him for daily sustenance, or to the deteriorated atmosphere of his confined dwelling, in which he vainly seeks the renovation of his exhausted powers, tends to rekindle the scarcely extinguished embers of disease.

To all these evils the Convalescent Hospital or the Watering-place Infirmary affords an efficient and ready remedy; and, when fairly and honestly adopted, it yields to the community, whether giver or receiver, an unmixed good. But we must not shut our eyes to the fact that we have another and very different class of our Hospital population to deal with. All charitable institutions are liable to abuse, and none of these so much or so detrimentally, in my opinion, as the Convalescent Hospital proper. Care must be taken that the malingerer does not establish his residence; and with equal vigilance the incurable must be excluded. These, if allowed facile admission, will completely destroy the usefulness which these very valuable institutions are capable of exercising, and convert into a crying abuse the otherwise beneficent agency of these adjuvant asylums.

Wherever convalescent establishments are erected for their special purposes, they should be constructed on a plan as little resembling the regular Hospital as possible. The reasons warranting this are obvious. I cannot, however, endorse the directions of Miss Nightingale that, in convalescent Hospitals, the requisites for ventilation, and, to a very large extent, the abundant space established as necessary in regular Hospital construction, should be, or may be, disregarded. I do not assert that the same cubic space and superficial area are equally needful for the convalescent as for the invalid; but a large difference cannot, in my opinion, be safely made. If small wards in Hospitals are objectionable on the ground of difficulty of ventilation, and if curtains are likewise undesirable for the same reason, I see no excuse for their adoption in convalescent Hospitals; and I am glad to find that, in the new institution to which I have referred, the mistaken views to which I have alluded have been discarded. Houses of this description may be erected, which will suggest very little association to the mind of the convalescent with the painful memories of the Hospital which he has recently quitted; but, in attaining this most salutary result, we need not thoroughly abandon those principles for which we have contended as essential in the construction of the regular Hospital, and which, I believe, cannot be safely disregarded in designing these kindred establishments.

I had originally intended to make some further remarks on the cost of erection of these Hospitals. Time, however, forbids me to enter on it. The strict limit as to the duration of these addresses, which I am commissioned by our executive to enforce, necessitates my careful observance of the rule. I will therefore only add that if, by this introductory opening of the subject, I have in any way facilitated its more complete discussion on the day devoted to it, the object I have had in view will have been accomplished.

Dr. Beatty (Dublin), at the termination of Dr. Chadwick's address, proposed, in very eulogistic terms, that the thanks of the Association be given to Dr. Acland for his valuable services as President for the past year, and that he be elected a perpetual Vice-President of the Association. (Applause.)

Dr. Thomas Smith (Cheltenham, formerly of Leeds) and Mr. Wm. Hey (Leeds) supported the proposition, which was carried unanimously.

Dr. Acland acknowledged the vote.

Dr. Chadwick then intimated that he had just received a message which he was afraid would necessitate him going to a distance immediately, and he feared, from the nature of the message, that he would not be able to attend any more of the meetings of the Association. Dr. Sibson would kindly occupy his place.

Dr. Sibson having taken the chair on the President leaving the platform,

Mr. T. Watkin Williams, the general secretary, read the Council's report:—

REPORT OF THE COUNCIL, 1869.

The Council look forward with pleasure to the assembling, at Leeds, of the thirty-seventh annual meeting of the Association, under the presidency of Dr. Chadwick.

The great meetings of Dublin and Oxford, presided over respectively by Dr. Stokes and Dr. Acland, taken together, form an important epoch in the history of the Association.

The Council feel that the transition from these seats of learning to Leeds, the great centre of one of the largest fields of industry in England, will lead to results not less important to the vital growth of the Association. That meeting, to which so many are looking forward with interest, will bring the Association again into contact with the most active forms of human life; and present to them, on the spot, the effects upon health of a large assemblage of men engaged in manual pursuits requiring both skill and exhausting labour.

The Council have taken advantage of the opportunity afforded by the erection and recent occupation of the new Infirmary at Leeds, to bring before the Association, at its annual meeting, the question of Hospital construction, which will be introduced, more especially in its Medical aspects, by the future President, Dr. Chadwick, in his opening address. Captain Douglas Galton, C.B., on the invitation of the President-elect and Council, has undertaken to give an address, with a view to a subsequent discussion, on the proper construction of Hospitals. Captain Galton is peculiarly fitted to occupy this position, for he was a member of the Barrack and Hospital Improvement Committee, and to him the country is indebted for the plans of the Herbert Hospital, which has served as a model for many similar institutions of more recent erection.

The Council are able again to report a considerable increase in the number of members of the Association. In the year 1868 there were 3702 members, of whom 73 have died, and 104 resigned, and 39 have been removed for non-payment of subscriptions. At the present time the number of members amounts to 4005.

The Treasurer's statement, audited by Mr. Church, of Bath, and Dr. E. L. Fox, of Clifton, which has been published in the Journal, is appended to this report.

Hastings Prize.—Your Council regret to have to report that there are no competitors for the Hastings prize this year.

The Committee of Council have held their usual quarterly meetings, and one additional. It will be the duty of the new Council to elect a successor to Dr. Sibson, whose presidency of the Council expires at this meeting.

The committee appointed at the last annual meeting for the purpose of promoting the direct representation of the Profession in the Medical Council, have issued an address to members of the Legislature and the general public, which has appeared in the Journal, and been circulated among the several branches of the Association, along with a form of petition to the House of Commons. On July 12, a deputation, accompanied by a large number of members of Parliament, and consisting of many members of the Association from various parts of the kingdom, was received by the Earl de Grey and Ripon, Lord-President of the Council, with whom was associated the Right Honourable William Edward Forster, Vice-President of the Privy Council. The views of the Association with regard to this important question, and the advantages that may be looked for from its adoption, were explained and illustrated by the Chairman of the Committee, Dr. Edward Waters, by the President of the Council, Dr. Sibson, and by the President-elect, Dr. Chadwick. The deputation was courteously received, and the arguments put forward in favour of the direct representation of the Profession in the Medical Council were listened to by the Lord-President and the Vice-President with marked attention, and the assurance was given by his Lordship that the statements submitted to them should receive every consideration. Your Council have viewed with satisfaction the adoption by the Medical Council of the principle of direct representation of the Profession in that Council, by the following resolution passed at their last session:—"That the Council are of opinion that, if the Legislature should think proper to invest the Council with extended powers and fresh duties, by which the Profession would be brought more under the direct influence of the Council, then in that case the Profession at large should have a more direct influence in the appointment of members of the Council."

Your Council are disposed to believe that this interview will not be without its fruits, and they trust that the Medical Council will be remodelled so as to embrace within itself members sent by the Profession, as well as those elected by the corporations and universities and those nominated by the Crown.

The Council look forward with confidence to the speedy attainment of a high standard of preliminary education, of one examining board for the admission of members into the Medical Profession in each part of the kingdom, and of thoroughly practical and clinical examinations.

These examinations can be properly conducted only under the eye of a body composed of Medical men, who are familiar with every want of the Medical Profession.

There is reason to surmise that a serious proposal is about to be made to do away with the present Medical Council, and to substitute for it a Government Council, constituted mainly of men who are not members of the Medical Profession, and a Government board of examiners.

The Council affirm with confidence that members of our great Profession will never permit Medical education to be withdrawn from their own supervision, and given over to a body of men exclusively appointed by the Government. Medicine, like the Law and the Church, will ever retain the direction of its own education and the control of its own examinations.

The Committee on the Direct Representation of the Profession in the Medical Council will present a full report of their proceedings. Reports also will be presented by the Committee on State Medicine, the Committee for Registration of Diseases, and by the Parliamentary Committee, which will doubtless obtain the careful consideration of the Association.

The Council have to regret the resignation of the very able editor of the Journal. Arrangements have been made for carrying on the business of the Journal until the appointment of his successor, which it will be the duty of the new Committee of Council to decide on at their first meeting.

The sectional meetings have become an integral and well-organised part of the general meetings, the scientific character of which they have unquestionably raised. The various sections draw men together who are interested in a common pursuit, give an impulse to inquiries into the many imperfectly explored fields of Medical knowledge, and tend to advance Medical science. The Council are persuaded that the members will distribute themselves freely among the different sections, and convey there to each other that precious knowledge acquired at the bedside, which so many observant and able men carry about with them untold for want of the opportunity of mutual cultivation.

The branches are in a flourishing condition, and have been active in discussing scientific subjects, as well as matters connected with the general welfare of the Profession.

During the past year a new branch has been established for that portion of Gloucestershire not included in the Bath and Bristol Branch.

The Council desire to offer to the secretaries and the various officers of the branches their warm thanks, since to them is due very much of the success of the Association.

Your Council cannot allow their President to retire from the office which he has filled for the last three years without expressing their sense of the invaluable services which he has rendered to the Association by a rare devotion of time, zeal, and ability.

Your Council recommend for election as honorary members Captain Douglas Galton, R.E., C.B., and Dr. Brown-Séquard, F.R.S.

FINANCIAL STATEMENT FOR 1868.

The Treasurer of the British Medical Association in Account with the Association for 1868.

RECEIPTS.

	£	s.	d.	£	s.	d.
Subscriptions	3310	17	6			
Subscriptions, arrears	183	15	0			
				3494	12	6
Advertisements and sales				2065	19	1
Sundry and other receipts				11	5	0
				£5571	16	7

PAYMENTS.

	£	s.	d.	£	s.	d.
Journal expenses—						
Mr. Richards: Printing, stamps, postages, sundry printing, etc.	3264	4	2			
Mr. Davidson: Commission on advertisements	92	5	5			
Mr. Butcher: Commission on advertisements	163	10	0			
Mr. Orrin Smith, engraver	25	15	0			
Editor of Journal	250	0	0			
Sub-editor	50	0	0			
Contributors	802	8	1			
Dr. Henry: Salary for office work	50	0	0			
				4698	2	8
Executive expenses—						
Secretary	370	0	0			
Secretary's petty cash, branch secretaries, and collectors	78	4	0			
Clerk's salary	62	10	0			
Reporting proceedings at Oxford and anniversary expenses	32	7	0			
Stationery	16	15	0			
Sundry other expenses	18	13	5			
				578	9	5
Scientific and other grants—						
Public Health Committee	43	13	0			
Parliamentary Committee	10	0	0			
				52	13	0
Balance due to Treasurer (last year)				41	10	7
Balance in Treasurer's hands (this year)				201	0	9
				£5571	16	7

R. WILBRAHAM FALCONER, M.D., Treasurer.
WILLIAM J. CHURCH, F.R.C.S., } Auditors.
EDWARD LONG FOX, M.D., }

April 1869.

Assets, estimated, December 31, 1868	£1672	0	0
Liabilities	1506	0	0
Excess of estimated assets beyond amount of liabilities	£166	0	0

Dr. RAMSEY proposed that the report of the Council be adopted.

Dr. GRIFFITH seconded the motion.

Dr. DAVEY expressed his satisfaction with the statement that there was a balance in hand, but took occasion to discuss the reasons why so many gentlemen had retired from their membership, and to criticise the expenses connected with the management of the Journal of the Association.

Dr. R. WILBRAHAM FALCONER, the treasurer, having replied to a question put by Dr. Seaton (Sunbury) with regard to the editorial expenses of the Journal, a discussion took place, in which the speakers were Dr. Lingen, Dr. Stewart (London), Dr. Webster (Dulwich), and Mr. Nunneley (Leeds).

The CHAIRMAN, in submitting the resolution to the vote, expressed his opinion that the time occupied in the discussion had not been lost. The motion was agreed to unanimously.

Dr. FALCONER then proposed, and Mr. WHEELHOUSE (Leeds) seconded, that Captain Galton, C.B., of the Royal Engineers, and Dr. Brown-Séquard, be elected honorary members of the Association, and the motion was agreed to.

Mr. HUSBAND (York) moved, and Dr. FALCONER seconded the reappointment of Mr. T. Watkin Williams as general secretary.—In reply to Dr. Bell, Dr. FALCONER stated that at a meeting of the finance sub-committee that morning it had been resolved that in the event of the present general secretary being re-elected, his salary be fixed at £300 per annum, but in the event of Mr. Williams declining to accept the appointment, they recommended that the election of general secretary be suspended until an inquiry had been made to ascertain if it was possible to secure more efficiency in the secretariat and the management of the Journal. Mr. Williams had agreed to be re-elected.—An animated discussion followed, Dr. BELL, Mr. CLAYTON (Birmingham), Dr. GIBBON, Mr. NUNNELEY, Dr. WEBSTER taking part therein. The proposition was carried.

Mr. CLAYTON (Birmingham) proposed, and Mr. NUNNELEY seconded, that the auditors, Mr. Church and Dr. Fox, be re-elected.—Agreed to.

Mr. WILLIAMS next read the report of the Medical Benevolent Fund, which stated that during the year 106 cases of distress had been relieved by grants varying from £5 to £20, the total amount thus expended being £855. The number of annuitants at present was twenty-seven, seven having died during the year. Two new ones only had been elected, the present rate of interest on the annuity fund being low. It was to be hoped that the committee would soon be able to proceed to the election of others, as the candidates were numerous, and many of them were in the most distressed circumstances. Dr. Broadbent, who had held the office of honorary secretary since 1864, had resigned, and the committee recommended as his successor Mr. Stamford Foster, who had kindly offered his services. Dr. HARE (London) proposed the adoption of the report. The resolution was seconded by Mr. BARTON, and after Mr. NUNNELEY had pointed out that the members of the Medical Profession in this district had contributed largely for purposes similar to those for which the fund had been established, it was agreed to.

Dr. DAVEY (Bristol) proposed an alteration in the eighth law, the effect of which would be to place twenty elected members on the Committee of Council instead of ten.

Dr. SEATON having seconded the proposition,

Dr. RICHARDSON moved as an amendment to the effect that a committee be formed to consider whether or not an entire alteration should take place with regard to the constitution of the Committee of Council.

Dr. GIBBON (London) seconded the amendment.

Mr. Husband, Dr. Stewart, and Mr. Heslop having spoken,

Sir WILLIAM JENNER appealed to Dr. Richardson to withdraw so stupendous a proposition as the amendment he had moved, but that gentleman declined. Both amendment and resolution were rejected.

The Rev. Dr. Bell and Dr. Arthur Leared then drew attention to various matters affecting the Association, and the proceedings did not terminate until twelve o'clock.

On Wednesday the chief business of the day was the

ADDRESS IN MEDICINE.

By Sir WILLIAM JENNER, Bart., M.D., F.R.S.,
Physician in Ordinary to Her Majesty the Queen.

Gentlemen,—There are special occasions when it is well for a man to review his mental progress, points in his life at which he does well—nay, is bound—to look back over the road he has travelled, to count his gains, the difficulties he has overcome, the advances he has made, and so be cheered in his present labours and stimulated to new efforts, gathering from the retrospect good hope for the years to come. The same is true of a profession. Its members should from time to time look back to their earlier days, scan the advances their profession has made, compare what it is now with what it was then, and weigh with unprejudiced eye the worth of its reputed progress.

Advances in practical sciences are not mere changes in ideas or in the modes of expression, which may, as in regard of religion, indicate greater enlightenment of mind; but they are advances in knowledge, the addition to the science of new facts, the elimination of supposed facts, the more correct appreciation of the bearing of old facts, and the application of this new knowledge to the advancement of the practical objects of the science.

There are special reasons why the members of our Profession —Practitioners of Medicine—should from time to time sum up the gains Medicine has been making as a practical art, for in the daily practice of our Profession so much is necessarily met to damp our spirits; so many cases in which diagnosis, in the

present state of our art, is altogether impossible, or at the best doubtful; so many in which the practical difficulties in the way of diagnosis, though the art be perfect, are insuperable; so many in which, the diagnosis being clear, we know that we are impotent to cure; so many in regard of which our apparently well-founded expectations of effecting a cure prove vain, that even the most hopefully minded must now and then be tempted to doubt if Medicine be really advancing as a practical art.

Again, the spirits of many have been damped by the idea that modern advances in the science of Medicine have led to scepticism in regard of the remedial powers of Medicine as an art, and especially as to the remedial power of drugs. "I trust you will not cast doubts on the efficacy of medicines," said a distinguished member of our Profession, speaking to me of this address. "They do not believe much in the worth of drugs at this Hospital," wrote a reporter to one of the Medical journals. Now, for myself, I desire to absolutely repudiate scepticism in regard of Medicine. I believe as confidently in the power of Physicians to treat disease successfully as I did when clinical clerk to one of the first practical Physicians of my youth. Extended knowledge and accumulated experience have only increased my confidence in the remedial powers of our art. Nor do I believe that others, on whom the imputation of scepticism has been cast, are less firm believers than myself in the value of treatment.

Modern research has shown that a large number of acute diseases occurring in previously sound persons have a tendency to terminate in the restoration of health, even though no drug be given. This is fact—knowledge—not scepticism. Again, modern observation has shown that certain acute diseases, formerly supposed of indefinite duration, run a definite course, *i. e.*, end spontaneously at a certain date from their outset, and therefore that conclusions as to the efficacy of drugs to cut short these diseases—conclusions drawn before their definite duration was known—were founded on false premises, and consequently are not trustworthy. All this is surely fact—knowledge—not scepticism.

Again, advances in knowledge have frequently been attended by a more correct appreciation of the mode of action of drugs; and the expression of this has not unfrequently, though most erroneously, been taken as evidence of scepticism. Thus, if I believe that saline aperients do not act as formerly I supposed they did—viz., by increasing the escape of watery matter from the radicles of the portal vein—I am not in the least shaken in my belief that the symptoms which I attribute to over-distension of the portal vein are relieved by their action, or that their action is followed by the disappearance of watery fluid from the peritoneal cavity and from the cellular tissue.

Again, if it should be considered as proved by experiment on dogs that mercurials do not produce increased secretion of bile in man, it would not in the least throw doubt on the established facts in regard of the great flow of a yellow and green-coloured fluid from the bowel after the administration of a mercurial to man, and the relief to many distressing symptoms which follows. A man's bilious headache, as it is termed, would be none the less certainly cured by a mercurial, even though it should be shown to the satisfaction of the whole Profession that mercury does not increase the secreting power of the liver. Our modes of explaining certain facts in curative Medicine would be changed, but not the facts themselves. My conviction, then, is that, although with regard to the virtues of this or of that particular drug, and to the mode of action of this or of that particular class of remedies, there is, no doubt, and always will be, differences of opinion—the evidence that satisfies A. being insufficient, from the constitution of his mind, to satisfy B. With regard to the value of drugs in the abstract, with regard to the value of treatment, there is really little difference of opinion among Physicians equally well informed as to the present state of Medical knowledge and equally experienced in practice. When I say among men equally well informed, let me illustrate my meaning. I was one of three who met in consultation concerning a case of apoplexy. In the opinion of one of my colleagues and myself, the only treatment to be adopted was as follows:—To place the patient in the recumbent position, with head and shoulders raised; to enforce absolute rest; to keep the bowels so far loose as to prevent excitement and straining; to apply cooling substances to the head in the event of any heat of the part occurring; to support the patient with light nutritive food, having regard to his habits. The third gentleman protested against the modern system of doing nothing; he was anxious to bleed, to purge, to blister; and, when opposed, was not sparing of the term "sceptic," etc. Now, the difference of opinion in this case was not due to scepticism on one side, and faith—*i.e.*, faith justified by knowledge—on the other, but to knowledge on the one side, and absence of knowledge on the other.

The case was one of degenerative change—retrograde metamorphosis—of the arteries; one had become so rotten that its wall had given way; its contents had escaped; a clot had formed, and, by its mechanical effects, given rise to the symptoms. The heart shared in the degenerative changes; the bleeding had ceased. To those who understood the real nature of the case, the lesions present, and the mode in which they had been produced—in short, the pathology of the case—belief in the efficacy of so-called active treatment appeared to be not merely unjustifiable faith, foundationless faith, faith without knowledge, but to be faith in opposition to knowledge, which in Medicine is the worst form of scepticism, inasmuch as it implies doubt of truth and belief in error—doubt which may prevent the saving of life, and belief which, embodied in practice, may kill.

The present appears to me to be one of those special occasions to which I have referred, when with advantage to ourselves we may look back and survey the progress which Medicine has made as a practical art in our own time—I mean during the time a large proportion of those here present have been engaged in the study and practice of their Profession. The time allotted to this address will not permit me even to enumerate the advances Medicine has made during the past twenty-five years; I shall therefore limit myself to pointing out certain great divisions into which some at least of the great practical advances of Medicine may be grouped, and to giving as briefly as possible such illustrations of its advances in each of these divisions as seem to me to be sufficient to justify this assertion—viz., that having regard to the attainment of its practical aims and objects *as an art*, no science has advanced more during the period in question than has the science of Medicine. As an art, I say; for while Medicine is universally admitted to have advanced as a science, its progress as a practical art is frequently regarded as trifling, and often even denied.

As I do not propose to enumerate all the advances of Medicine, so neither is it my intention to refer by name to those by whose labours the great advances in Medicine have been made. And with regard to all the illustrations I shall give in confirmation of the position I have taken—in fact, to all advances in Medicine as a practical science—it must be remembered that it is rarely, very rarely, if ever, that any great discovery, any great step forward, has been the direct result of the labours of a single man. All but invariably it has resulted from the successive labours of many men. And again, it must not be overlooked that, in regard of the advances of Medicine as a practical art, the silent workers render most efficient aid; the results of their unspoken experience confirming or refuting the published assertions of the few. It is to the experience of the mass of the Profession that we look for the final establishment of doctrine and of rules of practice.

In the selection I am about to make in confirmation of the statement that our science in its advance as a practical art stands second to none, I am conscious that I shall pass by some facts which others will think of greater value than those I have chosen as illustrations, and that others would prefer to illustrate the truth of the position I have taken by reference to more general and abstract principles. But I have been guided in my choice, first, by a desire to avoid disputed facts and theories; and, secondly, by a consideration of those things which have aided me the most frequently and effectually at the bedside when asking myself those two great questions which are hourly presenting themselves to the mind of the Practitioner—What is the illness of the patient?—What will do him good?

Those points have been to me of the greatest practical service when teaching the student at the bedside. It is clinical teaching that brings most closely home to a Physician the importance of every advance in our practical knowledge. By thus limiting myself, I feel that, while this address will more directly attain its object, it will be deficient in novelty and scientific interest, and so, as an address, be unworthy of its predecessors. For that I crave your pardon.

Among the really great advances in Medicine may be placed the separation of chronic degenerations from diseases. By degenerations I mean—1. Retrograde metamorphoses; passive changes as distinct from living processes, and especially granular disintegration, fatty degeneration and calcification, rotting and petrifaction; changes which may and do occur in tissues and structures removed from the body, in the bottle of the museum. 2. That change, accompanied by thickening and diminution of elasticity, which occurs in certain tissues in

advancing life. The general diffusion of these degenerations is the characteristic of advancing age. It is, in fact, old age; so much so that, if a means of preventing these changes should be discovered, that means would be the long-sought elixir of life. Rotting, petrifaction, and the special change in nutrition to which I have referred, although they occur as—so to say—natural changes in advancing life, may occur in the structures of the young, if those structures be damaged by active disease.

As illustrative of the clinical importance of these advances in our knowledge, I may refer to the modifications in our opinions and in our practice that have resulted from the application of this general knowledge to the changes that occur in special organs. Thus, our clinical knowledge, in regard of heart-disease, experienced advance with every step in our recognition of these degenerative changes. First, we became acquainted with the fatty metamorphosis of its muscular tissue—*i.e.*, the real conversion, by interchange of chemical elementary constituents, of the sarcous element of the muscle into olein, etc.—not atrophy proper, any more than is the resolution of a drop of water into hydrogen and oxygen atrophy of the water, but a real decomposition—a decomposition proper to advancing age. Then we learned the relation between this decomposition, rotting or fatty metamorphosis, and impediment to the flow of blood, to the textures of the heart; and we saw that the impediment in many cases was caused by calcification or petrifaction of the coats of the arteries. Subsequently we learned that whatever pathological conditions interfered with the nutrition of the muscular tissue favoured, to the same degree, this retrograde metamorphosis, rearrangement of chemical constituents, decomposition or rotting, which we call fatty degeneration. So we saw that mechanically induced congestion of the heart was followed first by increase in muscular tissue and power, and then by such damage to the nutrition of the old and of the newly formed muscular tissue as to be followed by rotting—*i.e.*, granular disintegration—and fatty degeneration; and thus we learned why the hypertrophied heart so often fails after a time to afford its proper physical signs, and is followed by its consequences.

Again, learning that degeneration of the special structures and tissues occurred simultaneously in particular individuals at about the same time of life, we came to the knowledge of fatty heart and rotten vessels being commonly concomitants; and our general stock of knowledge reached the level of his whose statement, when I heard it made at any early meeting of the Pathological Society, was always received with shouts of laughter—viz., that fatty heart is often a preservative lesion. It is so. For the life of an aged person is in greater danger if the walls of his arteries are decayed while his heart retains its full power, than it is if the muscular tissue of the heart is suffering decay in proportion to the loss of resisting power of the arterial walls.

Continuing the illustration from the heart, these advances in pathologico-anatomical knowledge have enabled us clinically to distinguish valvular lesions consequent on endocarditis from those degenerative changes proper to advancing age, and to attach their true significance to those secondary changes which occur in the valves of the heart of the young, the structure of which is damaged by acute inflammation.

We have attained to this practical conclusion—viz., that, regarded from a clinical point of view, structural changes in the valves of the heart are referable to one of three causes—imperfection in development, acute endocarditis, degenerative changes. And yet further advance of clinical knowledge has shown that non-fatal acute endocarditis is almost limited to acute rheumatism; and that degenerative changes, sufficient in degree to interfere with function, do not occur in the valves of the heart till middle life, and rarely till advancing middle life.

The importance of these facts in enabling us to estimate the clinical value of special valvular murmurs is evident. The influence the acquisition of this knowledge has exerted on practice is well illustrated by reference to a paper in the sixth volume of the *Transactions* of this Society. In having regard to their clinical significance, the active inflammatory nature of these degenerative lesions of the valves of the heart is regarded as indisputable, and special treatment, in accordance with that opinion, is advocated. Again, the knowledge we have gained of these degenerative changes has enabled us to appreciate at their real worth—to attach to them their true pathological significance, and, by so doing, to influence diagnosis, prognosis, and treatment—those changes in cerebral textures which follow on degeneration of the coats of the arteries and capillaries; to appreciate clinically the importance and signs of those changes in the coats of the larger arteries, which, circumscribed and considerable, by the diminution of elasticity and contractility they necessitate, lead to local dilatations—*i.e.*, aneurisms—and to comprehend why aneurisms of the arteries of the trunk and extremity do not occur spontaneously in childhood or youth, why they are so often the concomitants of early, though advancing, age, and so rarely commence in old age.

A second great advance in Medicine has resulted from the knowledge that elevation of the temperature of the body generally is the only evidence of the existence of pyrexia—of fever in the abstract; that if there be no elevation of temperature there is no fever; and that the only mode of practically determining the existence of elevation of temperature, and of estimating its degree, is by the use of the thermometer. Although great elevation of temperature may be determined by the hand of the observer, yet there may be very decided elevation of temperature without the hand detecting it. And, certainly, the hand of the ordinary observer gives no correct idea of the degree of elevation. The indexed thermometer ranks in importance with the stethoscope.

I will illustrate the value to us as Practitioners of this advance in our knowledge in regard to diagnosis by reference to its value in the diagnosis of these common diseases.

There is a form of typhoid fever, with which we are all familiar, that has been termed latent typhoid fever—a form in which the patient is, from the commencement to the termination of the disease, able to walk about, and even to follow his ordinary occupations. This is a form of the disease in which the patient not very infrequently dies from perforation of his bowel, or from intestinal hæmorrhage, even though, as is usual, the evidence of bowel-irritation has been trifling. The diagnosis of this practically important variety of typhoid fever is often all but impossible without the use of the thermometer; with its aid, it is comparatively, and it may be absolutely, easy. The thermometer, in this case, enables the Practitioner not only to satisfy himself, but also to satisfy the patient and his friends that he is really ill—that he is the subject of fever, and not merely out of sorts, poorly. Accuracy in our diagnosis, in this class of cases, is all-important; for by it we are led to avoid the treatment which some of the symptoms may seem to demand—treatment which, perchance, may lead, as it often has led, to a fatal result; while, by the ocular demonstration of the existence of the fever which we can give to the patient, we can induce him to take those hygienic precautions so important for his safe passage through the ailment. How often have we all known, in times past, a drastic purge administered by the Physician to remove the disordered secretions, and injudicious diet taken by the patient to remove the weakness, lead to death.

A second illustration of the value of the thermometer as an aid in diagnosis is afforded by cases of acute deposit of tubercle. This is a disease the diagnosis of which before the use of the thermometer was often impossible. Now, by a consideration of the continuous elevation of temperature—the degree of elevation and the alternations in the degree of elevation—the diagnosis can be made with comparative facility. A third illustration is afforded by the aid the thermometer gives in the differential diagnosis of pneumonia and tubercular pneumonia.

So much in illustration of its value to diagnosis; but the thermometer also affords more valuable aid in prognosis—for example, in typhus fever, typhoid fever, pneumonia, and acute rheumatism—and it gives valuable aid in determining the propriety of the treatment pursued in special cases. A third great advance in our practical knowledge has resulted from the appreciation of the influences of various mechanical consequences of primary diseases.

I may illustrate our advances in this kind of knowledge by the following:—When speaking of the distinction which modern clinical Medicine draws between inflammatory and degenerative changes in the valves of the heart, I might have referred to the fact that both have a common effect—viz. roughening of the margin of the valves. By this roughened surface fibrine is mechanically separated from the circulating blood—whipped out of it—and to the presence of this fibrine on the valve the greater part of the post-mortem visible abnormity is due. Formerly all this fibrine mechanically whipped on to the valve was supposed to be directly exuded as the result of endocarditis. Again, portions of this fibrine are frequently detached mechanically—*i.e.*, carried away by the current and arrested here and there in the substance of organs or in the larger vessels leading to or to parts of organs. Some of the effects of rheumatism figured in Rayer's great work are now known to be capillary embolism; while many cases of paralysis which were not long since altogether inexplicable are now matters of everyday knowledge to the student, and their relation to embolism, to the washing of portions of fibrine from the valves of the heart and its

arrest in one of the arteries of the brain, is matter of demonstration. Late observations have even rendered it probable that, in a certain proportion of cases at least, that remarkable combination of symptoms to which we give the name aphasia is due to this variety of embolism.

Another illustration of our advance in practical knowledge in this direction—*i.e.*, of the mechanical origin and consequences of special diseased states—is afforded by a consideration of a cause of death after tracheotomy in diphtheria. The patient, after the opening of the trachea, frequently, as is well known, suffers from disseminated lobular pneumonia; while the trachea may be opened in other conditions without any such result. The lobular pneumonia under the conditions referred to is due to inhalation into the capillary bronchi and air-cells of disintegrated diphtheritic exudation from the larynx, and the mechanical difficulty to its expulsion resulting from the opening into the trachea, and thus mechanically are established numerous centres of diseased action. This knowledge modifies practice most materially, and tends much to the saving of life.

Another class of diseases, in the practical acquaintance with which we have made great progress during the past few years, is that due to fluid blood-poisons—pyæmia, septicæmia, ichorhæmia, and the allied conditions. In illustration, I may refer to three common diseases, respecting which our advance in knowledge in this direction has a marked influence, not only in enabling us to give an explanation of common secondary affections, but also in regulating treatment.

It is now part of our daily clinical knowledge that a very large proportion of the fatal cases of typhoid fever are fatal, not from the severity of the original disease, not from the direct secondary consequences of the original disease, but from the effects of absorption of decayed matter from the ulcerated surfaces of the intestine, and the blood-condition—septicæmia—resulting. From this follow secondary pneumonia, nephritis, hepatitis, etc. The practical conclusion is that one great point in treatment is to prevent this absorption by the use of remedies calculated to destroy the fœtid intestinal contents.

Again, in determining a fatal result in scarlatina, septicæmia often plays a most important part. Absorption from the ulcerated surface of the throat leads to great enlargement of the lymphatic glands about the angle of the jaw, and then to general infection. The same is true in regard of diphtheria. The practical conclusion here is that one object in treatment is to destroy the absorbing surface (often quite practicable in scarlet fever), and to destroy fœtid matters by the use of antiseptics to the pharynx.

Among our advances in the same direction—that is, of the effects of the fluid blood-poisons, and ther consequences—should perhaps be classed those great strides forward in practical knowledge which have followed on our study of Bright's disease, its relation to local inflammations, to cerebral hæmorrhage, and to hypertrophy of the left ventricle of the heart. This last addition to our knowledge has advanced cardiac pathology, not only by its direct addition to our stock of knowledge, but also by bringing under general laws some of the apparently most exceptional cases of hypertrophy of the heart.

Another decided advance of modern practical Medicine has followed from the greater accuracy and minuteness with which the signs and symptoms of special cases of special diseases have been observed and described, the care with which collections of such cases have been analysed, and the greater precision with which special diseases have in consequence been defined.

Advances of knowledge which have followed are manifested—

1. By the more correct appreciation, in regard of well-known diseases, of the relation between objective signs and the lesions found after death. Thus we have attained to a degree of accuracy in the diagnosis of diseases of the heart, lung, brain, spinal cord, etc., which a few years ago would have been regarded as impossible.

2. By the separation of diseases previously confounded as one. *E. g.*, Bright's disease has been proved to include several distinct renal diseases, each requiring its special treatment, and all entitled to the common name of Bright's disease, only because they have as common consequences lesions resulting from the retention in the blood of urinary elements. To two of these special diseases of the kidney I may refer in illustration—viz., the gouty and the syphilitic kidney. Again, in recent time we have attained solid grounds for distinguishing pulmonary collapse from pneumonia, gout from rheumatism; and also for separating relapsing, typhus, and typhoid fevers. The advance in our knowledge in regard to the diagnostic symptoms of the last-named of these diseases, conjoined to our new knowledge of the symptoms of general acute tuberculisation, and of the origin of the febrile disturbances generally of childhood, has enabled us to separate into its proper constituents the most dissimilar pathological conditions, grouped, in times lately past, under the head infantile remittent fever; and to discard the very name, unless we use it to the public as a cloak for diagnostic ignorance.

3. By the discovery of the existence of diseases formerly unknown—need I mention Addison's disease, leukæmia, locomotor ataxy, trichinosis, cerebro-spinal meningitis, and albuminoid disease of the various organs? The accurate definition of a new disease is not only a gain in itself, but it enables us to define much more clearly allied diseases. Thus the knowledge of the parasitic nature of a considerable number of the diseases of the skin not only established the existence of several well-defined genera on a firm basis, but enabled other genera to be more easily and clearly defined—*e.g.*, the precise characters by which tinea tonsurans can be defined, make tinea decalvans, eczema, and herpes circinnatus more easily and clearly definable.

The more accurate definition of special diseases has led to a more accurate knowledge of the course of special diseases—their natural history, if I may say so—a knowledge the importance of which cannot be over-estimated. Acute sthenic pneumonia has been shown to have a course almost as definite as the acute specific diseases, and to have an almost certainly favourable termination in youth. The auscultatory signs of tubercular pneumonia are not to be distinguished from those of ordinary pneumonia; but the former as rarely spares the young as the latter kills them. The diagnosis between these two affections may be made absolutely by their course. The knowledge of the duration and course of diphtheria, the period at which the larynx is likely to become involved, albuminuria to occur, and the nervous phenomena to supervene, has given us great advantages in its treatment.

I may illustrate the folly of attempting to estimate the value of special treatment of a disease, before the natural history of that disease is known, by the following facts:—In 1817-19, an epidemic of fever prevailed in Edinburgh. This epidemic met with a singularly able historian in Dr. Welche. His object was not to write a history of the epidemic, but to prove the great value of blood-letting in fever. Dr. Welche shows that the mortality from fever in Edinburgh, before the employment of venesection, was very great, the percentage of fatal cases very considerable; and he proves indisputably that, after the introduction of free blood-letting, the mortality was comparatively, nay, absolutely, trifling. So frequently did the fever cease after the blood-letting, so quickly did the cessation of the fever follow on the venesection, that to the man who employed the lancet boldly in the treatment of fever, Dr. Welche thought it might be said, "O homo! jugulasti febrem." Now the investigations of the Physicians of the past twenty-five years have proved that the disease which Dr. Welche supposed he had killed by blood-letting was a disease which runs a short and definite course, ends spontaneously on or about the date at which he thought he killed it by blood-letting, and terminates almost always in health under all treatment and without treatment. It is wonderful to observe how few died, though, in the hope of killing the fever, 120 to 130 ounces of blood were taken from the arm in a few days in several cases.

Another great advance in practical Medicine is the recognition of the frequent relation of local lesions to chronic constitutional states. No Practitioner would now think of treating a local disease till the diagnosis of the constitutional state had been made. For example, in bronchitis in a child, both the prognosis and the treatment will be greatly modified by the fact that the little one is the subject of tuberculosis, of strumosis, of rickets, or of constitutional syphilis. In Bright's disease, both prognosis and treatment will be modified by the fact of the patient being the subject of constitutional gout, of tuberculosis, or of syphilis.

So in regard of intracranial diseases—I may instance meningitis, tumour, disease of arteries interfering with nutrition, as local diseases, for the successful treatment of which it is now admitted that a knowledge of the constitutional state is in every case essential. Surely this is a great stride in practical Medicine.

The increased accuracy of late attained in the definition of special diseases, and of their courses, has been greatly assisted by the use of special instruments for the detection of physical changes previously imperfectly recognisable. Without the microscope, the existence of leukæmia could not have been established; to its aid is due the knowledge of the parasitic

characters of tinea tonsurans, tinea favosa, chloasma, and thrush; it has yielded indisputable evidence of progressing destruction of lung-tissue; to it we are indebted for the separation of hydatid cysts from the various forms of simple cysts with which they were so long confounded, as well as for a knowledge of the real nature of the former. The diagnosis, prognosis, and treatment of Bright's disease are all aided by the information the microscope conveys.

The thermometer, to the clinical Physician, affords, as we have already seen, information of the highest practical value, whether regard be had to diagnosis, prognosis, or to treatment.

The laryngoscope has enabled us to appreciate changes in the larynx which, without its aid, could not have been suspected, and to determine with certainty the presence of other lesions which without it could only have been suspected—*e.g.*, growths within the larynx, paralysis of one or both vocal cords, small ulcers on the cords; and in two of these affections to detect the disease with certainty is to be able, with equal certainty, to cure the patient.

The ophthalmoscope has afforded valuable definite information in aid of the diagnosis of some of the most obscure diseases of the brain and its membranes.

The sphygmograph has accomplished something for Medicine as a science and an art, and promises much more.

The balance is an instrument of great importance, as determining the progress—that is, the advance or otherwise—of certain important diseases, and so the value of the treatment being pursued—*e.g.*, diabetes and phthisis.

Another great gain to modern Medicine has resulted from the diffusion of more correct ideas as to the meaning of the word cure, and of the distinction to be drawn between curing the disease and curing the patient.

The meanings of the word cure are best illustrated by reference to some special diseases. We cure scabies. It is to be observed, however, that when we cure scabies we do not cure the visible symptoms of the disease, but we destroy the agent the presence of which calls forth the visible symptoms. That agent being destroyed, nature cures the inflammation, vesication, pustulation, etc. We do what the Surgeon does when he removes a thorn. He does not cure the inflammation excited by the thorn, but he removes that which keeps up the inflammation, and nature cures the inflammation.

Ague is, again, a disease of another kind which we remove —that is, cure—by the use of certain drugs. The ague fit, once established, is not curable—*i.e.*, it runs its course, and then we prevent the recurrence of the ague fit. We cure or remove the condition which leads to the recurrence of the fit, over the symptoms and duration of which we exercise no control. We cure the disease.

Epilepsy is another disease which we cure. Each fit, like the attack of ague, once begun, runs its course uncontrolled. Epilepsy is sometimes occasioned by a special exciting cause, an irritant present at some one point—the thorn, so to say. For example, a man suffered from epilepsy. He passed joints of tapeworm, the worm was removed, and the fits did not recur. Years afterwards, the epilepsy recurred; and he said, "Oh, I must have another tapeworm." A dose of male-fern did remove another tapeworm, and again the fits ceased. Now, we may say the epilepsy was cured by the removal of the tapeworm; but it is to be noted that, although the excitant of the attacks was removed, the disease of the nervous system was untouched, as was shown by the recurrence of the manifestation of the disease as soon as the special irritant was again applied. Again, we cure epilepsy, we say, when, by the administration of drugs, we so modify the nervous system that, on the application of the irritants which previously induced a fit, no attack follows.

We cure patients suffering from the acute specific diseases. An acute specific fever is analogous not to ague generally, but to a single fit of ague; and as we have no drug that controls the duration of the fit, so we have no drug that controls the course or duration of the acute specific fevers. We have no drug to cut short the fever—no drug that exercises, so far as is known, any influence on the specific disease. But, notwithstanding this, there is probably no class of diseases in which we more frequently cure the patient—that is, by our knowledge of the course of these diseases, of the dangers which threaten the life of the patient at each stage, and by the judicious employment of remedies, under which are to be included air, food, stimulants, and drugs, commonly so called—directly, positively, prevent the patient from dying. The treatment is not expectant; it is positive, and even often anticipating. We do not stand by and let the disease run its course unmodified. We interfere at every stage to prevent, control, or counteract the consequences of the disease. We restrain diarrhœa; we check hæmorrhage; we prevent septicæmia; and regulate, by giving or withholding stimulants and food, the powers of the patient. We cure, but how we know not, a patient suffering from local nerve-pain; we cut short the pain by the administration of drugs, concerning the mode of action of which we know nothing. We cure the most distressing sufferings of constitutional syphilis by the administration of drugs, concerning the *modus operandi* of which we are really ignorant. The distinction between curing the disease and curing the patient is real.

Though the science of Medicine had attained to such degree of perfection that the diagnosis of special diseases was perfect, and the prognosis in individual cases invariably correct, the public would have little practical interest in its spread. Its Practitioners would be engaged in solving puzzles, and in little more. So far as concerns the non-professional public, the aims and objects of Medicine ought to be—

To prevent disease.

To cure disease.

To prolong life, and

To alleviate physical suffering.

But then it is manifest that the definition of special diseases must precede all attempts to determine their several causes and their modes of cure. Every advance, therefore, in the correct definition of special diseases, and in the diagnosis of special diseases, is a step in the direction of an advance of preventive and of curative Medicine.

In illustration of the advances made in preventive Medicine, I will adduce the firm establishment of the fact that drinking water is one of the greatest agents in the spread of two of the most fatal acute diseases of the present time—viz., cholera and typhoid fever. In the ten years ending 1866, 21,848 persons died from cholera in England and Wales, and 192,562 from fever. From the Registrar-General's Returns, it is not possible to say precisely how many of the 192,562 persons died from typhoid fever; but, seeing that typhoid fever is the endemic fever of our country, and that typhus prevails as an epidemic only, and that in limited localities and for a short time, we shall be within the limits of high probability when we say that 150,000 persons died of typhoid fever during the ten years in question, and that in no one year of the ten did less than 10,000 persons die of that disease. Now, with reference to cholera, the special facts collected by Dr. Snow proved that one of the great agents in the diffusion of cholera was drinking water; that every virulent local outbreak in a limited district of the disease was clearly coincident with pollution of the drinking water supplied to that district; and that persons living at a distance, if by accident they drank of the polluted water, suffered as certainly as if they dwelt in the district specially affected. The conclusion which follows from the facts collected by Dr. Snow is that, the conditions existing, be they atmospheric or other, which determine the epidemic disposition to cholera, the presence of minute portions of cholera excreta in the water supplied to a district for drinking purposes will be followed by an outbreak of cholera in that district. Careful investigations into the circumstances attending local virulent outbursts of cholera during the last epidemic, have proved the truth of that conclusion. I will refer to two such special investigations in confirmation—viz., Mr. Radcliffe's admirable researches into the relation between the water-supply and the spread of cholera in London, and to Dr. Ballot's most conclusive observations on impure water as a cause of cholera in Holland. Dr. Snow's investigations traced special individual cases and local outbreaks to one exciting cause. Mr. Radcliffe's researches bear specially on the influence of the polluted water in determining excess of mortality in a large district of a great city. Dr. Ballot's facts show that those towns and those parts of a town in Holland in which there was the greatest facility for the contamination of the water-supply by cholera dejections were those which suffered by far the most severely.(a)

The spread of typhoid fever by contamination of the drinking-water supply is, if possible, less disputable than is the spread of cholera by the same means. Every new investigation has added new proofs to the strong presumptive evidence afforded by Dr. Flint's cases. Solitary cases, outbreaks confined to single houses, to small villages, and to parts of large towns—cases isolated, it seems, from all sources of fallacy—and epidemics affecting the inhabitants of large though limited localities, have all united to support by their testimony the truth of the opinion that the admixture of a trace of fæcal matter, but especially of the bowel-excreta of typhoid fever,

(a) See *Medical Times and Gazette* for June 12, 1869, page 626.

with the water supplied for drinking purposes, is the most efficient cause of the spread of the disease; and that the diffusion of the disease in any given locality is limited or otherwise just in proportion as the dwellers in that locality derive their supply of drinking water from polluted or from unpolluted sources. The proof seems complete, that a large proportion of those who drink water containing a minute quantity of the intestinal excreta from a person suffering from cholera will suffer cholera; and that a large proportion of those who drink water containing a minute quantity of the intestinal excreta from a person suffering from typhoid fever will suffer typhoid fever. These diseases occur like small-pox, scarlet fever, and measles, *as epidemics*, owing to causes of which we know little or nothing; but when epidemics, unlike small-pox, scarlet fever, and measles, a local outbreak of cholera and of typhoid fever will be determined by the impurity of the drinking water. Had the water supplied to the east of London been as free from organic impurity as was that supplied to the west of London, the death-rate from cholera at the east would have been a little larger only than was the death-rate at the west of London. Had the drainage and water-supply of Winterton, Terling, and Guildford, been what modern Medicine has shown for health purposes they should have been, these places would not have suffered the terrible outbreaks of typhoid fever, of which the Medical Officer of the Privy Council gives such full details in the tenth volume of his inexpressibly valuable reports. The persons who died at these places from typhoid fever, and a large proportion of those who died at the east of London from cholera, were as certainly killed by the water they drank, and killed without need, as if the water supplied to them had been contaminated with arsenic.

And I am sure we all agree with the most distinguished Medical Officer of the Privy Council, that "the distribution of fouled water by the Guildford Board is as proper a case for judge and jury on action for damages by any of the five hundred people who had typhoid fever in that town as any case in which a railway collision brings some score of passengers into harm; and the fact that these water purveyors gave typhoid fever to their customers would be brought home to their consciences, and be suggested as a warning to other water purveyors, in a far more conclusive and effective manner by such legal proceedings than it can be by any departmental statistics and remonstrances."

Another advance in preventive Medicine, second only in importance (even if it be second) to those just mentioned, has resulted from the knowledge, lately acquired, of the influence of dampness of soil in the production of phthisis. Dr. Bowditch's and Dr. Buchanan's independent researches have placed beyond question the relation between dampness of soil and phthisis, and have proved that drying of the soil by proper drainage of any given locality is followed by remarkable diminution in that locality of the death-rate from phthisis. By improved drainage, causing dryness of the soil, in Rugby, the phthisis mortality has fallen 43, in Salisbury 49, and in Ely 47 per cent.

Thus, by the advances of modern Medicine, the public have gained certain knowledge of the means of preventing, to a very great extent, the spread of two of the most fatal of acute diseases, and of preventing the occurrence, in a large number of cases, of the most fatal of chronic ailments.

The advances of curative Medicine have been as decided as those of preventive Medicine. Not only have sounder views of the rational treatment of special diseases, based on advances of pathological knowledge, been established, but new drugs, of great practical worth, have been introduced into our Pharmacopœia, and old drugs have been found to possess virtues heretofore unsuspected. How wonderful is the influence of bromide of potassium over diseases for the treatment of which we were but a few years since almost impotent! A dull, heavy-looking lad suffered for seven years from epileptic attacks, steadily increased from the first in severity and frequency till many occurred in the twenty-four hours. For a year he was treated by a Physician, on general principles, with little benefit. The case was in all particulars most unpromising; yet, from the time the boy took the first dose of bromide of potassium to the present—nearly three years—he had not had a single fit.

Is this a solitary case? Certainly not. We could all match it. But it illustrates well the power of a new drug over a class of cases which, not long ago, were regarded by practical men as almost as much beyond the curative influence of drugs as is a case of cancer of the breast. To one other of the powers of this drug I must advert—viz., its influence on the sexual organs—a power which enables us to exercise a real curative influence over a class of most distressing affections, for which, by drugs at least, we could formerly do nothing.

Other illustrations of the strides made in drug-therapeutics are afforded by the influence of cod-liver oil on the cachexia of tubercular disease and of rickets; of iron on the cachexia of the aged; of digitalis as a cardiac tonic; of ipecacuanha in the cure of dysentery; of sulphites and sulphurous acid, and of carbolic acid, in the treatment of vegetable parasites; and of Faradisation and the continuous current in some morbid states of the nervous system.

The progress of pathological knowledge has been followed by an equal advance in the rational treatment of disease. Means were formerly sought to strangle a fever, to cut short a pneumonia. Increase of knowledge has taught us that these diseases always terminate within a limited period, but are never cut short; while collections of facts have proved what, in the present state of pathological and physiological knowledge, might have been predicated—viz., that a larger proportion of these diseases terminate in health under restorative treatment than under depleting remedies. The propriety of the substitution of food and moderate quantities of stimulants, as routine practice, for the lancet, rests on the firm basis of results; and this firm basis is established without regard to the answer that may be given by science to the question, Is alcohol food, or heart-stimulant, or a nerve-power supporter?

But, while admitting this general conclusion, the Profession as a whole have not forgotten that there is no one treatment applicable to all cases of disease bearing the same name. They have not failed to see that the Practitioner is distinguished from the routinist by his ability to discern when, with advantage to the patient, he may deviate from rules of practice generally applicable. No tables, however carefully compiled, however ably analysed, can teach a man how to treat *the* case of fever, or *the* case of pneumonia, now under his care.

A good illustration of the help yielded to us in the rational treatment of a special disease, from advances in our pathological knowledge in regard of that disease, is afforded by chronic pulmonary vesicular emphysema.

The diminution of the elasticity of the lung can in many cases be retarded; the exciting and determining causes of over-distension of the air-vesicles can be shunned; the causes of temporary impediments to the flow of blood through the pulmonary capillaries can be avoided; congestion of the heart, liver, kidneys, etc., can in this way be lessened, and, by direct remedies, still further diminished or removed. And thus sufferings are alleviated, serious secondary lesions of structure in organs, the integrity of which is essential to life, in a great measure prevented, and life itself indefinitely prolonged.

The benefit derived from opening the trachea in croup is another illustration of the value of rational treatment in the prolongation of life.

With reference to the power of our art to alleviate suffering, how great is the difference between the Medicine of to-day and that of our youth! Who that has suffered from a painful local affection can think of the alleviation to his sufferings which followed on the subcutaneous injection of an anodyne without gratitude? Who is there that has had to submit to the knife of the Surgeon, whose heart does not overflow with gratitude to those who introduced and perfected local and general anæsthesia? The electric telegraph, the second greatest marvel of our time, was a thing which, in a rough way, scientific men had long thought possible; but to be cut for stone, and know nothing of the agony; to have a leg removed, and smilingly ask, when the operation is over, "When are you going to begin?" to have a toe nail torn away, and look on and laugh when that most painful operation is proceeding—these are marvels of which none dreamed. No extravagance of fiction equals this reality. The discovery of the value of the subcutaneous injection of anodynes, of local anæsthesia by ice and ether spray, and of general anæsthesia by ether, chloroform, and nitrous oxide, are advances in alleviative Medicine worthy to rank with the advances in preventive, curative, and prolongative Medicine to which I have referred.

Keeping in view, then, those practical aims and objects for which Medicine is esteemed by the public—viz., its power to prevent disease, to cure disease, to prolong life, to alleviate suffering—I feel that I have said enough amply to prove the truth of my assertion that the progress of Medicine as an art has during the past twenty-five years(a) been second to that of no other science. And the present advanced state of Medical

(a) Too narrow a limit must not be given to the twenty-five years, as the writer intended rather to fix a time within which the illustrations given had become part of the stock knowledge of the Profession, than to fix with accuracy dates when each fact was published by its discoverer.

education; the perfection of the means of physical research; the many new centres of knowledge being established in our colonial empire and in America; the widely diffused acquaintance of the Profession with modern languages; the rapidity with which knowledge spreads; the confirmation, correction, or refutation which follows so quickly on the publication of novelties; the great ability; the absence of prejudice; the untiring energy; and the truthfulness exhibited by the younger workers in the field of our science, render me hopeful that the next quarter of a century will be distinguished by far greater progress than has the last, great though that be. And I can even now in mind realise the day when most of us, our faculties nnmbed by age, shall take but listless interest in the then present, or be, as is perhaps to be hoped, where suffering has no place; and when another, as full of sympathy for physical suffering, as anxious to relieve it, as we are now, shall stand in this place and tell how, twenty-five years before, one stood here and with exulting voice spoke of the advances of Medicine in the preceding quarter of a century, but only to add that the sum of those boasted advances was but as nothing compared to the strides the Profession had made as a practical art since that far-away day.

The meeting then broke up into the sections, which, as last year, were five in number—namely, those of Medicine, Surgery, Midwifery, Physiology, and State Medicine. Of the sectional work we can only this week give the following abstract of the able address by the President of the Section for State Medicine.

SECTION E.—STATE MEDICINE.

In this section, which met in the Council Chamber, Dr. W. Farr, F.R.S., was the president. In his opening address, he said public hygiene was in the same category as certain wants which could only be supplied by communities. The cost of roads, light, water, sewerage, could only be met by that company—the town—of which every ratepayer was a shareholder. Our towns, counties, and districts were only parts of that still grander community, the State, whatever might be its constitution, which had its duties to perform in watching over the public life. Hippocrates inaugurated the true philosophy of disease by announcing that all its phenomena were alike divine. Plagues were no longer traced to accidental antecedents, and a complete revolution in modern thought had been the consequence of that doctrine. Diseases as disastrous as ever awaited the Greeks before Troy befel the British army in the Crimea; but who would now accept the explanation that the gods slew the British army to avenge the insults offered by a prince to the daughter of a Greek patriarch? The true cause was here traced to the incapacity of a Minister who was cast out of office. And quite recently the plague among cattle had given an opportunity of observing how easily a pestilence might become a Ministerial question. The Public Health Act recognised the responsibility of Government, and took a practical form when the Board of Health was ably administered by the Earl of Shaftesbury, Mr. Chadwick, and Dr. Southwood Smith. Lord Llanover, on its extinction, called into existence a great council of health, which inaugurated a system of scientific inquiries, which were prosecuted still further under the direction of Mr. Simon with the happiest results. Public health, local government, nuisance, and other Acts abounded in the Statute-book, and testified to the goodwill of the Legislature, but there was no mastery of legislation. The community wanted a sanitary code, and one responsible man alone could produce such a code, to be accepted and sanctioned by Parliament. Sanitary law without sanitary officers was a dead letter, and sanitary administration could never be perfect without one supreme head. A Minister of Health must in the end be called into existence, but in the meantime his duties naturally devolved on the Home Secretary. The work divided itself into four great branches—administration, Medicine, engineering, statistics—each of which should be organised so as to work in harmony with a Council of Health and executive heads. There was a disposition in England to create for all sorts of purposes new territorial divisions, but for all large towns the organisation under the Municipal Act, with some improvements, would answer every purpose. The Town Council should nominate a Public Health Committee, with a permanent chairman presiding over the sanitary staff, and representing it as a Minister represents a department in Parliament. Leaving out of consideration the large boroughs, grouped parishes, or unions as they were called, would form the best basis of sanitary administration. The identity of the administration with the registration subdivisions of the country would enable them in the case of death and in sickness returns to follow step by step the consequences of sanitary operations, and solid progress would become as apparent as the sun at noonday, blunders and failures would be revealed, and illusions would be dispelled. The appointment of public health officers was prescribed by the Metropolitan Act, and that the institution was so far a success was unquestionable. All the large towns would ere long have their town Physicians, and important questions had to be decided. Should the public Physician in a large town engage in private practice? Should he undertake the office of coroner in small boroughs? Should he supervise the registration causes of death, and inquire into every death uncertified by a qualified Medical attendant? Should county magistrates appoint a county Physician? Public Medicine was now on its trial; as it became appreciated it would open a great career to young Physicians; but the public health was so wide a field and so difficult to cultivate that it required the aid of all classes. They wanted help, and they asked for it from the chemist, the engineer, the naturalist, from the highest statesman and the humblest town councillor. The primary aim of Public Medicine was to prevent disease, but it also surrounded the sick with the conditions most favourable to recovery, and diminished the death-toll of the people. It prolonged earthly existence and carried numbers of souls through childhood, youth, and manhood to a ripe old age. Health gave rich and poor the full use of their faculties; it lessened sorrow, and gave fortitude in the vicissitudes of life. These were great objects, and their attainment was difficult, but not impossible, and to accomplish them was to bestow on mankind riches more precious than gold. The mean lifetime in the healthiest parts of England was 50 years, but in whole towns and in entire classes it would often be found to be only 25 or 30 years; in the United Kingdom it did not exceed 41 years. It was found undeniably that a high rate of mortality was reduced by elementary sanitary measures. Pure air and pure water were indispensable conditions of existence. These withheld, the people would perish. The dangers of water once contaminated with sewage were well known to everybody, except to a well-known class of scientific witnesses who had led a certain Royal Commission into calling such water a "wholesome beverage." Pure water might be supplied for ever to the large towns at a fraction of the 500 millions sterling which the railways and the canals had cost. Arrangements might be made to prevent the diffusion of zymotic diseases, but the efficacy of the existing quarantine was questionable, while its evils were evident. Small-pox was replaced by other diseases in unfavourable sanitary conditions. But supposing all the favourable conditions to be supplied, even then some of the greatest problems of Public Medicine would remain unsolved. It was impossible to pass the population in review at a census without observing in many grave defects, in many shortcomings, in many organic degeneracies, in many criminal depravities. How out of the existing seed to raise races of men to a divine perfection was the final problem of Public Medicine. (Applause.)

We reserve our notice of the animated discussion on Hospitals, which took place on Thursday, as well as much more of interest, until next week.

REVIEWS.

The Practice of Medicine. By Thomas Hawkes Tanner, M.D., F.L.S., M.R.C.P., etc. In two vols. Sixth Edition. London: Henry Renshaw. Pp. 656 and 645.

There is a common character about the writings of Dr. Tanner, a character which constitutes one of their chief values; they are all essentially and thoroughly practical. Dr. Tanner never for one moment allows this utilitarian end to escape his mental view. He aims at teaching how to recognise and how to cure disease, and in this he is thoroughly successful. Most of our well-known works on the practice of Medicine have a special character of their own. Sir Thomas Watson's elegant work is a book pleasant to read, but not very easy to study; indeed, the student is apt to be led aside by the beauty and elegance of the diction from the more solid facts which underlie the easy and even flow of language for which these lectures are so remarkable. Dr. Aitken's work, on the other hand, deals, one might say, more with the science than with the practice of Medicine. It is a book for the student rather than the Practitioner; pathology is its great groundwork. But in Dr. Tanner's work we have one essentially on the practice of Medicine. Shunning controversial matters as much as possible, his teaching is mostly dogmatic, but

thereby the reader is enabled to form a clearer picture in his own mind than if he were presented with a multitude of conflicting views. The history of the book is also somewhat remarkable, in its gradual growth from a small pocket text-book to the two large, handsome, and beautifully executed volumes now before us. The first of these contains general diseases, fevers, and diseases of the nervous system, of the lungs, and of the heart. The second treats of diseases of the alimentary system, of the liver, of the pancreas and spleen, of the abdominal wall, of the urinary organs, of the uterine organs, of the skin and its appendages, of the blood-vessels, and of the absorbents. Finally comes one of the most important features of a good book of reference such as this is intended to be, a copious and accurate index. There can be no greater boon to a hurried Practitioner than an index which will enable him at a glance to find out the information which will settle in his mind what ought to be done in any particular case, and such a one is here supplied him. We might perhaps have wished a more thorough and complete revision of this work than Dr. Tanner has been able to accomplish in those portions of it which relate to pathology and pathological anatomy. So much has been done of late years in this direction that what was recognised as accurate and matter-of-fact not many years ago is now considered, if not absolutely in error, at all events as inexact. If we take the subject of apoplexy, it is clear that the old divisions of Abercrombie can no longer be retained, for Medicine has now a basis on morbid lesions rather than on symptoms alone. So again with phthisis. The complete change which this subject has experienced within a year or two is beyond measure striking, and it is no easy matter for any one man to take cognisance of all these changes, to formulate them, and to compress them within the space available in a treatise of this sort.

To criticise Dr. Tanner's work in all its bearings would far exceed the scope of the present article, but we may give some passing notice of certain of its contents. He begins with describing morbid states of the blood, but first of all deals with blood in its normal state; here we cannot clearly make out whether or not the recent views on the value of different kinds of food are entertained. Dr. Tanner gives in his account of these states a wonderfully good *ré-umé* of what is known on each subject. Writing of pyæmia, he refers to Polli's mode of treating such diseases by means of sulphites, and this he decidedly condemns, or declares, at all events, useless. In this Dr. Tanner is assuredly borne out by other authorities. Under the same heading he includes a chapter on hæmatozoa. Such a group is, we think, a mistake. Entozoa do not grow in the blood alone, and the chief one cited—the *Distoma hæmatobium* or *Bilharzia hæmatobia*, on the presence of which depends the endemic hæmaturia of certain countries—proves this.

Should there be in a work on Medicine, under a distinct heading, a chapter on dropsy? It is questionable, but at all events the present system is convenient, and Dr. Tanner avails himself of it to make some very plain and practical observations and explanations. His plan is to explain the nature and cause of the different forms of dropsy, and to reserve the discussion of treatment until the various affections causing dropsy are discussed. Dealing with cancer, he uses the term "carcinoma" as its synonym; perhaps the second term had better be dropped altogether. He also speaks of villous cancer in the bladder. Now, it is here, perhaps, that cancerous elements are most difficult of recognition. The transitionary epithelium of the bladder is normally exactly like a cancer cell. Another division — fungus hæmatodes — is merely a pathological accident, and had better be suppressed. Dr. Tanner adopts the system of classifying certain affections, as scrofula with tubercle and scrofula without tubercle; we are, however, sufficiently far advanced followers of Virchow to believe that the two conditions have no necessary connexion. Then, again, when writing of the inoculability of tubercle, the researches of Dr. Sanderson are perhaps too much overlooked, whilst those of Dr. Andrew Clark scarcely get justice done to them, especially with regard to the priority which is duely his. On amyloid degeneration, again, the remarks are good; but Dr. Dickinson's and Dr. Grainger Stewart's important contributions to our knowledge of the disease are not included. This is unfortunate, but much must have been done since the chapter was written. The notion that the disease depends on prolonged suppuration is hinted at, but the idea of its dependence on the removal of alkalies from fibrine is not recorded. When dealing with gout, Dr. Tanner refers to the notorious gout liquid of Laville. He seems, however, to have been here led into error. The analysis which is given in the papers which accompany the liquid is only an ostensible one, and is not to be relied upon, as Dr. Tanner would seem to think, and one not reading it with care is extremely liable to fall into the same error.

In the chapter on inflammation we have the keynote to Dr. Tanner's practice. He was a pupil, and is a follower, of Dr. Todd, whose system of treatment he adopts. No one, we fancy, would now advocate any return to the old system of universal blood-letting; but there are a goodly few among us who also object to universal stimulation. Dr. Richardson has pointed out that there are cases where blood-letting may be employed with advantage on scientific grounds, and there are many who have seen benefit derived from its employment. To take an instance: Labourers in the harvest-field, at a period when heat is usually intense and when labour is severe, are extremely prone to attacks of acute pleurisy, due frequently to sitting down or sleeping on the ground without sufficient clothing. They will suddenly complain of intense pain in the side, inability to draw a long breath—in short, of all the symptoms of acute pleurisy. Under such circumstances they resort to the nearest Surgeon, who, in a majority of instances, abstracts from their arms a certain quantity of blood, and they return weakened, no doubt, but their pain is gone, and in a couple of days they are again hard at work. Is there any other plan of treatment which will produce a similarly satisfactory result in as short a space of time? In similar cases, as also in those of acute pneumonia or bronchitis, the homœopaths use aconite (not, however, in homœopathic doses, for they use this remedy by the gallon), the orthodox Practitioner stimulates perhaps, but the former treatment is the more successful of the two. Still, it is only a substitute for blood-letting, and acts in the same way.

These brief notes on a portion of the book peculiarly obnoxious to criticism will show the care with which the whole has been collated. It is, indeed, a wonderful mine of knowledge, and although not absolutely exact in every particular, the rapid advance of Medical knowledge excuses what is almost impossible.

It should not be forgotten that the work was for some time out of print, and the pressure brought to bear on a popular author under such circumstances is often too strong to be resisted. Dr. Tanner is, on the whole, we think, to be congratulated on the care and thoroughness of the revision. It might, perhaps, have gone further with advantage, but, on consideration, we have every reason to be satisfied. The appendix of formulæ will be found useful, but we think the short notes on health resorts likely to be still more so, for it is curious how little real knowledge there is abroad on this, to many a patient, all-important topic.

GENERAL CORRESPONDENCE.

WHAT THE GENERAL MEDICAL COUNCIL OUGHT TO BE.

[To the Editor of the Medical Times and Gazette.]

Sir,—If most of the readers of your valuable journal shared my sentiments, they must, in the first place, have felt very angry at finding so many of your pages blocked up by the d—mn—ble iteration of the proceedings of the Medical Council. Yet, as it was your pleasure or policy to give them to us to read, so I and others felt it right to read them; and, having done so, I must confess to having felt grateful, for the Council at last has surely committed suicide, and, I should hope, would never meet again. I may be weak, but I plead guilty to having felt some lingering respect for this body, some compassion for its struggles, and some hope that a time would come when *e fumo daret lucem*. But when on the tenth day of the twelfth session, *apropos* to a debate on foreign diplomas, I found Sir Dominic Corrigan, in defiance of all rules of argumentation, making what should have been an amendment in a matter of detail, a motion nullifying the existence, character, and powers of the whole concern, I felt, as every one else did with whom I conferred, that the Council was done for by its own act. The President has resigned, and although a sense of duty may deter the most eminent of the members from following his example, I am sure that their inclination must lead them to it, and that they must regret their connexion with a body whose discordant composition seems to nullify all the talent, zeal, and business capacity of its members individually. As for adding more elements to such a chaos, it would but make confusion ten times worse confounded. No infusion of fresh blood can rectify a thorough congenital deformity and want of organisation; dissolution is the course which nature prescribes.

So far from wishing to cast disrespect on the members of the Council in their several capacities, I venture to say that if any three of them were selected, with definite objects to accomplish and definite powers to match, I believe every evil complained of would be remedied in a short time, so far as they admit of it.

What should those objects be? Protection from quackery? Alas! the demand is hopeless. The people love quackery and will practise it, and we might as well attempt to put down the east wind. It were far wiser to ask nothing from the State, except to be let alone, and be allowed to follow our own calling in our own way. The prohibition against the assumption of titles by people who have no right to them is good enough in its way, and with that we may be content.

The members of the Medical Council, instead of representing the corporations, should be men who have no interest whatever in these venerable monopolies. They should have power, by themselves or deputy, to visit and superintend examinations, or to submit all men to one common minimum test, and to take care that the stamp of a diploma is not given to any base metal, and that no one can get on the Register without having passed efficient and really searching examinations.

Instead of erasing the names of a few small deer from the Register, what the Council wants is power to issue and publish in the *London Gazette* edicts like the following:—

"Whereas, by an Act passed in the year of her present Majesty, the General Medical Council of Education and Registration were authorised and required to superintend the examinations of the various corporations and bodies which exercise the right of giving diplomas and licences to practise, and to withhold from any such corporation the said right of issuing diplomas and licences upon proof that the said diplomas and licences were given after an inefficient examination;

"And whereas it hath been proved to the satisfaction of the said General Medical Council that the corporate body styled the . . . of . . . hath issued its diploma and licence to divers who cannot spell English, and who have never been shown to have a competent knowledge of anatomy, chemistry, and practice of Surgery:

"We, the said General Medical Council, by the powers of the said Act, do hereby declare that the said corporate body styled the . . . of . . . is incapacitated, and is hereby deprived, of its right of issuing diplomas and licences for the space of three years—any laws, charters, privileges, or customs notwithstanding. Given under our seal, etc., etc.

(Signed) "F. Hawkins, Registrar."

The names of the Medical schools, with their proportion of *passes* and *plucks*, ought also to be published.

This, Sir, would be something like a Medical Council; and then, if teachers had liberty to teach when, and how, and where they pleased, and if examining bodies were afraid to pass incompetent men, we should have a state of things not to be attained under our present King Log. I am, &c.

London, July 24. Emeritus.

THE AMENDMENT OF THE MEDICAL ACT.

[To the Editor of the Medical Times and Gazette.]

Sir,—The enclosed letter was sent by me to Dr. Bell Fletcher, of Birmingham, in reply to an application for my signature to a memorial respecting an amended Act.

The subject is a large one; but, on your principle of *audi alteram partem*, if you incline to give the letter insertion, you are welcome. I am, &c. J. J. F.

Sir,—I am obliged to you for sending me the copy of "memorial," with view of amending the Medical Act of 1858. Your desire (and the desire of those who are acting with you) to improve the condition of the Medical Profession is so praiseworthy that I esteem you for it, and am truly sorry that, so far as I can understand the matter, I cannot unite with you in signing the memorial.

That the Act of 1858 has been almost useless I allow, and this uselessness of it is specially annoying to us, because there is not one of us that has not had to pay for it more or less. Why has the Medical Act of 1858 been so useless? Of course we have different answers to give to this question. To me one part of the reply consists in its having attempted by force of legislation, and especially by penal legislation, to enforce that which the public mind is not prepared for. Such attempts are always failures, and damage what might otherwise be the healthy action of any measure. Witness the mischief doing by the Vaccination Act just now, creating a prejudice that undoes in a short time what takes many years of gradual insinuation into the public mind to create. I deeply regret this. A wise statesman would legislate so as to encourage vaccination, facilitate it, and, in some measure, put a premium upon it, by making it necessary for all public employments; acting in this way, the masses would slowly learn to appreciate its value. As the law now stands, if uniformly put in force, the public will not stand it; if only occasionally and capriciously, it becomes an instrument of private spite.

To a minor degree, the Medical Act of 1858 is open to this objection; and it is only that its penal legislation has been found unworkable (which I understand you to regret) that has prevented its coming into collision with the prejudices and habits of the English people.

Do you desire this collision for us as a Profession? Will it do us any good? I think not. I think our endeavour should be to treat these prejudices and habits of the people—unwise and hurtful as we may think them to be—with respect, inquire into their causes, the needs which do exist to give rise to them, and endeavour, in our legislation, to meet those needs.

This is one part of the subject. In the working, or rather non-working, of the Act as regards Medical education and licences to practice, I should probably be more at one with you than I am in what I call its penal portion. These portions of the Act have not been satisfactory. The changes in Medical education seem to have been made in the interests of the old chartered licensing bodies rather than in the interest of the Profession.

The Medical Council has always seemed to me absurdly large. Look at the waste in salaries and in talk. A single well-paid functionary who had had Medical experience (but was dissociated from any Medical corporation), appointed by the ministry for a term of years, for which appointment they would be responsible to Parliament, a staff of three or four subordinates around him, for whom he is still responsible—these seem to me the likeliest arrangements to do our Profession good, as far as governmental machinery can. The existence of such an office, if at all respectably filled, would soon attract to itself the charge of various sanitary and other similar matters, which are now drifting about under "anybody's care;" so that the office would get more and more important, and, in course of time, would enter the legislature, if not the ministry—a change which would do much to improve the true status of the Profession, and still more the condition of the people. Can we hope any such result from a collection of respectable Physicians and Surgeons (by no means statesmen) met once a year for a few weeks to talk away the time, and then separate?

Many others matters rise up as I glance over your memorial; but I have said enough to show that, with all respect for your desire to improve the Profession, I do not think I can unite with you in signing it. I am, yours respectfully,

J. J. F.

POOR-LAW SURGICAL QUALIFICATIONS.

Letter from Mr. James Robertson.

[To the Editor of the Medical Times and Gazette.]

Sir,—I am directed by the College to request that you will have the goodness to insert the enclosed in your first publication in order to remove any misapprehension which may exist as to the rights which the licences referred to confer upon their possesssors. I am, &c. James Robertson, *pro* Sec.

Royal College of Surgeons, Edinburgh, July 27.

(*Copy.*)

Poor-law Board, Whitehall, S.W., 10th July, 1869.

Sir,—I am directed by the Poor-law Board to inform you, in reply to a communication which has been addressed to them by Drs. Andrew Wood and J. G. Fleming, that the diplomas of the Royal College of Surgeons of Edinburgh and of the Faculty of Physicians and Surgeons of Glasgow are recognised by this Board as conferring Surgical qualifications upon those Medical gentlemen who possess them.

I am at the same time directed to transmit for your information a copy of the Board's order dated the 10th of December, 1859, prescribing the qualifications for the office of Poor-law Medical Officer, together with a copy of the circular letter which accompanied that order. I am, Sir,

Your obedient servant,

(Signed) H. Fleming, Secretary.

The President, Royal College of Surgeons, Edinburgh.

THE LATE MR. KEATE.

[To the Editor of the Medical Times and Gazette.]

SIR,—I can fully confirm the statement of your contributor as to the character of the late Mr. Keate—an excellent Surgeon, rough outwardly, kind, and even generous, in reality. What a pity that no record remains of an experience so extensive and prolonged! I have heard him bitterly lament his connexion with the Royal Family, and once heard him say that after years of attendance he never received the smallest present, not even a toothpick, as a *souvenir*. Keate had his prejudices, amongst which may be reckoned the slight esteem in which he held Physicians, and the slight importance he attached to Medicine as distinguished from Surgery.

I am, &c. F.R.C.S.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on July 22 :—

Box, William Henry, L.S.A., Forest-hill, S.E., of Westminster Hospital.
Dawson, Frederick William E., L.S.A., Auckland, New Zealand, of the Westminster Hospital.
Green, Charles Josephus, Little Ealing, Middlesex, of St. Bartholomew's Hospital.
Hughes, William, Carnarvon, North Wales, of Glasgow.
Kesteven, William Henry, L.S.A., Holloway.
Lucas, Robert Harry, L.S.A., Burwell, near Newmarket, of the Middlesex Hospital.
Martyn, Geoffrey Theodore, Dublin, of the Dublin School.
Matthews, James Forrester, L.S.A., Royston, Cambridgeshire, of the London Hospital.
Peacock, Edward, L.S.A., Oldbury, of Birmingham.
Power, John Joseph, Dublin, of the Dublin School.
Sandiland, Arthur Henry, L.R.C.P. Lond., Bicester, Oxon., of St. Bartholomew's Hospital.
Stuart, George Ballingall, M.B. Edin., Blairgowrie, Perthshire, of Melbourne and Edinburgh.
Shaw, Ollive Sims, L.S.A., Stockport, of Guy's Hospital.
Tait, George Walter, Knowle, Warwickshire, of Birmingham.
Townsend, Thomas Sutton, Clifton, near Rugby, of Guy's Hospital.
Ward, William Simpson, L.S.A., Leeds, of the Leeds General Infirmary.

It is stated that of the twenty-five candidates examined only two failed.

The following gentlemen were admitted Members on July 23 :—

Anderson, Richard Benjamin, L.S.A., Theddlethorpe, Lincolnshire, of St. Mary's Hospital.
Atkins, Francis Day, L.S.A., Dalston, Middlesex, of Guy's Hospital.
Bolton, Richard E. N., Dublin.
Burger, Alexander, M.D. Bonn, Finsbury-place, of Birmingham.
De Morgan, Edward, L.S.A., Haverstock-hill, of University College.
Hart, Eugene John, L.S.A., Lee, Kent, of Guy's Hospital.
Hendley, Thomas Holbein, L.S.A., Charlton, Kent, of St. Bartholomew's Hospital.
Higgins, William Henry, M.B. Edin., Birkenhead, of Edinburgh.
Jones, Thomas Derry, L.S.A., Fitzroy-street, Fitzroy-square, of University College.
Knowles, John, L.S.A., Beccles, Suffolk, of King's College.
Langford, Phineas Pitts, L.S.A., St. Mary's-square, of the Middlesex Hospital.
Paterson, Walter Hugh, M.B. Edin., Brigg, Lincolnshire, of Edinburgh.
Prigg, Frederick, L.S.A., Bury St. Edmund's, of St. George's Hospital.
Roberts, William Lloyd, L.R.C.P. Edin., Festiniog, North Wales, of Glasgow.

At the same meeting of the Court Messrs. Ferdinand Edward Jencken, M.D. St. Andrews, and M.R.C.P. London, of Dublin, and John Wardleworth, L.R.C.P. Edin., Bury, Lancashire, passed their examinations under the old regulations, and were also admitted Members of the College. It is stated that of the 100 candidates admitted to examination at this College during last week, 67 passed to the satisfaction of the Court and received their diplomas, 20 passed in Surgery, to whom diplomas will be granted when qualified in Medicine. The remaining 13 candidates failed, and were referred for six months' further Professional study.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, July 22, 1869 :—

Brown, William, King's Norton, Birmingham.
Jones, Thomas Derry, University College.
Porter, John, Fleetwood, Lancashire.
Roberts, Arthur Copleston, Southernhay, Exeter.
Skrimshire, Charles Parnham, Holt, Norfolk.
Thomas, David William, Festiniog, Merionethshire.
Thorne, Frederic Lacoque, Leamington.

As an Assistant in compounding and dispensing medicines :—

Procter, Samuel James, Great Malvern.

The following gentlemen also, on the same day, passed their First Examination :—

Aston, John P., Leeds Hospital.
Batchelor, Ferdinand C., Guy's Hospital.
Baumgartner, John R., King's College.
Coombe, George A., Guy's Hospital.
Denne, Thomas S. H., Charing-cross Hospital.
Greaves, William, Guy's Hospital,
Harvey, Thomas, Westminster Hospital.
Hind, Henry, St. Bartholomew's Hospital.
Pearse Francis J., Westminster Hospital.
Phillips, George A., St. Bartholomew's Hospital.
Rose, William, King's College.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

GLYNN, W. R., M.B. Lond. Univ. (late Senior Assistant-Physician Children's Infirmary, Liverpool).—Physician to the Northern Hospital, Liverpool, *vice* Dr. Roberts, resigned.

HODGES, FRANK H., M.R.C.S. Eng., L.R.C.P. Edin., late Resident Physician, Edinburgh Royal Infirmary—House-Surgeon to the Birmingham and Midland Eye Hospital, *vice* Henry Denne, L.R.C.P.L., resigned.

LAKING, FRANCIS, M.D.—House-Physician to St. George's Hospital.

YELD, HENRY J., M.D., M.R.C.S. Eng., L.S.A. (Senior Assistant-Surgeon Sunderland General Infirmary).—Surgeon, *vice* George Welford, M.R.C.S., resigned.

MILITARY APPOINTMENT.

Surgeon Robert Speedy, from half-pay, late 45th Foot, to be Staff Surgeon, *vice* Oliver Barnett, seconded on appointment to the Staff of His Excellency the Viceroy and Governor-General of India.

BIRTHS.

ARMSTRONG.—On July 15, at 196, Parrock-street, Gravesend, the wife of John C. Armstrong, M.R.C.S., of a son.

CHAMBERS.—On July 22, at 2A, Sutherland-street, S.W., the wife of Thomas Chambers, F.R.C.S.E., of a son.

HAVILAND.—On July 22, at Biddenden, Kent, the wife of O. Haviland, M.R.C.S.E., of a daughter.

ILES.—On July 25, at Watford, the wife of Wilson Iles, M.D., of a daughter.

REDFERN.—On July 23, at Rosebank House, Donaghadee, the wife of Peter Redfern, M.D., M.R.C.S., Professor of Anatomy and Physiology in Queen's College, Belfast, of a son.

THOMPSON.—On July 23, at Droxford, Hants, the wife of James Thompson, M.B., late Army Medical Staff, of a daughter.

WATSON.—On July 23, at Little Huthwaite, Wortley, near Sheffield, the wife of Alfred M. Watson, M.D., of a son.

MARRIAGES.

CRESSWELL—PARKER.—On July 23, at The Grange, Bothwell, Lanarkshire, by the Rev. John Roxburgh, D.D., assisted by the Rev. J. Harper, Richard Cresswell, M.R.C.S., L.S.A., youngest son of H. R. Cresswell, Esq., Lewisham, Kent, to Marion, the eldest surviving daughter of the late James Parker, Esq., Glasgow. No cards.

WATSON—SCOTT.—On July 27, at London, Robert Watson, Esq., Staff Surgeon, to Jane Bertram, youngest daughter of David Scott, Esq., of Montrose, N.B. No cards.

DEATHS.

BARLOW, LYDIA MARTHA, widow of George Hilaro Barlow, M.D., late Senior Physician to Guy's Hospital, on July 27, at Sydenham.

BRODAICK, H. C., M.D., Acting Superintendent of the Ophthalmic Hospital, and a Professor of the Medical College, at Madras, on May 27 last, aged 37.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

BOURNEMOUTH GENERAL DISPENSARY.—Resident Surgeon. Candidates must be registered, and must possess a qualification in Medicine as well as Surgery. Testimonials, diplomas, etc., to be sent, under seal, to the President of the Bournemouth Dispensary on or before September 9.

EAST LONDON HOSPITAL FOR CHILDREN.—Medical Officer. Applications and testimonials to be sent, before August 4, to the Hon. Sec., Rev. S. B. Burnaby, Rectory, Wapping.

HAY UNION.—Medical Officer; must be legally qualified. The gentleman appointed will be required to reside in Hay. Applications and testimonials to Mr. C. Griffiths, Clerk to the Guardians, on or before August 4, election on August 5.

ISLE OF MAN HOSPITAL AND DISPENSARY.—Resident Medical Officer. Information may be obtained by applying to the Hon. Sec., Mr. John Moore, to whom testimonials must be sent on or before August 11.

METROPOLITAN FREE HOSPITAL.—Assistant-Physician. Candidates must be Members of the Royal College of Physicians, or, if elected, pledged to become such within twelve months of the date of election. Applications, with testimonials, diplomas, etc., to be sent into the Hospital before August 5.

ROYAL PORTSMOUTH HOSPITAL.—House Surgeon; must be a Medical graduate of a British university or a M.R.C.S. Applications and testimonials to be sent to the Secretary by August 4.

POOR-LAW MEDICAL SERVICE.

*** The area of the district is stated in acres. The population is computed according to the last census.

RESIGNATION.

Pocklington Union.—The Sutton-upon-Derwent District is vacant; area 14,718; population 2399; salary £26 per annum.

APPOINTMENTS.

Alton Union.—John Wood, L.R.C.P. Edin., L.M., M.R.C.S. Eng., to the Fourth District.

Chorley Union.—Edward Jackson, L.K. and Q. Coll. Phys. Ire., M.R.C.S. Eng., to the Brindle Workhouse.

Torrington Union.—Sloane Michell, M.R.C.S., L.S.A., to the First Dolton District.

UNIVERSITY OF DUBLIN.—The Chair of Zoology and Directorship of the Museum, made vacant by the appointment of Dr. Edward Perceval Wright, F.L.S., to the Professorship of Botany, have been conferred on Mr. Alexander Macalister, L.K.Q.C.P. Irel., L.R.C.S.I. Mr. Macalister is well known as a most successful and original investigator in the various branches of practical, physiological, and comparative anatomy.

QUEEN'S UNIVERSITY IN IRELAND.—At a meeting of the Senate of the Queen's University, held on the 21st inst., the following Examiners were appointed for the ensuing year:—In Medicine, Professor Cuming, M.D.; in Surgery, Edward Dillon Mapother, M.D.; in Materia Medica, Maxwell Simpson, M.D., F.R.S.; in Medical Jurisprudence, Professor Hodges, M.D.; in Midwifery, George H. Kidd, M.D.

INTERNATIONAL CONGRESS OF ALIENIST PHYSICIANS.—This is to be held either at Brussels or Ghent from October 4 to 11 of the present year. The subscription is fixed at 20 fr., and M. Lunier, 52, Rue Jacob, Paris, officiates as general secretary, to whom communications are to be addressed.

MEDICAL BENEVOLENT FUND.—At the monthly meeting, held on Tuesday last, grants amounting to £100 were made to twelve applicants. A letter was read from Dr. Hare, the Treasurer, expressing his increasing sense of the value of the charity, both as to its objects and its mode of administration, and enclosing a donation of £100. A cordial vote of thanks to Dr. Hare was passed. A donation of twenty guineas was also reported from Dr. C. Brodie Sewell, and £7 collected at the annual dinner of the Bath and Bristol branch of the British Medical Association, at the instance of Mr. Crossman.

SOCIETY FOR THE RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.—The directors held their quarterly court on Wednesday, July 14, Dr. Burrows, President, in the chair. At the meeting the large sum of £1427 10s. was voted for the half-yearly grants, being £177 in excess of the sum distributed last half-year. Fresh applications were made from seven widows and twenty-six children, to whom the sum of £236 10s. was given. There are at present fifty-seven widows and forty-nine children receiving relief, an increase of five widows and twenty-six children during the half-year. One widow has died, another is no longer eligible, and three children, having attained the age of 15, have ceased to be eligible for relief. The directors avail themselves of this opportunity to urge the wealthier members of the Profession to assist them by their contributions, without which the funds of the Society will not suffice to meet the continually increasing demands for relief.

POOR-LAW MEDICAL ASSOCIATION.—The annual meeting of the Poor-law Medical Association took place on Wednesday at the Freemasons' Tavern, Dr. Rogers, President, in the chair, and there was a good attendance of members. After the report of the Council was read, and some changes in by-laws considered, several honorary members were elected. The President then addressed the meeting. He referred to the work which the Association had done, making particular reference to pauper lunatics, workhouse dietary, and dispensaries. He pronounced a warm encomium on the long and valuable services of Dr. Griffin. He referred to the friendly co-operation of the Profession in Ireland, and expressed much pleasure at the course (worthy of imitation) which the Irish Medical corporations had adopted in support of the Superannuation Bill which had lately been passed for Ireland. He quoted statistical details to show the defects of the system pursued in England respecting Poor-law Medical relief, and concluded by moving the adoption of the report. Dr. Colborne spoke next, and expressed the hope that the Irish Medical Officers' Superannuation Bill would next year be extended to England. He said that improvidence was encouraged amongst the people by the granting of Medical relief as a right. Many guardians wished that panperism should not be suppressed, for it gave them more power, as they were in most cases employers of labour. He hoped that the Medical Profession would be firm, and would show to the guardians that they would not be their slaves. Dr. Dixon said that in London the members of the Profession could be more independent of the guardians than their brethren in the country. It would be well if guardians were more enlightened; but educated men would not, except rarely, become guardians, lest they should be the mere tools of the Poor-law Board. He agreed with the previous speaker, that habits of improvidence were encouraged by the present Poor-law system; and he expressed a preference for public dispensaries over the custom of dispensing medicines at private houses. The report was unanimously adopted. The President called attention to the valuable services which had been rendered to the Association by the Honorary Secretary, Dr. Dudfield. (Cheers.) The Honorary Secretary returned thanks, and said that the Association was making good way. He expressed much confidence in Mr. Goschen, the President of the Poor-law Board. A vote of thanks was moved by Dr. Richards to the Chairman, who replied, and the meeting terminated. The members and some Parliamentary friends of the Association dined together the same evening.

QUEKETT MICROSCOPICAL CLUB.—The fourth annual general meeting was held on Friday evening last in the library of University College, Arthur E. Durham, Esq., President, in the chair. A report was read, which showed that 142 members had been elected since the last annual meeting, making a total of 512. The Treasurer's report showed that the finances of the Club were in a very satisfactory condition. In vacating the chair, which he had ably filled for two years, the President delivered a highly impressive address, which was listened to with marked attention throughout. The following gentlemen were elected to fill the offices named for the ensuing year:—*President:* Mr. P. Le Neve Foster. *Vice-Presidents:* Dr. R. Braithwaite, Mr. W. M. Bywater, Mr. A. E. Durham, Mr. H. F. Hailes. *Members of Committee:* Mr. T. Crooke, Mr. B. T. Lowne, Mr. S. J. McIntire, Dr. J. Matthews. *Treasurer:* Mr. R. Hardwicke. *Hon. Secretary:* Mr. T. Charters White. *Hon. Secretary for Foreign Correspondence:* Mr. M. C. Cooke. A paper on the Ratio-micro-polariscope, by its inventor, Mr. James J. Field, was read, at the conclusion of which the instrument was exhibited. Ten new members were elected, and the proceedings terminated.

SERIOUS CHARGE AGAINST A MEDICAL PRACTITIONER.—We quote from an Irish paper the following report. It furnishes another instance of the dangers to which Medical Practitioners are exposed in the honourable discharge of their duties. Dr. Wm. Bennett Forde was placed at the bar charged with a felonious assault. The prisoner had been put on his trial at the last assizes, but the prosecutrix having taken suddenly ill, and fainted in court, the jury were discharged. Messrs. Coffey, Q.C., and Gerald Fitzgibbon, for the prisoner, now put in a plea that the judge having discharged the jury, under the circumstances the prisoner could not be put again on his trial to this plea. The Crown answered, setting out the facts, and alleging that the judge, finding that the trial could not proceed, and that the cause was the sudden illness of the witness, without whom the trial could not proceed, had, in the exercise of his discretion, discharged the jury. His Lordship ruled with the Crown. Mr. James Green, Q.C., stated the case for the Crown. The prisoner was a Medical Practitioner at Queenstown, and the prosecutrix, Ellen Kearns, was a girl of 13 years of age, in the employment of a confectioner named Hammond. The girl complained of being ill, and her mistress sent for Dr. Forde, who came and took her back to his shop for the purpose of giving her a remedy. It was alleged that in his shop he committed the offence. He afterwards called at the house, and on each occasion the girl fainted on seeing him, and got an hysterical fit. When finally on examination, she stated what had taken place. The girl Ellen Kearns was produced and examined by Mr. Waters, Q.C. She proceeded to detail the facts at length, but in a manner so different from her informations, that his Lordship stopped the case and retired for ten minutes to consider it. On his return into court, Mr. Green, Q.C., said that, upon consultation with his colleagues, he thought it but just to withdraw from the prosecution. His Lordship directed an acquittal, and said that the story was evidently the offspring of the child's diseased imagination, and the prisoner left court without a stain on his character. Fortunately for the honour of the Profession, these charges when investigated are generally found to be false, but this trial, as well as many others which have taken place, inculcate the necessity of extreme caution on the part of our brethren. Consultations of a delicate kind should never take place except in the presence of a third party. The reputation

of a Medical Practitioner is like that of the wife of Cæsar—it must be "above suspicion."

LEGACY TO THE PARIS FACULTY OF MEDICINE.—A retired Paris shopkeeper has left by his will 150,000 francs for the purpose of founding a Professorship of History of Medicine, or, in the event of the Faculty not approving of this destination, some other professorship. As, however, it is stated that the money is not sufficient to endow a chair (at least 200,000 francs being required for this purpose), and as the testator insists that M. Cusco, whose specialty is ophthalmology, shall be the first person to fill the post, it is doubtful whether the Faculty can accept the donation thus fettered.—*Union Méd.*, July 24.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

H. D. T.—We make it a rule not to recommend any special Medical man. If pressed to do so, we advise the applicant to have recourse to such a man as Mr. Quain, of Cavendish-square, President of the College of Surgeons, or Mr. Hilton, Vice-President.

Jaffa.—In Copland's Medical Dictionary.

Wellclose-square.—Whilst the Metropolitan Board of Works is lavishing its hundreds of thousands on very doubtful works, we agree with our correspondent that it is strange that they cannot afford £4000 to prevent Wellclose-square being built upon.

A and B. enter into partnership; A. is a Member of the Royal College of Surgeons, B. is a Licentiate of the Society of Apothecaries. Question: Can a firm thus constituted legally claim charges made in their capacity as partners for attendance and medicines supplied in Medical and Surgical cases? We think not. A partnership is void in law under the clause of the Medical Act and under other statute laws unless both partners are duly qualified. The partnership is, *de facto*, illegal because it does not fulfil the provisions of the statutes in existence. B. cannot legally assume the title of Surgeon. Contradictory decisions have been given in the inferior courts of law, but the weight of evidence is against our correspondents.

COMMUNICATIONS have been received from—

Dr. HITCHMAN; Mr. H. SHERWIN; J. J. F.; Mr. NATHANIEL ALCOCK; Mr. SERGEANT; Dr. FRANK H. HODGES; Dr. D. MACKINTOSH; Dr. T. R. GLYNN; Dr. FAYRER; Mr. SAMUEL OLDHAM; Dr. DAY; Dr. PROTHEROE SMITH; Mr. J. B. BLACKETT; Mr. H. D. TOWNSEND; Dr. MACLEOD; Mr. ALEXANDER YULE; Mr. ALEXANDER YOUNG; Mr. J. ROBERTSON; Dr. ROBERTS THOMSON; Dr. F. H. BROWN; Dr. FELCE; Dr. DUDFIELD; Mr. J. A. ROSS; Dr. LETHEBY; Mr. T. C. WHITE; Mr. JOHN POLLARD; Mr. V. STONE; Mr. J. CHATTO; Dr. BALLARD; Dr. B. W. RICHARDSON.

BOOKS RECEIVED—

Soul's Reform of the Patent Law—Pope on the Drift of Modern Medicine—Broadbent's Attempt to apply Chemical Principles in Explanation of the Action of Remedies and Poisons—York Lunatic Hospital Report—Report on the Sanitary Condition of the St. Giles District—Medical Report of the Royal Lunatic Asylum of Aberdeen—New Orleans Journal of Medicine, vol. 22, No. 3—New York Medical Journal, No. 52—New York Medical Record—Report on the Health of Glasgow.

NEWSPAPERS RECEIVED—

London Mirror—Tower Hamlets Independent—New York Medical Gazette—Indian Volunteer Gazette—Liverpool Mercury.

VITAL STATISTICS OF LONDON.

Week ending Saturday, July 24, 1869.

BIRTHS.

Births of Boys, 1076; Girls, 1043; Total, 2119.
Average of 10 corresponding weeks, 1859-68, 1845·0.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	824	776	1600
Average of the ten years 1858-67	715·6	660·6	1376·2
Average corrected to increased population	...	...	1514
Deaths of people above 90	...	...	...

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-cough.	Typhus.	Diarrhœa.	Cholera.
West	463388	1	3	9	...	10	5	35	...
North	618210	2	10	14	...	14	9	96	...
Central	378058	...	1	11	...	15	2	28	...
East	571158	...	3	28	...	10	12	50	...
South	773175	2	6	13	4	18	15	44	...
Total	2803989	5	23	75	4	67	43	253	...

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·886 in.
Mean temperature	66·0
Highest point of thermometer	90·9
Lowest point of thermometer	51·1
Mean dew-point temperature	58·2
General direction of wind	Variable.
Whole amount of rain in the week	0·00

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, July 24, 1869, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the year 1869.	Persons to an Acre. (1869.)	Births Registered during the week ending July 24.	Deaths. Corrected Average Weekly Number.	Deaths. Registered during the week ending July 24.	Temperature of Air (Fahr.) Highest, during the Week.	Temperature of Air (Fahr.) Lowest during the Week.	Temperature of Air (Fahr.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3170754	40·7	2119	1462	1600	90·9	51·1	66·0	0·00	0
Bristol (City)	169423	36·1	106	76	*76	89·8	51·4	65·4	0·00	0
Birmingham (Boro')	360846	46·1	210	175	100	87·6	49·0	65·0	0·00	0
Liverpool (Boro')	509052	99·7	323	295	265	79·9	53·3	63·3	0·01	1
Manchester (City)	370892	82·7	185	210	*250	89·4	51·0	65·2	0·07	7
Salford (Borough)	119350	23·1	104	60	64	81·9	50·9	64·2	0·05	5
Sheffield (Borough)	239752	10·5	177	126	123	83·0	51·0	63·6	0·00	0
Bradford (Borough)	138522	21·0	85	71	65	84·9	51·1	64·0	0·09	0
Leeds (Borough)	253110	11·7	211	129	123	81·0	52·0	64·4	0·07	7
Hull (Borough)	126682	35·6	64	59	58	...	...	...	...	...
Newcastle-on-Tyne, do.	130503	24·5	82	69	49	79·0	52·0	61·8	0·00	0
Edinburgh (City)	178002	40·2	144	86	108	79·7	42·0	61·3	0·10	10
Glasgow (City)	458937	90·6	442	268	309	77·9	48·2	62·7	1·00	101
Dublin (City, etc.†)	320762	32·9	185	158	99	79·4	46·5	64·2	0·17	17
Total of 14 large Towns	6546587	35·5	4437	3244	3289	90·9	42·0	61·8	0·11	11
Paris (City)	1889842	...	...	...	817	...	...	...	...	...
					Week ending July 17.	Week ending July 17.				
Vienna (City)	(1863) 560000	...	...	...	335	...	...	66·0	...	...

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·886 in. The barometrical reading decreased from 30·02 in. on Tuesday, July 20, to 29·75 in. on Thursday, July 22.

The general direction of the wind was variable.

Note.—The population of Cities and Boroughs in 1869 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous.

* The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

† Inclusive of some suburbs.

APPOINTMENTS FOR THE WEEK.

July 31. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 1½ p.m.

August 2. Monday.

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 1½ p.m.; St. Peter's Hospital for Stone, 2½ p.m.

3. Tuesday.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.

4. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1¼ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.

5. Thursday.

Operations at St. George's, 1 p.m. Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

6. Friday.

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

CHOCOLAT-MENIER.

(Manufactured only in France.)

ANNUAL CONSUMPTION EXCEEDS 5,000,000 lb.

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BUSSANG	FACHINGEN	OREZZA	SELTZER
CARLSBAD	FRIEDERICHSALL	POUGUES	SPA
CONDILLAC	HOMBOURG	PULLNA	VALS
CONTREXVILLE	KISSINGEN	ST. GALMIER	VICHY
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BRITISH MEDICAL ASSOCIATION.

THIRTY-SEVENTH ANNUAL MEETING,

HELD IN LEEDS, JULY 27, 28, 29, AND 30, 1869.

ADDRESS IN SURGERY.

By THOMAS NUNNELEY, Esq., F.R.C.S.,
Surgeon to the General Infirmary at Leeds.

Mr. President and Gentlemen,—Long years ago, when I first became a member of this Association—then in its infancy, and numbering only a few hundred country members, being, as its name implied, a Provincial Association—it was thought no small honour to be the person selected to read the annual Address in Medicine or Surgery. Now, when not only its title, but its constitution, is changed, and it is in fact, as it is in name, a British Medical Association, counting its members by as many thousands as in those times it did by hundreds, and embracing not only the *élite* of the provinces, but many of the worthiest in each metropolis of the three divisions of the kingdom, many of the best men in our colonies, and honoured by the fellowship of numbers of the most distinguished men in Europe and America; when, year after year, the Professors of most of our oldest and largest universities, who, by themselves and their predecessors in their respective chairs, have made the study of our Profession an honour to the British name and a credit to human nature, have appeared in the office I am now called upon to fulfil, the honour is indeed great. But with that how greatly is the responsibility increased! so much, indeed, that, had I not first been named by my Professional brethren amongst whom I live, and had not the selection been afterwards confirmed by our governing Council, I should hardly have presumed to venture upon the office. Even now, in so doing, I must throw myself upon your favourable indulgence, and appeal to that kindly feeling which, I trust, the friendship engendered by our meetings through so many years will allow me to crave, not in vain, at your hands. That you appreciate my zeal in the cultivation of our noblest of professions, I feel assured; that you will forgive and look favourably upon my present shortcomings, I presume to hope.

Last year, the learned Linacre Professor of Anatomy in Oxford gave, as you well remember, an elaborate and interesting dissertation upon some most important questions in physiology—especially those in which modern science has made most progress—and showed the Association how great is the aid to be gained by the extended application of physical science to the unravelling of physiological problems. To have even attempted this a few years ago would have been not merely useless and impossible, but by many would have been denounced as presumptuous, irrational, and profane. How the advanced ideas laid before you by the learned Oxford Professors, Drs. Acland and Rolleston, were supported, and even carried still onwards, by the profound reasoning, the extended learning, the mathematical calculations, and the chemical knowledge of the Dublin Professor, I need not remind you; for no one who had the opportunity of hearing the address of Dr. Haughton can fail, even now, to remember how wit and wisdom were conjoined, and to have been deeply impressed with the fact that, if Medical men are to be capable of efficiently dealing with physiological and pathological questions, and the correct treatment of disease, they must be something more than mere anatomists and routine administerers of drugs; that they must dive deeply into and quaff freely of that extended scientific knowledge to the importance of which all our seats of learning have at last become alive, and which they are making such praiseworthy exertions to afford facilities for enabling their alumni to acquire.

Gentlemen, had I merely consulted the bent of my own feelings, I might have ventured, at however humble a distance, to follow in the same direction; for such inquiries have ever been amongst those which, from early life, have had attractive charms for me. I have ever regarded an extended acquaintance with the operations of nature as the true path by which the laws of life, whether of man, animal, or plant; the production, increase, maturity, decadence; the calling into existence and the passing into decay; the maintenance in health and vigour; the lapse into weakness and decay; the advance or degeneration of the species; the restoration and improvement; the descent into feebleness and imbecility of both mind and body in the individual—are to be learned and understood. I have ever felt that, in proportion to our knowledge of Nature, so will be our power, both for good and for evil, over her; and that, as man is but one manifestation of Nature, the better we are acquainted with the laws of matter, so shall we, whose especial province it is to deal with matter in its noblest and most complex forms, be better enabled to perform our duty. Let us but know the properties and the innermost laws which govern what we call inert matter; and, depend upon it, ascending from the simplest forms of organic material through a more and more complex combination of atoms until we arrive at man, with his varied mental and corporeal powers and weaknesses, so shall we understand the laws by which he is created, maintained in health, cast down by disease and decay, and finally returned to that dust whence he sprang. So also shall we be better able not merely to ward off those changes which constitute disease, but we shall be enabled to apply our means, whether it be by the application of hygienic laws or the administration of drugs—not, as at present, for the most part empirically, but with a knowledge of their specific effects, so that they shall act directly and certainly, accomplishing the purpose for which we employ them, even as now the chemist in his laboratory manipulates his agents; and thus we shall raise our Profession to the dignity and precision of a true science. Chimerical as it may perhaps appear to those who are not familiar with the progress of the collateral sciences, those who know what has been done and is being done by modern scientific investigations, will readily admit there are not wanting premonitory indications which, like the rising cloud, now no bigger than a man's hand, presage that such an era may ere long burst upon the world in full power, and bring with it changes as great and beneficial as did that little watery vapour, and far more universal. To mention no other fact; look what Marshall Hall's discovery of reflex nervous action, not more than thirty years old, following as it did rapidly upon those of Bell and Magendie, has done for physiology. Why may we not reasonbly look forward to like advances in therapeutics and practical Medicine? We have men amongst us this day who have done much, and who will certainly accomplish more. Why may not those great general laws which govern and regulate the universal phenomena of gravitation, light, heat, electricity, magnetism, galvanism, chemical and vital action, by which the face of all Nature, not of this earth and its inhabitants alone, is changed and metamorphosed, be proved to be mere modifications of one all-pervading principle which alike controls and explains the creation and distribution of distant worlds, and the origin and action of microscopic cells, and regulates the stupendous results of their various modifications and influences? When we consider how little was known of these subjects a century ago, and what is now understood and done with them, who shall presume to say how soon and how much more knowledge may not be obtained?

To-day, however, such is not my duty. While this lofty aim is ever to be kept in view as the goal which it is the duty of all of us—especially of those who are entering the Medical Profession, and of its younger members, who have leisure for the task—to strive to reach, we must not forget our present condition. We who are older have suffering humanity to relieve, health to restore, and disease to mitigate, with such means as we best can employ. As last year physiology was the theme, I have this year assigned to me what is to us and our fellow-citizens, as practical men, of at least as much immediate importance, the duty of addressing you on Practical Surgery, and pointing out, as far as may be in the limits of an address, the improvements and alterations which in recent times have taken place in it, both as a science and as an art.

This, considering the busy place in which we are assembled, can hardly be thought otherwise than appropriate. The splendid Hospital which the liberality of the town and neighbourhood has raised is a practical proof how pressing and important, in our every-day life, Surgery is. It must never be forgotten that the cultivation of both science and art is essential to the constitution of a good Surgeon. While he who is really a dexterous and exquisite artist, or a mere "practical Surgeon," may, if he has not a competent knowledge of the scientific principles which should guide and regulate his art, be a most dangerous man, and really a bad Surgeon; so, on the other hand, a man who has a profound knowledge of his

Profession as a science, may, if his hand have never acquired or have forgotten its cunning, or if his mind be so constituted that he cannot apply his knowledge to the case before him, be utterly unworthy to be trusted with the manipulation of diseased parts. Though it is undoubtedly true, that the more thoroughly the principles of Surgery are understood, the less the practice of it as an operative art will be required, I apprehend the most Utopian dreamer will never figure to himself the day when operative Surgery will be otherwise than a necessary blessing to mankind. So long as a man is a machine, controlling and controlled by resisting matter, so long will he be liable to the laws of matter, and be subject to accident and disease which require manipulatory interference. Hence the great importance of all improvements, not only in our means of diagnosis, but in the practical treatment of disease. In this respect our Profession has no reason to be ashamed. Great as has been the advance in the various branches of scientific knowledge, I venture to say that in no single one has it been greater than in our own. Let those who are acquainted with the history of our Profession—those who have adopted the excellent method of devoting some of their leisure to the study of the works of the many great men who have lived and worked in bygone days—declare the progress and improvements within even comparatively modern times. Nay, let those of only this generation, men of my own age, recollect what has been done within their own day, and they will not blush; for the progress made is unsurpassed, and such as, were it set forth in full, would much astonish those who are merely *au courant* with the Professional opinions of the present day. It is my duty to lay some of these improvements before you; and here the very richness of the material is a source of embarrassment. Of all it is impossible to speak even in passing words. Where volumes would hardly suffice to indicate their value, I must, for the most part, be content merely to glance.

I recollect the time when the stethoscope was almost an unknown instrument, and well remember the hesitation there was in arriving at an opinion as to its value as a means of diagnosis; yet it has done far more more for mankind than many a battle fought and won, which has ennobled and made famous its general throughout the length and breadth of the land. Forty years ago, the microscope was little more than a toy, as often, from its imperfections, its aberrations of colour and sphericity, and its feeble defining powers, leading to error as to truth. Now it has become almost perfect, and its most skilful and ardent manipulators are those of our Profession; while its employment, not only for histological investigations, but in the daily diagnosis of disease and its treatment, has become almost as essential to the scientific Practitioner as is the telescope to the astronomer. The ophthalmoscope is of so recent introduction, that it may safely be said that the majority of Medical men have not mastered the difficulties of its application; yet it has already revolutionised the diagnosis and treatment of several of the most serious affections of the eye, and rendered our knowledge of much that was before confused, uncertain, and impossible to understand, clear and precise. So the laryngoscope has enabled us to illuminate the larynx and trachea, which until now were closed, dark, and unapproachable to any of our senses; and thus not only can we see diseases which heretofore could hardly be guessed at, but, by operation and treatment, cure them. Though the endoscope has as yet not accomplished all that its votaries have said in its favour, and in the hands of the practical Surgeon has, I believe, so far failed to be of very much use in illuminating the deeper cavities of the body, it is doubtless the forerunner of improved instruments which will enable us to light up more than one of the hollow organs, and to see what is there going on. Nay, those are not wanting amongst us who anticipate the day as not very distant when we may be able to read as in a book the darkest recesses of our bodies; and I believe he who denies that this shall ever come to pass will be a bolder and a rasher man than he who believes in its realisation. Then, again, the sphygmograph, as a help to precision in estimating the true value of the variations in the pulse and the measure of the heart's action, in a more exact manner than digital touch alone can accomplish, is an application of physiological and mechanical skill which is worthy of great praise. Nor must the employment of delicate thermometers for ascertaining calorific variations, under different abnormal conditions, be passed over without mention, as in many cases tending to help diagnosis and prognosis.

Thrombosis and embolism, as now understood, are comparatively recent terms, by which are indicated conditions the most serious and dangerous, often suddenly fatal, which heretofore were utterly incomprehensible; and, though the study of these conditions may not, so far, have done all that could be wished in enabling us to cure them when once actually existing in a severe degree, it has taught us to understand the nature of the affection, and the cause of the great danger of it; to know what not to do, which formerly was, in ignorance, often done injuriously; and to do much to avoid the occurrence of the affection—even, if the attack be of lesser dimensions, and the obstructing plug be seated in the smaller vessels, or in those whose patency is not essential to the immediate maintenance of life, to greatly assist nature in effecting a cure.

The term "pyæmia" is of modern introduction; and, though much still remains to be solved respecting the true cause of the origin of the dreaded condition which it indicates, the very recognition of its existence shows a great advance towards precision of diagnosis, and throws a beam of light into that chaos of confusion which, within our own times, enveloped the true cause of that fatal result which so often follows accidents and operations. Though much still remains to be elucidated, what is known is an important onward step towards that scientific precision which eventually will enable us to reduce the fatality following Surgical injuries, whether inflicted by accident or by operation, to the least possible proportion.

At no very distant date, dropsy was most commonly, in the Medical mind, as it still is in the non-medical, an entity, a positive affection, to be treated as a distinct disease; whereas now even the youngest student knows that it is very rarely, if ever, otherwise than a consequence of disease in organs often seated far away from the dropsical part; and that to cure these organs is to remove the dropsy, while merely to busy ourselves with the removal of the effused fluid, and neglect the abnormal condition which gives rise to it, is truly to let the patient die untreated. Though some distinction was recognised between two most dissimilar conditions giving rise to a like state of abdominal distension, and having, on a cursory examination, many of the same symptoms depending upon the effused fluid, the pathological nature of ascites and ovarian disease, totally differing as they do, was hardly comprehended—the one most commonly a mere consequence of disease; the other a serious local malady, but little, if at all, under the control of drugs, but amenable to direct Surgical interference. Until recently, the poor sufferer from ovarian disease was doomed to almost helpless distress, dragging a miserable, comfortless, and, for the most part, short existence after the disease had once been developed; the temporary relief obtained by tapping being by no means so dangerless as many imagine; for I find, in looking over the record of operations in our infirmary—and there is no reason for believing that the ratio is materially different from that of other Hospitals—that, of the last thirty-eight cases of paracentesis for ovarian disease, ten ended fatally. Now, as the result of modern Surgery, ovarian disease is a curable one. If, in any of the great achievements whereby mankind has been benefited, Great Britain is entitled to a foremost place, most assuredly she may assert her claim to it in this; for her Surgeons may call the operation their own. So bold was the conception, so surrounded with difficulties and dangers in the diagnosis and the execution was the proceeding, that no wonder the world stood aghast and incredulous at the proposition, or that those who were the pioneers were denounced and subjected to obloquy for their temerity. That at first, from many causes, deaths were frequent was unavoidable; that ovariotomy will always be one of the most important and serious operations to which a human being can be subjected is certain; but it has now fairly won its place as equally legitimate as any other of the great operations in Surgery. By it hundreds of women in this country and in America have been restored to all the blessings of health and all the functions of life; so that the operation is now practised wherever Surgery is cultivated. Even in France, Germany, Italy, and other countries which have been slow in adopting it, ovariotomy is now not very unfrequently performed. The dangers of it are constantly decreasing; for, with continued experience, what cases are fitted for operation, and what are not, is better determined; the kind of operative proceeding and all its surroundings, and the proper after-treatment, are better understood. I believe it would be no difficult task to prove that, in experienced hands, ovariotomy is a less dangerous operation than amputation of the upper thigh. Less than thirty years ago, a man who proposed ovariotomy was denounced by more than one of those who were then princes in Medicine and Surgery, as a dangerous lunatic. Now, in this country, it is of almost daily performance.

From time immemorial, stricture of the urethra has been a terrible curse to the unfortunate sufferer from it, and—shall I add?—an opprobrium to Surgery. Now, if this be not entirely removed, it is certainly immensely mitigated. For generations, one device for the relief of stricture has followed another;

various forms and many materials have been employed, in instruments and chemicals, for passing along the urethra; and operations without number have been invented for enlarging its constricted and unyielding calibre; but, at the best, these contrivances have only been effectual in the least severe forms of the malady; and not unfrequently, even in these, the improvement has only been temporary; while, in the more severe and distressing cases, tedious and painful curative attempts have too frequently resulted in failure. Many of the suggestions for destroying the strictured part by escharotics, or for dividing the thickened membrane, whether from within or from without the urethra, have not been dangerless to life, and have so frequently failed in effecting a cure, that it is no exaggeration to say no practical Surgeon has been satisfied with the result which he has obtained by the use of them. Now, thanks to the simple, innocuous, and, comparatively speaking, painless operation, and the ingenious instruments devised by Mr. Holt, in the great majority of cases, even those of the worst description, a speedy and permanent cure may be obtained. Wherever a passage exists along the urethra, no matter how small, and a bougie, no matter how slender, can be got along it into the bladder, I believe that, with few exceptions, the complaint can be quickly cured. I have now done the operation so many times, without, in any one instance, any dangerous or serious symptoms supervening, that I can indorse all that Mr. Holt, in the last edition of his book, has said of it. In my opinion, Surgeons have only to give it that fair trial which it deserves, to secure for it very general adoption. Were it employed in an early stage of the complaint, I believe that those dreadful and yet not very unfrequent cases, where the perinæum is riddled with false passages, and the structures burrowed with hard gristly sinuses, would no longer be seen.

During the last few years, great activity has been exhibited in Ophthalmic Surgery. Our greatly improved means of diagnosis in affections of the retina, chorcid, vitreous humour, and crystalline lens, since the introduction of the ophthalmoscope, is an unalloyed good, when the diagnosis is founded upon sufficiently practical skill in the management of the instrument, and an accurate acquaintance with the precise appearances presented by the various tissues of the interior of the eye-ball in a normal, as well as in a morbid condition. To obtain this, however, in passing, I may venture to say, I suspect to require a more patient investigation than is always given; and hence, as with the microscope in the hands of the inexperienced, the instrument has not very unfrequently led to error, rather than to truth, from supposing all that appears to be seen exists in the eye; whereas it may be merely an optical delusion, or a confounding of the really natural appearance of the normal structures with those which result from diseased changes in them. That the method suggested by O'Ferrall, of removing the entire globe of the eye when it has suffered destructive change, or when it continues in an irritable condition after mechanical injury or inflammatory action, so that its presence excites sympathetic mischief in the other one, leaving its muscles and fibrous capsule as a movable nucleus, is a great improvement over the old plan of merely removing the anterior half of the ball, all those who have frequently practised both will readily admit; for not only is the operation far less severe, but it is far more successful in its results. I must, however, presume to express a doubt whether operative dexterity and bold manipulation have not, in some instances, taken the place of true Surgical knowlege and acumen, and not unfrequently led to consequences the reverse of beneficial to the patient, in some of the many operations now so readily resorted to upon the interior tissues of the eyeball. I doubt not that occasional success has rewarded the operator when it might not have been achieved by the more cautious treatment of the older Surgeons; but I fear, not unfrequently harm, rather than benefit, has ensued when operations have been practised upon eyes so changed by disease as to afford little probability of restoration to healthy function. Of all the tissues of the eye with which an undue liberty has been taken, almost as though it had been uselessly placed in the organ, is, I think, the iris, which, if it could complain, would, I suspect, with some justice do so. Its physiological value seems to have been unduly ignored; and, in more than one kind of operation, it is now ruthlessly, and, I fear, sometimes unnecessarily, destroyed. Thirty or forty years ago our best and most successful ophthalmic Surgeons rarely touched it, if they could avoid it. Now it would appear as though it could not be too frequently excised or torn away, whether it be healthy or diseased. Experience must determine which of the two proceedings is the best; but I must own to my judgment—perhaps some of my hearers may be disposed to exclaim, "Your prejudice"—inclining me rather towards the earlier than the more modern proceeding.(a)

Operations for the closure of recto-vaginal and vesico-vaginal fistulæ I need do no more than mention; for, as is well known, when successful, as they so often are, by rescuing the miserable sufferers from these horrible complaints, and from a life of forced seclusion and misery, in which existence is a burden to themselves and a nuisance to all about them, and restoring them to the enjoyment of companionship and activity, they are a benefit to humanity, and a triumph of modern Surgical skill.

Though the introduction of lithotrity is not of so very recent a date, many of those now present were in active practice before it was known, and it is only within the last few years that improvements in instruments, and the method of using them, can be said to have placed it upon a firm basis, and given it that hold upon Surgeons and the public which it now possesses. I am not about to enter upon a critical examination of its advantages, as compared with those of lithotomy, otherwise than to say that, while unquestionably it is in many cases an operation to be preferred to lithotomy, I am not altogether convinced it is so infinitely superior that in every doubtful case it should be selected, or that the mode which has sometimes been adopted in comparing the results of the two methods, is so correct and impartial as to give an exact and reliable comparison of the true value of them. In selected cases, it may be perfectly certain there are very few of us who, were we ourselves the subjects of operation, would not prefer lithotrity to lithotomy; yet I believe it to be true that in many cases the latter is the better operation of the two; and, taking everything into consideration, in comparing the results of them it will be found the ratio of recoveries after them approaches nearer than the advocates of lithotrity have sometimes striven to show. Those cases which are selected for lithotrity and do well would, so far as my experience goes, almost invariably do as well with lithotomy. In looking over the records of the two operations in our infirmary for the last sixteen years, I find that out of 111 lithotomy operations there were 97 recoveries and 14 deaths; while out of 25 lithotrity cases, 21 recovered and 4 died, showing a decided percentage in favour of lithotomy. Upon many points these records are not sufficiently explicit to allow of a very accurate judgment being formed, otherwise than it is clear that the patients subjected to lithotrity were in at least as favourable a condition for recovery as were those who underwent the cutting operation. That this high percentage of deaths after lithotrity is decidedly in excess of what it ought to be, according to other and larger returns, is certain; and were all the details known it might be possible to reconcile and explain the very great discrepancy between it and those of several excellent Surgeons, particularly Sir H. Thompson, which are much more favourable. Still the fact remains that, as a rule, the cases which are submitted to lithotrity are in a condition far more favourable for recovery than those which are lithotomised, independent of the operations themselves, and two most important conclusions may be asserted without fear of contradiction—1. That many persons having large and hard stones, who could not be relieved by lithotrity, do recover after lithotomy. 2. That many of those who die after lithotomy do so directly or indirectly solely in consequence of the great size of the stone. The size of the stone has, in my experience, more to do with the success or the failure of the operation, than any other single thing. Age has great influence, but the size of the stone has more; and yet it is precisely these unfavourable cases which are subjected to lithotomy, and not to lithotrity. With a small stone and a healthy young subject all experience proves lithotomy to be an operation of very little danger—a fact which ought always to be borne in mind when canvassing the respective value of the two methods.

The removal of the entire tongue is altogether a modern Surgical operation. Though, for time out of mind, greater or less portions of the tongue have been removed by cutting instruments, escharotics, actual cautery or ligatures, the importance of the organ in deglutition and articulation, the difficulty of reaching its base, and especially the fear of not being able to arrest the hæmorrhage, owing to the depth of the wound, the size of the arteries, and their near origin from the carotids, have not unreasonably deterred attempts at more than partial

(a) Let me not be understood as decrying operations for detaching adhesions of the iris when they will not otherwise yield to treatment, or operations for artificial pupil when necessary, or even excision of a portion of the iris when it has been lacerated or bruised in cataract operations, but rather to the frequent removal of large portions of the iris in extraction of the lens, and in glaucoma, when the objects to be achieved can be equally well attained without such destruction of important tissue.

amputation of it. I believe it was Mr. Syme who first suggested an operation for its entire removal, and performed it in the presence of many members of the Association, when its meeting was held in Edinburgh. Unfortunately, that patient, as well as a second, died a few days after the operation; and a solemn warning was published by Mr. Syme, who declared that the operation was so serious that further attempts were not justifiable, as no one could recover from it. Subsequently, I believe, in a third case, Mr. Syme was, by a like proceeding, rewarded with success; and Mr. Fiddes, in Jamaica, and Dr. G. Buchanan, in Glasgow, have also succeeded by the plan laid down by Mr. Syme. However, believing that the severity of the operation depended far more upon the method of proceeding than upon the mere removal of the tongue itself, I devised what I hoped would prove to be a less formidable one, and which experience has proved to be so. Up to the present time I have removed the entire tongue nineteen times, and Dr. Fenwick,(b) of Montreal, has done the same operation once, without any untoward symptom following in a single instance. In most cases, the patient has not required any after-treatment, being able to sit up the following day, and in ten days to be considered well. In the majority of operations not a drachm of blood has been lost. In two cases only has there been any hæmorrhage, and in those not more than half an ounce of blood was lost. In one a point of hot wire, and in the other a ligature, at once arrested the bleeding. The little constitutional disturbance which follows this operation is surprising; indeed, in the majority of cases, there is none. Now, I do not for one moment assert or believe that this operation will permanently eradicate cancer of the tongue, or prevent its recurrence, any more than the removal of the disease by the scalpel in any other part of the body will secure immunity for the future; but this I do declare, that, by affording an easy and safe method of getting freely beyond the disease, and demonstrating how very little inconvenience in articulation and deglutition is caused by the ablation of the entire organ, it will encourage much earlier resort to the operation than would otherwise be thought proper; and thus, so far as operation can do, cure the patient. The importance of the subject, and the little opportunity which there has yet been of making the method known, will, I trust, be considered a sufficient excuse for my introducing a matter in which I am personally interested.

Ever since the time of Tagliacotius, and more especially since John Hunter's immortal work on "Inflammation," made Surgeons understand the *rationale* of the union of parts newly brought together, plastic operations, as they are now commonly called, have been practised more or less frequently, and with more or less success; but I doubt if even now their value and importance is sufficiently appreciated, or the enormous benefit which can be effected by them, when every other plan of treatment fails, in those dreadful contracted cicatrices which result from burns, is adequately recognised. Every Surgeon must know of such cases. I have reason for believing that in the Leeds Infirmary such cases have been, and still are, more frequently and successfully treated by operation than they are in some places, and, perhaps, more commonly than some Surgeons are aware of.

In tabulating the records of operations done in the Leeds Infirmary during the past sixteen years, I find one hundred and seventy-two cases of plastic Surgery entered. Of these, none were on the lower extremity; forty were on the upper, of which thirty-two were cured, six relieved, and two failed. These were all contractions of the axilla, whereby the arm was tied down to the side; of the bend of the elbow, the forearm being greatly contracted on the arm; or of the wrist, palm of the hand, or fingers. Many of the cases were extreme and complicated, more than one contraction existing. Fifty were of the neck and face, whereof forty-one are entered as cured, seven as relieved, one no better, and one as dead. Many of these, also, were extreme, requiring more than one operation. Several were operated upon by the late Mr. Teale, and supplied the data for his papers "On Plastic Surgery." Two cases were of the chest, both being relieved. Staphyloraphy was performed four times, two of the cases being cured, and two greatly improved. In one a rhinoplastic operation improved the nose. The remaining seventy-six cases were either of the cheeks, eyelids, or lips, the majority being single or double harelip operations. It is, however, of cicatrices following deep burns that I wish more especially to speak, as I believe every other kind of operation than the transplanting of normal skin to be not unfrequently worse than useless. That occasionally some benefit may follow the stretching of the tender and inelastic new cutis and the hard, rigid, fibrous bands under it; the dissecting the skin from the subjacent tissues, the simple division of it, the entire removal of it, and allowing the gap so caused to granulate and cicatrise afresh when on the stretch; or the attempt to form new cutaneous tissue by metallic setons, and various other contrivances, I am not prepared to deny, after what has been stated by Surgeons to occur; but in my experience it has not been so, and I cannot but suspect that, if we had a fair account after the lapse of two years of most of those cases which at first appeared to have been benefited, we should find the condition of the parts very much less favourable than at first they promised to be, for almost invariably contraction in the new tissue gradually goes on until a hard, unyielding cicatrix is again formed, as bad as it ever was. John Hunter long ago wisely remarked that Nature was more chary of forming new skin, as though it were more difficult for her to do it, than almost any other tissue in the body.(c) When she does form new skin, after the entire substance of the dermis and subcutaneous tissue has been destroyed, it is, as every Surgeon knows, a very poor apology for the original structure. The only effectual method for obtaining a cure I believe to be the substitution of a portion of the neighbouring sound skin for the cicatrix. That the attempt is not altogether free from risk is certain, for if the flap should slough, as it may do, the patient may be rendered worse than he was before. But in every operation there is some risk. The deformity to be remedied is often so distressing and serious, the cure in many cases is so complete, and the proportion of failures to cures is so small, that I am strongly impressed with the propriety of operating in every case where a satisfactory flap of sound skin can be obtained. The operation is so important, and frequently so tedious, that it is not to be undertaken without due consideration of all the proceedings to be adopted. Some of those which are necessary to success I will shortly call attention to in the *Journal*.

Every Surgeon knows but too well that fractures of the spine are not only amongst the most fatal, if not the most fatal, injuries we have to do with, but also that perhaps they are those for which Surgery has hitherto done the least. Though we occasionally hear of a patient who is supposed to have suffered from a fracture in some part of the spinal column recovering, this exception to the usual course is so very rare as only to prove the truth of the rule, and in some of the alleged instances it is permissible to inquire whether the symptoms may not rather have resulted from concussion of the cord, effusion of a small quantity of blood in its sheath, twisting of its ligaments, or some similar condition, than from fracture of and compression by displaced portions of the bones. I do not mean to question the possibility of recovery taking place after fracture of the spine, even though nothing be done; indeed, there is sufficient evidence to prove that it has; but that it is to be looked for in any given case is more than any Surgeon would anticipate. So hopeless are these injuries that Sir Astley Cooper more than once declared if one patient out of one hundred cases can be saved by operative interference, it is one saved from death.

I believe Mr. Henry Cline was the first who actually trephined the spine, though, as Dr. McDonnell in his two excellent pamphlets has pointed out, he was not the first to discuss the propriety of its being done.(d) The suggestion was first made by Dr. James long before,(e) and also by Louis; but I cannot find from the passage in "James' Dictionary" that he had either seen or knew of the operation having been done; or,

(b) See a report of the operation in the *Canadian Medical Journal* for December, 1868; see also the *Lancet* for November 14, 1868, where Mr. Sampson Gamgee relates a case in which he removed the tongue by a different proceeding—Rignoli's; terrible hæmorrhage occurred at the time of operation, and also subsequently, the patient dying of exhaustion and sloughing of the parts. During the last week, Dr. Bell, of Ottawa, Canada, has favoured me with a visit, and informed me of a second successful case which he and Dr. Fenwick have just had.

(c) "Skinning is a process in which Nature is always a great economist, and without a single exception."—*Hunter's Works*, by Palmer, vol. iii. p. 501.

(d) "A Case of Fracture of the Spine," in which the operation of trephining was performed, with observations, by R. McDonnell, M.D., F.R.S., etc., 1865; "On the Operation of Trepinning in Case of Fracture of the Spine," by R. McDonnell, M.D., F.R.S., 1866.

(e) "If the spinal marrow is wounded, death follows inevitably. Though, as it may seem cruel not to attempt the relief of one under these unhappy circumstances, the Surgeon should lay the injured part bare by the knife, and elevate the fragments, which press upon the medulla, in a proper manner; or, when they are quite loose, extract them in a proper manner; then let him cleanse the wound thoroughly, and apply balsamic medicines, using the napkin and scapulary. He must continue this until the wound heal or the patient dies."—*James' Medicinal Dictionary*. London: 1745. Vol. ii. "Fractures—Fracture of the Vertebræ."

from the report in the *Archives Générales*, that Louis did more, in the case of a fractured spine by a musket-ball, than introduce his finger into the wound whence a ball had been extracted, and take away some loose fragments of bone, though both of them perfectly understood the *rationale* of the operation; and Louis actually discussed with M. Duplessis the propriety of making an aperture when there was not one.(f)

Though Mr. Cline's patient died, the case served to direct much attention to the operation, and, indeed, to divide Surgeons into two parties as to the propriety of the proceeding. Opposite opinions were expressed with very great bitterness, into which personal feeling largely entered. Sir A. Cooper expressed himself strongly in favour of the operation,(g) in which he was supported by several excellent practical Surgeons, such as Benjamin Bell, Tyrrell, South, and others. (To these names may now be added that of one of the most distinguished living authorities on the structure and functions of the medulla spinalis, Dr. Brown-Séquard.) Sir C. Bell, John Bell, and Alexander Shaw, on theoretical grounds alone, denounced it in such unmeasured terms as to show that at least as much feeling and prejudice as Surgical knowledge controlled their judgment.(h) Though the operation of trephining the spine has occasionally been done in this country, in France, and Germany, and still more frequently in America, the statement will probably be regarded as near the truth that, from one cause or the other, the great majority of Surgeons have never entertained a sufficiently favourable opinion of the operation to induce them to perform it. For many years it seems to have been almost forgotten. Yet I cannot but think this neglect has resulted more from submission to habit, to traditional authority, and a want of a due consideration of all the facts connected with the subject, than from a full and careful consideration of them. Doubtless the almost uniform fatality after fracture of the spinal column has greatly tended towards inclining Surgeons to regard operative interference as useless.

Dr. McDonnell, in the first of the two pamphlets to which I have referred, has collected all the cases he could find recorded where trephining of the spine had been performed. These are twenty-six in number, in seven of which, he says, life was preserved for some time. Since then, Dr. McDonnell has operated upon a man whose life was certainly prolonged by it, and in whom, for a time, marked improvement took place. I have operated upon four men, three of whom died, the injuries, as shown by post-mortem examination, being such as not to allow of recovery taking place; but the other man, who most assuredly, judging from all the cases I have seen of fractured spine, must shortly have died, recovered, and lived for upwards of two years and a half after the operation, which was done August 1, 1866. He continued in excellent health; though weak and partially paralysed in the legs, he had full power in the upper extremities. His condition at the time of the operation was most unfavourable; and after it he was most unfortunate, for he had a very severe attack of hospital gangrene, which was then prevalent in the Infirmary. This caused very extensive sloughing over the sacrum and where the wound had been made. Dr. Gordon, of Dublin, has had an equally successful case.(i) Dr. Brown-Séquard informs me of a case he saw in 1867 in Western New York State, where Dr. Potter had, with most satisfactory results, operated. Though the spinal cord had been completely crushed, life was saved in an enjoyable condition. In May of this year I operated upon a third case, and again in June upon a fourth. Thus out of thirty-three cases of fracture in various parts of the spinal column, where trephining has been resorted to, life has been permanently saved in at least three of them, and considerably prolonged in several others; while, in some who died, marked improvement immediately followed the operation. Moreover, in no one of these successful cases was the condition of the patient favourable. In all of them the accident had occurred some time before the operation was performed, so that pressure on the spinal marrow had been prolonged, and much mischief thereby done. In Dr. McDonnell's case, the injury was inflicted five weeks before the operation was performed. In my patient, who recovered, as long a time had elapsed. In my fourth case, the operation was done on the tenth day after the injury; while in Dr. Gordon's two months had actually intervened between the fall which occasioned the paralysis and the operation. I am aware this very length of time may, by those who are opposed to the operation, be adduced as an argument against it, and as favouring the assertion that these patients recovered in spite of the operation, rather than in consequence of it. However, before arriving at such a conclusion, I would venture to advise those who are inclined to use it to make themselves acquainted with the details of the cases, when I shall be much surprised if they should continue to do so. If so, I should merely reply that if such a mode of arguing were allowed, it would render all observation useless. It would be a mere assertion, contradicted by every analogous fact. If Sir A. Cooper's experience of these cases, when left to themselves, be true (and that it is so I believe all who have seen many such cases will coincide in), then I would declare the success which has attended the operations lately done is as satisfactory evidence of the propriety of them, in suitable cases, as is that for the propriety of trephining the skull when fracture and depression of it have happened.

The three great arguments which may be adduced against the operation are:

1. The difficulty in diagnosing between those cases in which the operation may be useful, and those in which it cannot possibly afford relief, owing either to the extent of the fractured bones, the impossibility of removing the pressure, or of remedying the mischief which has already been inflicted upon the medulla spinalis or to other organs, as in my fourth case, where a good deal of blood had been effused about both, and within one, of the kidneys. That this is a serious question is undoubtedly true; but it is almost equally so in fracture of the cranium and many other dangerous injuries involving important operations. If we are to be deterred from operating in every case which is not free from doubt, we must abandon many operations which all agree ought to be undertaken. It is a good argument for putting us on our guard, and for inducing us to carefully watch and minutely investigate every symptom; but it is not so for prohibiting operative interference, provided this be based upon sound anatomical and pathological knowledge. I believe careful attention and extended experience will enable us, in fracture of the spine, to determine with as much accuracy upon what cases are fitted for trephining and what are not, as it has done in fracture of the skull, and in selecting such cases of ovarian disease as may be submitted to operation, and such as ought to be let alone.

2. The position of the fractured bone often renders it impossible to reach it. It is said, with some truth, that commonly it is by the body or bodies of one or more vertebræ being broken and displaced, that pressure on the front of the medullary cord is caused; and, as this cannot be removed, the mischief will not be relieved by merely taking away the arches and spinous processes behind it. No doubt this is correct in many cases, but it is not so in all, and possibly not so commonly as is supposed. It not unfrequently happens when the fracture is caused by direct violence, as in this district it often is (and likely enough in others), applied to the part itself, as by the falling of stone or earth in quarries and coal-pits, when the man is in a bent position, that the arches are broken and depressed upon the cord, causing pressure of it, precisely as a piece of depressed skull presses upon the brain.(k) Now, why

(f) *Archives Générales de Médecine*, 1836, tome ii., p. 421.

(g) "Mr. Henry Cline was the only person who took a scientific view of the accident. He considered it to be similar to fracture with depression of the cranium, and to require that the pressure should be removed; and as the cases had proved so uniformly fatal, he thought himself justified in stepping out of the usual course, with the hope of preserving life. He made an incision upon the depressed bone, as the patient was lying on his breast, raised the muscles covering the spinal arch, applied a small trephine to the arch, and cut it through on each side, so as to remove the spinous process and the arch of the bone, which pressed upon the spinal marrow. The only case in which he tried it did not succeed; and, unfortunately, he did not live to bring his opinion to the test of experience to warrant a decided judgment being formed. He was blamed for making this trial. I am not sure he would have been ultimately successful; but in a case otherwise without hope, I am certain such an attempt was laudable."

"I beg the reader to observe that this operation is not mine; that I have expressed some doubt of its ultimate success, but I wish the trial to be made as the only means of deciding positively on its utility; and if it saves a life in one hundred, it is more than I have yet seen accomplished by Surgery."—*Cooper, on Fractures and Dislocations*, 4to, p. 516.

Referring to the above passage in Cooper's work, Sir C. Bell says: "The man must be already dead whose condition is not made worse by such an operation as this. What sort of schooling must he have had who does not believe that a man would be the worse for having a bone dug out from around the spinal marrow?"—*Observations on Injuries of the Spine*, by Charles Bell, 1824, p. 22.

"Such are the symptoms, and such frequently the manner of our patient's death; and, notwithstanding the bloody operation described in books of making incisions, finding the fractured or luxated bone, and drawing it out by the spine or splinters, there is nothing practicable; and these very ignorant directions, given upon the highest authorities, are dangerous to none but boys. The cutting into the fractured vertebra is a dream."—*John Bell, Principles of Surgery*, 4to, vol. i., p. 626.

(h) Mr. Le Gros Clark, in his Lectures on Surgery, just delivered at the Royal College of Surgeons of England, expresses an opinion decidedly adverse to the operation.

(i) *Medico-Chirurg. Trans.* vol. xlix. p. 21.

(k) Even complete separation of the bodies of the vertebra does not necessarily destroy the cord. I have recently had a very interesting case which proves this. A man on the roof of a building nearly forty feet high

the elevation of the bone should not relieve the pressure and its effects, as it is expected to do in the other, I am at a loss to conceive. Such also, I presume, will be the effect where the pressure is caused by effused blood rather than by depressed bone. In the cranium, if blood be effused under the dura mater, even though we might not think of dividing the membrane, we should not hesitate to elevate the depressed portion of bone lying over the effused blood, in the reasonable hope of relieving the pressure, and so in the spine. If the blood be external to the membrane and immediately under the bones, the pressure would certainly be more effectually removed in the spine than in the cranium. It must also be remembered that in many instances it happens, even when the fractured and displaced portion is the body of one of the vertebræ, that the offending piece of bone may be small and not greatly displaced, so that, by removing the counter-pressure caused by the arches, which perhaps may also be displaced, the narrowing of the canal, though mainly caused by the anterior pressure, may be effectually removed. As the cord does not completely fill the bony canal, is not tightly strung in it, and is not inflexible, there is no reason to suppose that it cannot recover from a slight displacement in any direction, or that it will not accommodate itself to its altered position, provided the calibre of the canal be not materially lessened, and the cord itself have not been injured. The brain recovers from temporary pressure, and I see no reason why the spinal cord may not equally do so. Indeed, we have ample proof that it does, in the frequent recoveries after not only lateral, but the most excessive and acute angular curvatures of the vertebræ. When disease in the bones has ceased, we find the functions of the distorted cord are as perfectly performed as they are in the straightest vertebral columns. The degree of displacement in such cases of extensive caries of the vertebræ is often far greater than can occur in recoverable cases of displacement by injury.

3. Destructive inflammation of the medulla and its membranes, set up by the operation, has been declared to be an almost necessary consequence of trephining the spinal bones, and has doubtless deterred many Surgeons from venturing upon it. Upon this Sir Charles Bell and Mr. Shaw were particularly emphatic. Yet experience has proved that to a great extent the fear is imaginary; for, if the operations which have been performed have not been sufficient to remove all other objections to the operation, they certainly have been sufficient to prove that this one has been very greatly exaggerated. It must not be overlooked that, owing to well-known anatomical arrangements, the spinal cord is far more favourably placed than is the brain. The dura mater in the cranium, owing to its intimate connexion with the bones, is very much more likely to suffer when fracture occurs, than it is in the vertebral column, where it is not in close apposition with the bones; and I need not remark upon what every Surgeon so well knows, that upon its integrity depends the condition of the arachnoid and pia mater. If it be opened they most probably will become inflamed and suppuration follow; if it be not injured, their normal condition may be mantained, and the brain and cord substance escape inflammatory mischief. In my three cases where death followed, careful examination showed no trace of inflammatory action about the cord or its membrane.

It has been asserted as a reason why the operation should not be performed, that it is a very difficult and painful one; that the wound could not heal, and that, even though the cutaneous and muscular one should do so, the bones cannot be reproduced, and thus the spine will be left too weak to support the head and shoulders. These are imaginary fears, which have been proved to be altogether groundless. That the operation requires care is perfectly true, but so do most other important operations in Surgery. It is neither so delicate, nor involves so much anatomical knowledge, as many which are constantly undertaken. It is not a very painful one; the parts which are divided are not particularly sensitive, and even if they were so, there is, in the majority of cases, no reason why an anæsthetic should not be given. Whenever the fracture is below the middle dorsal region, so that respiration and the heart's action are not interfered with, there appears no reason why such may not be administered. Chloroform was given in Dr. McDonnell's and Dr. Gordon's cases, as it was fully in three of mine, and partially in the fourth. The same argument would forbid nearly every operation. In all the cases which have recovered, the wounds have healed up well and quickly, and in the three which have permanently recovered, no weakness of the spine has been complained of, or is at all apparent. The man upon whom Dr. Gordon operated is following a mechanical occupation, and he upon whom I operated could easily have done so, as his arms and head were perfectly supported, and moved; indeed his sister, with whom he lived, declared he was "wonderfully strong in his upper parts;" while the man in New York State, operated on by Dr. Potter, enjoys life. Moreover, there is great reason to believe that breaches to a moderate extent in the vertebral arches may be filled, if not with ossific deposit, at least with strong fibrous tissue. This supposition is strongly supported by experimental inquiry upon animals; for Dr. Brown-Séquard has been good enough to show me preparations, which he has taken the trouble to bring from Paris, of the spinal columns of cats and dogs, where, during life, he removed some of the vertebral arches and spinous processes, and after death found the spaces partially filled with deposit of bony material. The want of ossific deposit after trephining the cranium is not regarded as an argument against the operation where a portion of the skull has been depressed. Other arguments *pro* and *contra* could easily be brought forward, were I writing a treatise upon the subject, which I am not, and for which this is neither the time nor place; but I hope I have said sufficient to induce Surgeons to consider the subject impartially, and to give the operation a fair trial. That success will be frequent, I do not pretend to anticipate; the nature of the injury does not allow this to be hoped for; the fatality after similar operations upon the cranium alone would not justify this, but if one case in twenty should be successful, as I think may fairly be anticipated, it would still be a great gain; for Sir A. Cooper declared that if one in the hundred recovered, it would be the one snatched from death. So far, out of thirty-three operations, permanent success has been obtained in three cases, and prolongation of life in several others.

Abnormal conditions of joints and their treatment form no small or unimportant part of a Surgeon's work. From time immemorial they have done so; and there is no reason to think they will not do so in the future. Disease in the articulations has probably been the cause of important Surgical interference almost as frequently as disease in all other parts of the body put together. Probably more limbs have been amputated in consequence of disease in, or accidents to, the joints than from all other causes conjoined. Hence, whatever improves the Surgery of the articulations is an immense gain. Not to dwell upon the gradual but immense advance in the Surgery of rest, which for fifty years has been steadily growing, and which really was the true cause of much of the success of Scott's treatment, though he himself was not fully aware of it, I think I may unhesitatingly claim your attention to two of the greatest advances in Surgery—the reduction of dislocated limbs by manipulation, and the excision of such joints as are hopelessly diseased, instead of amputation of the whole limb. These two great improvements could hardly have been made prior to our own day, for, until anæsthetics were discovered, manipulatory reduction of dislocated limbs could only have been practised in very exceptional instances, and excision of joints would not have been frequent.

Here I would venture for one moment to digress, to point out how the unity of all parts of our Profession is demonstrated, and the absolute necessity there is for those who pursue one branch to be educated in all. Nature has constituted vitality one; and we who are the handmaids of Nature, helping her in her distress, putting her in the right when she is wrong, and assisting and encouraging her when she is right, must deal with her in her entirety if we would be good Medical men. To understand one condition, and to ward off the other, wherever the disease which causes it may be seated, we must know all, and discard as unphilosophical and dangerous errors mere specialties. Anæsthetics, when first introduced, were regarded as a blessing, by the saving of pain; but none of us then fully recognised how greatly they would extend our Surgical power, by enabling us to accomplish so much more than had ever been done before. True it is that dislocated bones have been put into their sockets from time to time by rude movements; but such attempts have been conducted on no rule: in the great

slipped, and fell transversely upon some iron palisading. Two of the spikes penetrated the long muscles of the back, fracturing the transverse processes of two lumbar vertebræ, and the floating ribs on each side, passed into the abdominal cavity and wounded the liver and other viscera. Yet the poor fellow retained complete sensation and motion in both lower extremities, and during the night actually got out of bed and walked round it. After death, the fibro-cartilaginous body between the second and third lumbar vertebræ was found to be completely divided, and the spinal and transverse processes separated, the only connecting structures between the vertebræ being the ligaments. This specimen, with three others, taken from the fatal cases where trephining had been performed, are exhibited in the museum. In more than one instance it will be seen that though the bodies of the vertebræ have been separated from each other, there has been no displacement of them.

majority of cases they altogether failed, and, when they did succeed, it was more frequently by brute force or chance than by skill.

In the whole round of Surgery, I know of nothing more perfect than the reduction of a dislocated limb by manipulation, as it has been not inaptly called. To those who have only seen a dislocated hip, for instance, replaced by the common method of extension and counter-extension with pulleys, and for the first time witness a few painless and comparatively gentle movements made with the dislocated thigh by the unassisted Surgeon, the process very likely not occupying a minute, and find the limb restored to its normal condition, the proceeding must appear almost like magic. To Dr. Reed, of Rochester, U.S., we are, I believe, indebted for first directing attention to this plan, which he pointed out as applicable to two of the four varieties of hip-joint dislocation. The method is, however, capable of a far more extended application than Dr. Reed appears to have been aware of. In our Infirmary we have reduced not only every form of dislocation the hip is liable to, but those of the shoulder also. I have practised it in a man seventy-three years old, and I have assisted my colleague, Mr. T. P. Teale, to do so in a child of only two years. My own cases of success number upwards of twenty, and each of my colleagues has had several. Many cases have been reported by Mr. Birkett in Guy's, Mr. Hutchinson in the London Hospital, and by other Surgeons in Hospital and private practice, so that the general value of the method may be regarded as fairly established. I may mention that its successful performance mainly depends upon attention to two things—1. Our anatomical knowledge, enabling us to place the bones and muscles in the most advantageous position; and, 2. On bringing the muscles into a proper condition, in which they shall have neither too much nor too little power of action, for either state will prevent success. If their action be too great, their resistance cannot be overcome; on the other hand, if it be entirely suspended, the head of the bone will not be drawn into or maintained into its natural cavity. Hence the anæsthetic should only be carried far enough to suspend volition and spasmodic action, leaving some little power of perception and contraction. When in this semi-passive condition, the limb should be firmly seized, put into gentle rotatory motion in such a direction as our knowledge of the attachment of its muscles tells us, when they act, will cause them to draw the head of the bone towards its socket, and then, by a sudden and more forcible action, they are roused into quick contraction, by which the bone is partly thrown and partly pulled into its socket. To every dislocation of the ball and socket-joints this simple method is applicable; to the hinge-joints it is not equally so.

Though excision of the knee, shoulder, and elbow-joints was introduced in the latter part of the last century, the operation was so little practised, and took so little hold, that, as a practical operation, excision of joints may fairly be claimed as of recent date. Mr. White,(l) of Manchester, appears to have the honour of being the Surgeon, in 1768, who first successfully excised the shoulder-joint, and, on theoretical grounds, to have suggested excision of the hip-joint, though he never performed it. It was, so far as I know, Mr. Park, of Liverpool, who first performed excision of the knee-joint, which he did in July, 1781, on a seaman who, after a long and dangerous illness, recovered so completely that he was reported to be able to perform the duties of a common sailor. In a second operation, the patient died. These two cases appear to have constituted Mr. Park's experience. Soon after the publication of the successful case, the two Moreaus, father and son, in France, excised, with more or less success, not only the knee-joint, but the shoulder also. A few excisions were done in France and Germany. The results, however, do not appear to have been very satisfactory, and for many years the plan seems to have sunk into oblivion. In 1827, Mr. Crampton, of Dublin, wrote in favour of the operation, after which a joint was now and then excised; but still the feeling against the operation was so strong, that it was regarded as almost forbidden, especially of the knee. Mr. Syme(m) published a work on excision of joints, in which he spoke in favour of excision of the shoulder- and elbow-joints, but forbade excision of the wrist and hip, and spoke doubtingly of the knee-joint.(n) During the last thirty years, and especially the last five, excision of joints has come more and more into vogue, and at the present day many Surgeons practise and advocate it. Mr. Jones, Mr. Price, Sir W. Fergusson, Professor Humphry, and others may be named as advocates of it. Still, however, in many Hospitals it is not frequently performed; and many Surgeons look upon excision—except, perhaps, of the elbow—with considerable distrust, and choose amputation as the preferable operation, believing the danger to the life of the patient to be less, and thus agree with Samuel Cooper, who, in his "Dictionary of Surgery" (6th ed.), says, after reviewing the operation: "I see no reason for preferring excision to amputation. No doubt more limbs might be saved by the practice than by that of amputation, but more lives would be lost."

One of the latest English writers on the subject, who even proclaims himself an advocate for excision, says: "I believe excision of the knee to be a more severe operation than amputation, more immediately dangerous to life, and requiring a longer time for convalescence."(o) Dr. W. MacCormac, of Belfast, in a recent article, where he compares the results of excision of the knee with those of amputation of the thigh (speaking, however, it should be stated, more from the cases which he has tabulated from the practice of other Surgeons, than from his own experience), declares excision of the knee to be at least twice as dangerous an operation as amputation of the thigh.(p) On the other hand, in addition to the Surgeons whose names I have above mentioned as in favour of the operation, must be placed that of Mr. Butcher, of Dublin, who speaks in the most decided terms of the advantages and comparative safety of excision of the knee. Out of seven cases upon which he has operated, six made good recoveries; only one proved fatal.

I think I am hardly speaking too decidedly when I say that nearly all Surgeons who have practised excision of joints agree that, whatever be its merits so far as the lower extremity is concerned, there can be no doubt of its advantages in the upper. I have now performed excision of joints so many times with success, and with so few failures, that, were I to speak only from my own experience, I should, in suitable cases, give an almost unqualified opinion in favour of excision of nearly every joint in the body, as compared with the corresponding amputation necessary to get rid of the disease; while I believe my colleagues, from their experience, would hardly be disposed to speak quite so strongly. I have successfully excised the shoulder-joint three times. The elbow-joint I have removed eight times. Five of the cases recovered with useful arms. Two of the cases died, one being a woman who, when nearly well, was carried off by erysipelas, then prevalent in the Infirmary; the other was a man with compound comminuted fracture of the joint, caused by a fall from a great height with bales of wool; these fell upon him, and crushed his body: peritonitis was set up, and, I believe, was the cause of death. The remaining case was one of partial excision, which in the end required excision of the whole joint, and then did well. Twice I have removed the wrist-joint according to Lister's excellent method. One case did exceedingly well; the other required amputation, the metacarpal bones being found extensively involved. The hip-joint I have excised six times, with only one death, and that from an attack of diphtheria seizing the boy three days after the operation. One operation, where long-continued suppuration of the pelvis had previously existed in a bad subject, was followed by great suppuration and very slow healing of the wound. The other four patients recovered quickly and well, with hardly any lameness, a high-heeled shoe being all that is required. I have excised the knee eight times, with uniform success. Some of the patients walk with no other lameness than a stiff knee. In two of these cases, the condition is quite equal to that reported of Park's sailor. One man gains his living by selling coals, a sack of which he commonly carries on his back. Excision of the various bones of the foot, one, two, or three being removed, where a while ago amputation above the ankle would have been adopted, I have done and seen done very frequently, with uniform success, so far as immediate recovery is concerned, and, in the great majority of cases, with a permanently useful limb; but, to

(l) White's "Cases in Surgery," 1770.

(m) "A Treatise on Excision of Diseased Joints." By James Syme. 8vo. Edinburgh, 1831.

(n) The feeling against excision of the knee-joint was doubtless increased by the ill-success of those who practised it; for not only were many deaths caused, but long and tedious recoveries often only resulted in misshapen and useless trunks, so that no one appears to have realised anything like the signal success reported by Park, and thus suspicion was raised in many minds that the extraordinary usefulness of the limb in that case had been overstated. The unfavourable feeling towards the operation was certainly not lessened by the fact that in more than one instance where excision of the knee-joint had been done in children who recovered, the growth of the limb was arrested, and thus, as they grew up, one leg increased with the body, while the other remained that of a child.

(o) Holmes's "Surgical Diseases of Children." 8vo. London.

(p) "Observations on Amputation of the Thigh and on the Merit of that Operation, as compared with Excision of the Knee." By Wm. MacCormac, A.M., M.D. (*Dublin Quarterly Journal of Medical Science*, August, 1868.)

insure this, the greatest care must be taken to remove every affected bone. If this be not done, the probability is great that, in the end, amputation will be necessary. From not being sufficiently careful on this point, in some cases, Syme's or Chopart's amputation has been required before the patient could be said to be well.

Thus, then, I think I am justified in declaring that, in my experience, excision of joints has been most satisfactory, not merely as regards the immediate effect of the operation, but in the after-condition of the patients. Their power of locomotion, when the lower extremity is concerned, and the retention of the hand and arm, with all their varied movements, in full, as compared with their maimed and comparatively helpless condition when amputation has been performed, even though supplied with the best apparatus the skilled mechanician can furnish, contrast most favourably. The records of our Infirmary show that, in the last sixteen years, sixty-six excisions of joints have been performed. Of these, five died; one was relieved; in two, amputation was subsequently done; fifty-eight recovered. Of the sixty-six, thirty-eight were excisions in the upper extremity, and twenty-eight of the lower. Six of the upper extremity were primary, for accidents. Of these, five recovered, the average age being 22¼ years; the man who died was 43 years old. Of the thirty-two pathological excisions of the upper extremity, thirty recovered. One, aged 30, was greatly benefited temporarily; amputation became necessary, which also relieved for a time, and was followed by death from phthisis. One, aged 55, died from exhaustion after erysipelas; while the average age of the thirty who recovered was 17¾ years. Of the lower extremity, only five were primary excisions for injury, being all of the tarsal bones; four of them recovered, the average age being 37; one died, aged 34 years. The pathological excisions were twenty-three, of which nineteen recovered, the average age being 17 years; two were relieved, of the average age of 22½ years; two died, of the average age of 19 years; and a boy, aged 13, died of diphtheria, after excision of the hip-joint; the other, aged 25, after excision of the knee. These statistics do not, I think, contrast unfavourably with those of corresponding amputations.

The success of joint-excisions, I am convinced, very greatly depends upon the selection of suitable cases for the operation, the manner in which this is performed, and the after-management of the case. If the disease be principally in the synovial membranes, ligaments, or cartilages, or if the bones be involved only to a moderate extent, and that owing to the disease having extended from the first-named structures to them, the whole disease may be extirpated without the loss of much bone, and that which is left will probably be healthy. On the other hand, if the bones are the parts which have been primarily diseased, or are extensively so, it is doubtful if the whole of the parts involved can be removed; so that the mischief may still go on; sinuses leading down to carious bones are formed; these give rise to pain, inability to move, and exit to a large discharge of pus, by which the patient is worn out, or so much bone requires removal (as I have seen done), that the medullary canal is laid open and involved in the suppuration, by which pyæmia, in all probability, will be induced, and the unhappy patient soon carried off; or, should he struggle through, the limb will be rendered useless, from great shortening or want of firm union, if the excessive suffering does not necessitate amputation. If the subject be young, and the epiphyses be removed, there will be great danger, if not certainty, that the development of the limb will be arrested, as has happened not unfrequently. A very striking and interesting illustration of this result has fallen under my own observation in a girl 15 years of age, whose knee had been excised when she was 6 years old, by which the growth of the thigh, as well as of the leg and foot, had been arrested; so that, when she was presented to me, she had one limb that of a well-grown girl of 15, and the other that of a child 6 years old. Moreover, the union was very loose and imperfect, and at so bad an angle that the limb was a useless burden. I re-excised the parts, and got good bony union, with the limb perfectly straight.

A second most important consideration towards obtaining success is, I believe, not to make the wound in the soft parts larger than necessary. This is a point too often not attended to, and incisions far larger than necessary to allow of the bones being removed are often made. Now, I consider that any division of parts larger than is necessary for the section and removal of the diseased bone, without any rough handling, is a direct evil unnecessarily inflicted. Such large wounds lead to greater hæmorrhage, to greater danger of pyæmia, and to greater drain upon the system; for, as they invariably suppurate, the larger the wound the greater is the suppuration; and thus, at the best, the recovery is thereby rendered more prolonged.

The after-treatment of the limb is of the utmost importance; though I cannot help thinking too great stress has been laid upon it in every case, at once getting the limb into an immovably fixed and often rigidly extended position, and that very often a different one from what, possibly for many months, it had been retained in. The knee is the only joint I care to immediately put into an exended and fixed position, and even that much less rigidly than is said to be necessary.(q) A few days before the operation, I have a piece of strong, firm sole-leather, extending from the trochanter to the heel, and broad enough to encircle three-fourths of the limb, well soaked in water, and accurately moulded to the sound leg, upon which it is allowed to dry. Upon this splint, immediately the wound has been closed by iron sutures and wet lint, I lay the operated one, with a little padding of cotton-wool, which protects the limb and absorbs the discharge. Two sand-bags, placed on each side of the thigh and leg, are sufficient to keep the whole limb steady. This I find to be far more comfortable to the patient, and to keep the limb in a better position than the wooden box of Jones, Price, Butcher, and others, which, I think, has a tendency to tilt the end of the femur forwards, and the tibia backwards, and so to assist in union taking place at an angle, to which there is already a tendency. After excision of the hip and the elbow, I do not confine the limb in any apparatus. There is very little disposition to move it. After excision of the elbow, I commonly simply lay the limb in a semiflexed position upon a pillow. Children, after excision of the hip, I allow to lie in the same bent position in which they have almost invariably lain before the operation. After two or three weeks, or when the wound has nearly healed, I slowly bring the limb down by means of graduated weights suspended by the ankle. Union, whether by bone or ligament, does not take place before this time; and in the meanwhile the patient rests much more comfortably in the position to which he has been accustomed, the wound heals much more readily than it would do in the constrained one of full extension, and strength is more quickly gained.

It is yet a moot question whether, in excision of the knee-joint, the patella, supposing it not to be implicated in the disease, should be left, or should in all cases be removed. Mr. Butcher, Mr. Holmes, and some others, are very decided in their belief that in every case it should be taken away. To determine this question, I have not removed it in three cases; in two, where the cartilaginous surface was diseased, I have removed the whole inner half of it by a longitudinal section; and in the remaining case I have taken it away altogether. Indeed, in one case, which had originated in a fall upon the knee, the patella itself had been the chief seat of the disease, and had in a great measure disappeared. My mind is not fully made up on the question; but I think, when the patella has been altogether taken away, the recovery has been somewhat more speedy, and the limb has been more sightly afterwards. But, on the other hand, where the patella has been left, I think the anchylosis has been firmer and the limb stronger, though the patella forms an ugly protuberance. Provided the epiphyses are not removed, I see no objection to excision, and much in favour of it, in children. Youths and young adults are the most favourable cases. After 40 years of age, each year puts the patient in a less favourable position for the operation; though even then, all other things being favourable, I would not hesitate to perform excision. I cannot but hope and believe, as cases are well selected, and due care taken in the operation and after-treatment, the plan will grow more and more into favour as its success becomes demonstrated; and the long delay which is now allowed before the operation is performed, during which the pain and discharge enfeeble the patient, will be considerably shortened; by which, though possibly some patients may be subjected to excision of a joint who might have recovered by anchylosis, I am by no means sure even such will not have been gainers by the operation; while I am confident many others will be saved a vast amount of misery and confinement, and be restored to health and activity who otherwise would not be.

I need not remind this assembly, so learned in all that relates to Professional lore, by what slow steps our forefathers progressed in attaining that knowledge and practice by which bleeding from a wounded artery is now, in ordinary circumstances, so easily arrested; but the mere student of the present day practice alone, who, seeing a divided or open artery

(q) Butcher, "On Excision of the Knee-joint."

simply tied by a thread, and the hæmorrhage at once cease, likely enough considers the process so easy as almost to have been intuitively adopted even in the earliest times, should refer to works of a former day, when he will find that, ever since Surgery has had an existence, down to the penultimate generation, the fear and danger of loss of blood from an open blood-vessel have been a matter of supreme difficulty, and directly or indirectly, by operations which have not been undertaken from a fear of fatal hemorrhage, or which have been done in order to avoid this catastrophe, have, perhaps, inflicted more misery, distress, and loss of life upon mankind than anything else in Surgery. He will then find how limbs were burnt off, and how tumours were sawn away by hot chains; how constantly actual and potential cauteries were in liberal employment in every Surgical operation; and how one never-failing styptic after another was invented, lauded, and abandoned, merely from this difficulty. "It is really this accident of hæmorrhage," says John Bell, "that has retarded our Profession for ages; for the ancients, ignorant of the ways of stopping hæmorrhages, did not venture to cut out the most trivial tumour, or they did so with fear and uncertainty. They performed these operations slowly and imperfectly, with burning irons or ligatures, which we now perform rapidly and safely with the knife. If they ventured to amputate a member, it was only by cutting, after it was gangrened, among the putrid flesh. They merely separated parts that were already dead and bloodless; so great was their abhorrence of blood." (r) It was not until the middle of the fifteenth century that Ambrose Paré thought of tying an open artery; being then, as he says, "inspired by God with this good thought for the good of mankind and the improvement and honour of Surgery"—a thought too simple and grand to be easily adopted, and so it met with such opposition as, with other good things done by him, to lead to his being prosecuted by the Paris College of Physicians. The invention was badly received and slowly adopted. It was not until a century later that Petit invented a rude form of tourniquet; and not until the present century the single ligature, as now employed, was commonly used. Indeed, prior to the time of John Hunter and the most important and conclusive experiments of Jones, supplemented as they were by the observations of Scarpa, Freer, Hodgson, and others, the principle of the ligature could not have been understood. Until then, the fear was lest the artery should be cut through too soon; and every possible means was adopted to prevent that action which we now know to be essential to success. Though in this country the works and practice of these Surgeons had caused the multiple ligature to be abandoned, for many years later it had not been entirely given up on the Continent; for I once saw a very celebrated French Surgeon, in an operation for popliteal aneurism, place a double ligature, with a considerable space between the threads, upon the femoral artery—followed, as might be expected, and as commonly happened, by the death of the patient. Even in England, so late as 1814, we find that excellent Surgeon, Hey *primus*, writing: "I have been accustomed, in amputations, to tie the femoral artery twice, leaving a small space between the ligatures; and this method has been constantly used in the Leeds Infirmary since its establishment." (s)

The ligature, as employed for many years past, is so simple, so easy of application, and in the majority of cases so satisfactory, that many Surgeons are still quite contented with it; yet that it has grave defects is undeniable. Its immediate action in arresting the flow of blood is certain, and is probably as satisfactory as anything that can be suggested; but that its after-effects are not unfrequently injurious and productive of mischief, no one can deny. For the permanent sealing of a blood-vessel, when it has been tied by a ligature, two dissimilar actions are required. The adhesive inflammation is essential for the closing of the vessel; and the ulcerative, that the thread may be liberated. Now this latter action may take place too quickly, before the adhesive has sealed the vessel, or sloughing may follow, and that, which not very aptly is called secondary hæmorrhage, may occur. Besides this, the mere presence of the ligature must necessarily prevent the entire closure of the wound by primary union; and suppuration, to a greater or less extent, must ensue. Suppuration, having once been set up, may, and often does, cause much mischief. Thus, without endorsing all that has been lately written against the introduction of fibrous material into the living body, every Surgeon must admit that there are valid reasons against the presence of any foreign body. Whatever it may be composed of, it must *per se* be more or less an evil. Accordingly, a means for obtaining a certain and secure closure of a bleeding artery, in which no foreign substance shall remain, or, if remaining, shall be innocuous, has been a grand desideratum with all practical Surgeons. Cold, exposure to the air, styptics of various kinds, and cauteries, actual and potential, are all useful when the bleeding vessel is of small size; but, as every Surgeon knows, are not to be depended upon when the vessels are of more than a moderate calibre.

M. Thierry, reflecting upon the fact that it commonly happens that arteries of a large size, even the femoral, do not bleed when the limb has been torn or twisted off, ingeniously conceived that, if in all cases the divided arteries could be brought into the same condition as they are found in these cases, a like condition of closure would occur. Many experiments were made by him, MM. Carron du Villard, Maunoir, and Amussat in France, Lieben and others in Germany and elsewhere, upon the blood-vessels of living and dead animals of various kinds, as dogs, donkeys, horses, and smaller creatures, for the most part with such success as to justify the application of the plan of isolating blood-vessels, drawing them out of their sheaths, and so twisting their coats that these shall be torn through, to operations upon the human subject. Accordingly, many Surgeons upon the Continent tried torsion in a considerable number of cases, in many instances with success; but in many others, where the vessel was beyond a moderate size, the hæmorrhage was not permanently arrested. In England, Mr. Aston Key (with whom, at that time, I had the advantage of being on terms of the closest intimacy) was perhaps the one who was the most sanguine in his expectations, and who gave the method the fairest trial; but he soon abandoned it. In France, where the plan took its rise and was more practised than elsewhere, the advantage or not of torsion was very warmly debated. While some Surgeons reported great success, others of the most undoubted skill and reliableness, as Delpech, of Montpellier, were unfortunate in their results; and in the Hôpital St. Louis, in Paris, out of six amputations where the blood-vessels were twisted, the torsion failed in five, and only succeeded in one case. Dupuytren, who was requested by the Institute to report upon the proceeding, made many experiments at the Hôtel-Dieu, and arrived at the definite conclusion, "that in man, though torsion may be applied with security to arteries of a small size, it cannot be trusted to without imprudence in those which are at all voluminous. . . . . That a great many failures must be placed by the side of successes; that, according to the observations of many Practitioners of experience and incontestable skill, sometimes owing to inflammation and abundant suppuration, extending along the sheaths of the vessels in consequence of their torsion; sometimes from its failing to arrest the hæmorrhage; sometimes, owing to many circumstances, it being impracticable; so that, after many attempts, it has been found necessary to have recourse to the ligature. So far as union by the first intention is concerned, favourable as at first sight it appears to be, torsion has not proved to possess any marked advantage over the ligature." (t) Though this conclusion could not then have been known to Mr. Key, he independently arrived at a similar estimate of torsion, as it is evident most other Surgeons did. Since then, except for small vessels, where it continued to be successfully employed, torsion has been wholly abandoned for those of larger calibre, until the last three years, when attention has again been much directed to it. In December, 1867, I saw in the Edinburgh Infirmary a case where Mr. Syme had successfully used torsion to the popliteal artery. The interesting papers of Professor Humphry and Mr. Bryant on torsion will be in the recollection of all those who were present in the Surgical Section at our meeting in Oxford last year. I am not aware that the recent revival of torsion in the living human body, or the experiments made on animals, have added anything to the knowledge or conclusions of those older eminent Surgeons I have referred to, who practised and abandoned it nearly forty years ago. I apprehend I am not far wrong in stating that the opinion of most of the few Surgeons of the present day who have been induced to practise it, is much the same as that I have quoted from Dupuytren. For small vessels it may well enough be employed; but, for myself, I must say I could not twist a large artery and lie comfortably in bed the next night, lest, while I slept, the elastic artery should untwist itself, and my patient bleed until he slept never to wake again. Besides

(r) "The Principles of Surgery," vol. i. p. 142. By John Bell, Surgeon. 4to. Edinburgh: 1801.

(s) Hey's "Practical Observations in Surgery." Third edition, 1814. The old Leeds Infirmary was opened in the year 1766.

(t) "Leçons Orales," vol. iv. p. 212; Velpeau's "Nouveaux Eléments de Médecine Opératoire." Art. "Torsion."

which, the after anxiety as to suppuration along the vascular sheath, and its consequences, is not to be ignored.(u)

To our learned associate, Sir J. Simpson—to whom the world is so much indebted, that had he been half as successful in destroying and making miserable human life in warfare, as he has been in saving suffering, and conferring blessings upon distressed humanity, would he have been amongst those whom the State delights to enrich and ennoble—our Profession owes a most ingenious method of arresting bleeding from divided blood-vessels without the use of ligatures. He suggested the plan of closing the open vessel by pressing it against bone by a long steel pin carried through the soft tissues on each side of it, or by carrying the pin under the vessel, and twisting a loop of wire over its two ends in such a way as to allow of its being easily removed when desired without disturbing the parts. So much has of late been said for and against acupressure that I need do no more than refer those who desire to know all that can be said in favour of acupressure to the work of the two Aberdeen Surgeons, Pirrie and Keith,(v) who, at the Hospital there, have devised modifications in the method of using the compressing power, and have followed out the plan with an enthusiasm and perseverance that only those who were fully impressed with the great value they believed it to possess could have done, and which they believe their success fully justifies. On the other hand, many most excellent Surgeons, whose skill, candour, and experience are beyond all question, have never felt themselves justified in having recourse to acupressure; while many of those who have tried it, from one cause or another, have ceased to employ it. For myself, I must candidly confess I have never felt sanguine that it possessed all the advantages its advocates claimed for it; nor could I shut my eyes to its disadvantages. True it is, that the presence of a fibrous material is avoided; which, however, can be easily got rid of by the use of a metallic thread, as I have frequently done, and have twice successfully secured the femoral artery by an iron wire in thigh-amputations. But there is substituted for the ligatures the presence of the needles and the compressing wires, by which necessarily, according as one or other method is employed, more or less of the soft tissues are subjected to as great a pressure as is sufficient to close the arteries, be they ever so numerous. This, to my mind, is equivalent in mischief, and, though different in kind, yet possibly as great as the presence of the fibrous material in the wound. Moreover, the difficulty of effectually closing the open mouths of large arteries, when much retracted and deeply imbedded in soft yielding tissues of considerable thickness, is so great that I cannot believe it to be in all cases possible, without the employment of very considerable force. Besides which, the tension of a stump often varies much on the day following an amputation from what it was at the time of the operation; so that the force which might then be just sufficient to press together the sides of the cut vessels, may, within less than twenty-four hours, amount to a strangulating pressure, or the limb may have so shrunk in size that what was due pressure then may the next day be too little for security. Thus, as I said with torsion, so I say with acupressure, and, if reports as to hæmorrhage are to be believed, with equal justice, I could not feel satisfied as to the safety of my patient, had I left a recently divided large artery only secured by the quarter or half twist of a needle. Though I know the femoral artery has several times been thus closed, the practical question is, not whether such can be effected on some occasions, but whether it can be done as an every-day working operation, and our patient be left as secure from hæmorrhage as he is by any other applicable means, or, if the plan possesses any other such great advantages over them as shall justify the exposure to an increased risk of bleeding. I think it does not. I have purposely visited more than one Hospital where acupressure has been in vogue; and in our own Infirmary I have carefully watched many cases in which it has been employed with the full intention of adopting it, had I found it possessed advantages over ligatures; but attentive observation of these cases, and a comparison of them with those of my own in the Hospital at the same time in which it was not used, have shown that the latter recovered in every respect as well as where it had been used: while I find my colleagues, who at first eagerly adopted the plan, have quietly abandoned it, which, had marked success attended its use, they certainly would not have done. For upwards of eighteen months, I believe, acupressure has not been used in the Leeds Infirmary. Long ago tying a vessel with fine silk, and cutting the ends close off, was tried; but the irritation, and consequent suppuration set up, led to the abandonment of the plan. I have frequently substituted annealed iron wire, which can be made as flexible as silk or hempen thread, for fibrous material; but I have found a new difficulty. So tolerant is the animal economy of the presence of this metal that, in many cases, only the adhesive inflammation has been set up, and the ligatures have not been separated for many weeks. Though, doubtless, if the ends were cut close off and the wound closed, in many cases the wire would be encased in lymph and lie quiet, or in time be absorbed, still this quiescence cannot always be secured. Suppuration may be set up, and hæmorrhage occur when not expected. Hunter was well acquainted with this tolerance of the presence of metals, and also with the fact that foreign bodies which are deeply imbedded are not so liable to excite inflammation as when they are near to the surface.(w) Now, as most of the arteries which are tied are not very far removed from the skin, this tendency to suppuration may exist when they are so tied, and thus lessen the chance of the compressing material remaining quiet.

How far the method of soaking a fibrous material in carbolic acid, as suggested by Professor Lister, and the still more recent one of employing catgut so treated, with the ends cut close off, will accomplish all that he anticipates, time alone will show. If I might presume to venture on an opinion, it would not be one of very confident success. That a ligature composed of animal tissue may occasionally undergo absorption without exciting suppuration or ulcerative action is very possible; but whether other, and quite as important, practical difficulties may not accompany its use is, I suspect, altogether unproved.

Doubtless, these and like considerations have presented themselves to many minds, and have led to many suggestions. The idea of employing movable forceps, of varying length and strength, according to the size and depth of the vessels, occurred to me, as it did to other Surgeons; but whether they contrived such forceps, and actually used them, I am unable to say. I have now closed the arteries with such forceps in so many operations of magnitude, that I can speak with confidence as to their efficacy and security, and also, I believe, of their advantage. Though I think it better to place them upon the bare arterial coats, yet, in many cases, where the vessel has been surrounded by tendinous fibres, or where it has been retracted and could not be withdrawn from the surrounding muscular fibres, I have not hesitated to include some of this tissue in the blades, and no hæmorrhage has occurred. Upon the larger vessels, as the femoral, I allow the forceps to remain four days, though I believe they might safely be withdrawn at an earlier period. Upon the brachial and tibials, two or three days is sufficient. The forceps should be long enough to project from the wound, to allow of their easy removal, and yet not to be in the way, they are brought out between the flaps, which are closed in the ordinary manner; they do not interfere with any kind of dressing which may be used; and, as the pressure is obtained by a cross-spring just external to the wound, this is not interfered with by their removal. In no one instance has suppuration been set up in their track; nor have I seen an instance of pyæmia follow their use. They must be made of good steel, and may be electro-plated or not. They completely meet the objection raised against the use of fibrous material—they do not excite ulceration, they press no tissue but the artery itself; and, by greatly lessening the duration of the presence of a foreign body in the wound they meet that objection, so far as at present can be with safety effected.(x)

There remains but one other subject to which I propose to allude. It is, however, an important one. I own to approach-

(u) See an interesting paper in the *Lancet*, April 17, 1869, by Dr. Ogston, of Aberdeen, "On the Comparative Strength of Arteries secured by the Methods of Ligature, Acupressure, and Torsion."

(v) "A Practical Treatise on Acupressure." By W. Pirrie and W. Keith. 8vo. 1867.

(w) "This circumstance, of the deeper-seated parts not so readily taking on the suppurative inflammation as those which are superficial, is shown in cases where extraneous bodies irritate any parts; for we find that extraneous bodies are in general capable of producing inflammation; but, if these extraneous bodies are deeply seated, they remain for years without doing more than producing the adhesive inflammation, by which means they are enclosed in a cyst, and only give some uneasiness . . . but if the same body was nearer the skin it would produce suppuration. . . . It is probable that these cases of pins, etc., owe their want of power in producing suppuration not entirely to situation, but in some degree to the nature of the substance, metals perhaps not having the power of irritation beyond the adhesive, for when the adhesive has taken place the part appears to be satisfied."—*Hunter's Works*, by Palmer, vol. iii. p. 287.

(x) "On a New Mode of Closing Blood-vessels by Movable Forceps." By the Writer. (*British Medical Journal*, 1867, vol. ii. p. 310.)

In the first suitable case of aneurism, I intend to cut down upon the artery, and place upon it a pair of forceps so as to close its calibre for a short time, and then remove them without disturbing the wound, which I hope to find more effectual and less severe than pressure, either by the fingers or tourniquet.

ing it with some hesitation and reluctance. Hitherto what I have glanced at has afforded me pleasure and satisfaction. There has been shown progress towards that scientific precision which we all so much desire to attain. In what I am about to speak of, I have to encounter that which I believe to be a Professional error, founded on false facts, and supported by plausible assumptions, rather than by accurate observation and true deductions. I refer to the recent—shall I venture to say fashionable?—method of treating wounds by what has been called "antiseptic treatment," by which it is to be feared the sound physiological and pathological doctrines and practice of the last generation of British Surgeons are unheeded, and in danger of being temporarily forgotten by what seems to me unsupported fancies, which have little other existence than what is found in the imagination of those who believe in it. Had the works of John Hunter been now so generally studied as they once were, and the doctrines which he enunciated been carefully kept in mind, this fallacy could hardly have obtained the temporary currency it has done. (y) "The antiseptic treatment of wounds" ignores those truths which formed the life-long labour of our great physiologist to establish, and for which the world has been taught to regard him as not the least of its benefactors. The theory and reasoning by which the antiseptic treatment of wounds is supported, appear to overlook facts open to all the world, and to disregard observations familiar to every person, through all ages, from the earliest period to the present day. If the antiseptic theory be true, no wound ought ever to have healed until carbolic acid, or some like substance, had been discovered and applied. A simple abrasion ought to have been regarded as a death-warrant, without hope of reprieve; a burn or a scald could not have been recovered from; and vesications, which all Physicians, for thousands of years, have known full well the value of, by affording an extensive nidus for deadly monads to revel in, should only have destroyed the patient by pyæmia; and a simple issue or seton, which used to be regarded, and probably ere long will again be so esteemed, as a valuable outlet for morbific material, would simply be an easy inlet for septic organisms, and infallible death to the sufferer. While a parturient creature, human or animal, ought never to have survived to have nourished her offspring; for, if to guard against the ingress of these creatures, it be necessary to keep an abscess covered with a carbolised screen, while it is pricked in the dark with a bistoury dipped in carbolic acid, guided by Surgical fingers similarly imbrued, and to use a probe smeared with the like, when introduced into a small sinus, so that those ever present, ever active germs, which must surreptitiously dart in, may at once be killed as they do so,(z) how much more surely must they find ready entrance and tempting food by the way, through the dilated vagina, into the patulous uterus, with its rugose surface, as it were, expressly prepared and ready for them to generate and multiply in, cause immediate putrefaction and inevitable destruction to the female? How could the obstetric hand avoid carrying them in shoals, without number, into the vagina? The constitution of the patient, his habits of life, his strength or his weakness, the condition of his digestive organs, the state of his blood, his temperament, diathesis, hereditary disposition, age or sex, his state of mind, the nature of the parts injured, the extent of the mischief inflicted, the manner in which it has been caused, by sharp or blunt instruments, the force employed, the presence or not of foreign substances, the effusion of blood into the parts, the possibility or not of bringing them together, the prevalent diseases, the condition of the air, temperature, moisture, climate, electrical and other physical and moral circumstances by which he is surrounded; his food, clothing, and lodgment, which up to now have been considered as having a not unimportant influence over the progress of a wound towards healing, whether it should grow together by the first intention, heal by the effusion of lymph, the second intention, or it should suppurate kindly and granulate healthily; or whether ill-conditioned pus should be formed, irritative fever be set up, absorption of pus take place, and death by pyæmia follow, are all become of none effect; Surgical science and Medical knowledge are reduced to the one plain rule of, in full faith—for that is as essential as the acid itself—plentifully imbruing the part with carbolic acid; when, to a true disciple, all wounds, whatsoever and wheresoever they may be, and whatever tissues or cavities be implicated, become as nothing, or, still better, the *débris* may, likely enough, so it is asserted, become valuable pabulum for the growth of new normal tissues.(a)

Ever since Hunter proved the vitality of the blood, and pointed out the circumstances under which this could be maintained, the process by which wounds heal by the first intention, or without suppuration, has been thought to be well understood, as also the means which should be adopted to secure this result. Suppuration, *per se*, is not an unhealthy action, nor is pus itself always an injurious substance; but when the process can be prevented by union by the first intention, so much the better for the patient, for, wherever pus or effused blood exists, there is more or less danger of their becoming decomposed, absorption taking place, and the system being poisoned by them; or, it may be, of Surgical fever supervening, and, through the constitutional affection, of the wound taking on unhealthy action. That this happens by no means so very rarely, even when there is no external opening, I think every Surgeon must know full well. That a cavity containing broken-down grumous blood, a large abscess filled with ill-conditioned pus, or a suppurating joint, without an external aperture or with a very small one, and giving rise to dangerous constitutional mischief, will not unfrequently, on being laid freely open, so as to afford ready outlet to their contents, and expose their cavities to the atmosphere, immediately assume a healthy condition, while the constitutional amendment is as marked and contemporaneous with the local improvement, are undoubted facts. Both of these occurrences are easily explained by the chemical theory of decomposition of animal matters, but how they can be explained on the germ theory of putrefaction, when, in the one case, there has been no exposure to the external air, and in the other, where a free exposure to it is immediately beneficial, I am at a loss to comprehend. In the three former cases, germs cannot possibly have induced the mischief, inasmuch as there have been no openings by which they could have entered, supposing them actually to have been present in the assumed myriads in the atmosphere, for as yet no one has ventured to assert they can penetrate the unbroken skin—and, in the latter, if any had entered by the small and imperfect aperture, an immensely increased number ought to have found ingress by the greatly enlarged opening. To expose any of the normally protected membranes, even the dermis itself, to the air, has always been known to be prejudicial; and to keep a raw or suppurating surface protected from it has as long been known to be important for obtaining a speedy cure. It is a method which Nature constantly employs in the scabbing over of grazed or wounded parts, and it is a method which Surgeons, time out of mind, have practised. It is, however, not the simple exposure of such parts to the atmosphere which causes the mischief, as, on the germ theory of aseptic putrefaction, it should be, for keeping them in an irritable condition is quite as often the cause. An irritable sore, causing constitutional fever while the part is exercised or in a depending position, will, other circumstances being precisely the same, on being kept quiet in a horizontal position, often at once heal, and the fever cease. A raw or wounded surface, if ever so protected from the atmosphere by a stimulating resinous plaster, will not unfrequently soon become inflamed and suppurating; whereas, if covered with a simple, bland, albuminous, or mucilaginous substance, it will at once cease to be so. Now the former resinous material would repel or destroy the germs, while the latter should tempt their presence and nourish them. Yet, with that, ill-conditioned septic suppuration takes place; with these it does not. A piece of common adhesive plaster, friction with a turpentine liniment, a scratch with a rusty nail or a fish-bone, or even a common pin, a leech-bite, or the sting of a bee, will, in some persons, cause as much suppurative mischief, absorption of pus, sloughing of tissues, purulent deposits, septic poisoning, and the death of the person, as will any compound fracture, dissecting wound, inoculation with inflammatory serous effusion, puerperal fever, idiopathic cellular erysipelas, or even the bite of a venomous snake, in others, or perhaps the same person, at a different time, and under different circumstances; the symptoms, like the result, being identical in all these forms, however originating. These effects may be constitutional, but they cannot be germ-poisoning. Some of them may even be the direct effects of an actual poison inserted at the time the wound has been made; but what reason exists for imagining septic germs are introduced by the sting of a wasp or the bite

(y) See the "Treatises on the Blood, Inflammation, and Gunshot Wounds," by Hunter, *passim*. Also James and Thompson on "Inflammation;" Travers on "Constitutional Irritation;" and the works of Sir A. Cooper, Abernethy, Dupuytren, Velpeau, and other Surgical writers.

(z) See Lister, *passim*. *British Medical Journal* and *Lancet*.

(a) "And now, before speaking of some cases treated with carbolic acid on the antiseptic system, I wish to direct your attention to an experiment illustrating the germ-theory of putrefaction. It is upon this theory the antiseptic treatment is based, and I venture to say that, without a belief in the truth of that theory, no man can be thoroughly successful in the treatment."—Lister, in *British Medical Journal*, July 18, 1868.

of a cobra, rather than by the prick of a needle or the tooth of a healthy animal? In the former, the presence of a virulent poison is well known to exist. In the latter, if there be germs we might expect them to be carried into the wound Yet the formation of pus is the exception and not the rule. That septic effects take place in the animal body by the decomposition of either the fluids or the solids themselves, or by the exposure of them to the air, is, and for long has been, believed in as a Medical doctrine, which also has had the almost, if not altogether, unanimous support of chemists. Upon it much Medical and Surgical reasoning and practice for generations have been based, until the present day, as those who refer to the works of the great Practitioners of the last and early part of the present century well know. Hence the constant employment of septic and antiseptic terms and remedies, as applied to the constitutional condition, and not to extrinsic circumstances as now.

John Hunter taught, and Sir A. Cooper and many other Surgeons practised it, that when a wound can be sealed with its own blood, provided the quantity be not too great, so that it decomposes and acts as a foreign substance, and yet enough to desiccate and form a cement which excludes the air, no better can be found. I very often successfully employ it in compound fractures. Liston and many others adopted isinglass, which for generations before goldbeaters' skin, court-plaster, or white of egg and other gelatinous and albuminous forms, have been in popular use. More recently, Dr. Richardson has suggested a compound of tannic acid and collodion, which he calls styptic colloid, and declares superior to every other. All these appear to act in a like manner, by affording an unirritating cover to the raw surface. Possibly, if there be much blood effused, the styptic colloid, by the tannic acid which it contains securing the certain coagulation of this, may possess some merit over the simple dried blood itself.

For some years past, there has been a growing tendency to attribute various diseases in man to microscopic organic bodies, and since the proof that some of the diseased conditions in grasses, tubers, plants, and trees, may be traced to such sources, this belief has grown stronger. Analogy has shown that some human cutaneous affections may have their origin in this way; and, as it appears certain some of these minute bodies are active agents in assisting, or, at least, are always present in, diastaltic action, such as fermentation, it has been thought not improbable that some of the widely-spreading epidemic diseases, —zymotic, as it has become the fashion to call them—may have their origin in the atmospheric diffusion of various species of organisms. This hypothesis, which, as yet, is a mere speculation, very insufficiently supported by facts, has had an undue prominence given to it by some of the more active public hygieists, and, not very remotely, has biassed men's minds towards the adoption of the germ-theory of Surgical diseases resulting from wounds.

The germ-theory of putrefaction appears to rest:

1. Upon the assumption that the air is filled with minute living organisms, which are so numerous that they freely pervade every atom of it.

2. That these organisms are the sole and true cause of decomposition, and the putrefaction of everything and everywhere.

3. That these minute creatures are as active as they are ubiquitous, continually going to and fro, seeking whom they may devour, so that upon whatever raw surface they are allowed to settle or to enter, putrefaction and destruction follow; where they are excluded, no suppuration takes place, or if it does occur (which, indeed, it is impossible to deny) it becomes innocuous.

4. That the true remedy against them is carbolic acid, for, though other things may be useful against them, none are so effectual as this, which not only has the power of destroying them, but is able to convert dead and foreign matters into material for the production of healthy normal tissues. Dead bones, which heretofore commonly required to be taken away mechanically, are said, under its influence, to become absorbed and quickly to disappear; even fibrous material being afterwards unheard of.

As to the existence of these living organisms upon which the antiseptic treatment is based, I cannot enter at length. It would be altogether beyond the scope of the present address to enter fully upon the disputed question, whether homogenesis—generation from parents—or heterogenesis—spontaneous generation—is the true mode of the creation and multiplication of sperms. That question must be determined by each member for himself consulting the many works and papers recently published on the subject, and which will be found principally in the *Comptes Rendus* of the French Academy, and more especially the writings of M. Pasteur on the former side, and M. Ponchet on the latter. (b) It is to M. Pasteur and his disciples, the Panspermatists, who also maintain the doctrine that all decomposition and putrefaction, are physiological phenomena, depending upon living germs derived from the atmosphere, the modern antiseptic school of Surgeons look for the *rationale* of their treatment of wounds. Now, though many of the experiments of Pasteur and his followers are very ingenious and, to some scientific persons, satisfactory, on the other hand, Ponchet and many other most reliable observers have altogether failed to realise the same results when repeating them, and, in many instances, have obtained exactly the opposite. They have also instituted other experiments and observations which appear to completely negative those of Pasteur. Amongst the most recent and able of these is our well-known associate, Professor Hughes Bennett, who, in an admirable lecture delivered at the Edinburgh College of Surgeons in January, 1868, has given the result of his elaborate and careful experiments and reasonings upon them, in which he altogether denies the correctness of Pasteur's conclusions;(c) and, I think, proves that some fatal fallacy pervades those of Professor Lister, made with urine placed in jars fitted with small contorted tubes, which he supposed to be sufficient to exclude the ingress of germs. Satisfactory as these experiments of Mr. Lister appear to have been to some

(b) "L'Origine de Vie." Par Georges Permetier. Avec une Préface par F. A. Pouchet. Paris: 1868.

(c) "This"—*i.e.*, the composition of dust—"has been tested in various ways. The dust has been ransacked to discover organic germs; collected and carefully examined with the microscope, near the soil and on the summits of the highest buildings; not only in frequented, but in desert places; in crowded assemblies as well as in Gothic cathedrals and ancient vaults; in the ancient palace of Karnak, on the banks of the Nile, in the tomb of Rhamesis II., at the extremity of the Desert, as well as in the central chambers of the great pyramid of Ghizeh. The chief element of the dust collected in these places has been found to be starch corpuscles. Large quantities of air have been drawn through tubes by aspirators, and collected on cotton, in distilled water, or projected on glass. The feathery snow which, falling through the atmosphere, may be well supposed to collect its contents, has been melted, and the precipitate carefully collected. The emanations of marshy places, such as those of the Maremma, in Tuscany, have been specially investigated. The larynges and mucous pulmonary surfaces of numerous animals have been explored, even to the innermost bone cavities of birds. On the summit of Mont Blanc, amidst eternal snow, on the glaciers of the Jura and of the Pyrenees, and in the deep crevasse, on the burning plains of Egypt and in the markets of Constantinople, the dust of the atmosphere has been microscopically examined, and in all with a like negative result as to the existence of germs. Nowhere could they be seen; or if a few, in the opinion of some, were visible, could they in any way account for the multitude of minute infusoria which, in all these localities, not only readily spring up in putrid fluids, but in every instance are identically the same."—*Bennett, On the Atmospheric Germ Theory*, 1868, pp. 14-15.

"The only conclusion I can draw from the numerous contradictory and ingenious communications presented to the Academy of Sciences during the last eight years on this matter is, that not the slightest proof is given by the chemists, with M. Pasteur at their head, that fermentation and putrefaction are necessarily dependent on living germs existing in the atmosphere. They rather tend to show that these are phenomena of a chemical nature, as was ably maintained by Liebig. Did we, indeed, confine our reading to the papers of M. Pasteur—that is, to one side of the case—we could easily persuade ourselves of his correctness; but every one of his experiments has been repeated by several independent investigators, who have shown his imagined proofs as to the existence of atmospheric germs to be altogether erroneous. We may conclude, therefore, that living germs are not necessarily the cause of putrefaction and fermentation; neither is it necessary to believe that ferments are living at all—they may be dead. This, if not admitted, seems to be implied by Pasteur himself, who tells us he can now excite these processes, not by fresh yeast, but by the ashes of yeast. That they may be induced by the dead organic matter which has been subjected to a direct temperature of 150 or 200 degs. Centigrade—a heat utterly incompatible with the existence of life—we have seen to have been proved by Pouchet, Musset, Solly, and others.

"The idea that these imaginary germs were the cause of putrefaction, of disease, of blights among vegetables, and other evils, originated with Kircher and the pathologists of the seventeenth century. It has been frequently revived, but always shown to be erroneous. In 1852, cholera was supposed to be occasioned by a fungus that really existed in the dejections, but which Mr. Busk pointed out was the *uredo segetum* of diseased wheat, which entered the body in the form of bread. Certain well-known parasitic diseases are spread by contact, such as scabies, which, as it depends upon an insect burrowing in the skin, may be understood to crawl from one person to another. Favus, also, I succeeded, in 1841, in proving, might be made to grow on diseased surfaces of otherwise healthy persons; but many of our unquestionably infectious diseases, such as small-pox, scarlatina, measles, and typhus, have no such origin. It has been attempted to be proved, indeed, by Lemaire that in the condensed vapours of Hospitals and other putrid localities vibrios may be found; but that vibrios are the cause of these various diseases is not only not proved, but, from what has been stated, is highly improbable. What, then, it may be asked, is the origin of the infusoria, vegetable and animal, that we find in organic fluids during fermentation and putrefaction? In answer to the question, I say they originate in oleo-albuminous molecules, which are formed in organic fluids, and which, floating to the surface, form the pellicle or proligerous matter. There, under the influence of certain conditions, such as temperature, light, chemical exchanges, density, pressure, and composition of atmospheric air and of the fluid, etc., the molecules, by their coalescence, produce the lower forms of vegetable and animal life."—*Idem*, pp. 23, 24.

of our associates, I confess they never carried conviction to my mind, even before their fallacy was demonstrated. We may, then, I think, at the very least, say the presence of these germs is not proved; and probably, with safety, we may go much further, and deny their existence in the number and universality maintained by Pasteur and Lister. That not unfrequently some minute organisms, vegetable as well as animal, may be wafted in the air, and float about, as microscopic particles of organic and inorganic matter do, is certain; but this is a very different thing from what is meant by the Panspermatists. It is, moreover, greatly to be doubted if these low organisms are of such varied genera and species as many suppose. It is far more probable that many which are so considered are but different stages of the same monad. I believe, when such bodies are formed in putrescent substances, they are commonly the result, and not the cause, of the putrefaction (the sarcina ventriculi vomited with the fermenting fluid in diseased conditions of the pylorus, for instance); that they are formed by the interchange of the elements of the nidus in which they are placed, or with those of the surrounding air; and that the change in it is not caused by them. In other words, that the chemical theory of decomposition, as of material out of the body, so of effused fluids and secretions in the human being, is correct. That these changes result from, and are greatly controlled by, the vital conditions of our bodies, as was maintained by Hunter, and believed in by the ablest men before and since his time, chemists as well as physiologists and pathologists, is certainly true.

That suppuration does occur, even when the antiseptic treatment has been managed and manipulated by the most reverent worshippers of the hypothesis, is undoubtedly true; but then it is said the pus becomes innocuous because of the treatment. Now this is simply to beg the question, and is a mere assertion which altogether ignores the millions of cases, throughout all ages and under all circumstances, where suppuration has taken place in every variety of wound with as little ill effect as it has ever done in the best selected cases where the antiseptic treatment has been controlled by the chiefs of the hypothesis. Such instances must occur to the mind of every Surgeon now present. There is no one who cannot call to recollection cases of as marvellous recovery from such shocking mutilations as, according to all Surgical rules, ought to have been followed by the most disastrous results, yet which have recovered in spite of nothing having been done. It is not upon exceptional cases that scientific Surgery will be built.

That carbolic acid is a specific against purulent infection, or that it acts by destroying septic germs, I believe to be a fallacy, one of the *Idola Theatri;* but that it is a useful agent, among many others which have a like effect with it, in coagulating animal matters, in accordance with its strength, stimulating the parts and contracting the smaller vessels, so as to arrest the oozing of blood and serum, I readily admit, and, if the claim for it were limited to this action, I believe no one would feel inclined to doubt its value. The practice of applying analogous substances to wounded parts, more especially when lacerated and contused, is a very ancient popular one, as every reader of sacred and profane history well knows.(d) One or other of such substances, more especially the resins, balsams, camphor, musk, and various alcoholic preparations, alone or combined, enter into all the more celebrated vulnerary preparations of former Surgery, and for generations out of mind have formed the bases for the nostrums of the village doctoress and skilful horse-leech, into whose hands they doubtless descended from earlier authorised Practitioners. In the hands of an old lady, who I know inherited the practice from her grandmother, in my boyhood, well bathing a wound or bruise with old rum was a sovereign remedy, which I have many times seen applied to others, and smarted under myself, and to its efficacy I can even now bear testimony. I have always taught my pupils, where parts have been seriously injured, and had their vitality lessened in a great degree, as smashed fingers and other badly contused wounds, one of the best applications to them is thin linen lint well saturated with some balsamic tincture, as benzoin, which, uniting with the blood, forms a hard sheath, often only to be removed when cicatrisation is complete. Doubtless scores of Surgeons have realised like results. This I have always attributed, as Hunter (who was well aware of the effect of the application of spirit to a wound) did, to the coagulation of the albumen, and its forming, with the blood, an impervious cover, by which the air is excluded and decomposition prevented, and not to the exclusion of septic germs. The albuminous compound, if in the wound, is innocuous, and is capable of being absorbed. Even where there is a mere abrasion, and only a little oozing of serum or liquor sanguinis, a fast impervious glaze—an artificial epidermis, is formed, and thus an anæsthetic effect is produced, and the desicating influence of the air prevented.

In large wounds, as amputations, this same effect has, in one form or other, been long sought for. It forms one of the most essential conditions for union by the first or the second intention. If bleeding in the flaps at once ceases, they may be brought together without delay, for the intervening layer of blood, coagulable lymph, or liquor sanguinis, will be so thin that its vitality will be maintained, and direct union will take place; but, if the oozing does not cease, the effused mass is too considerable, its vitality is not maintained, the flaps are too widely separated to influence it, and decomposition of it occurs. It is to obtain this arrest and "glazing of the flaps" that these have been, and still are by many Surgeons, exposed to the action of the air for three or four hours before being adjusted to each other. Yet how can this long exposure of such large tempting surfaces to the myriads of craving septic germs be reconciled with their refusal of the inviting offer; for such exposed surfaces often neither suppurate nor furnish fœtid pus; indeed, some good Surgeons declare it to be the best mode of treating flaps so as to secure primary adhesion of them. Such also is doubtless the explanation of the action of a solution of the chloride of zinc, reported so favourably of by Mr. De Morgan, Mr. Moore, and other Surgeons, and of the perchloride of iron as for long used and preferred by myself and others. The simple washing of the flaps with rum or alcohol, simple, or holding in solution some of the balsamic gum resins, has the same effect; and such, I believe, is the identical action of a solution of carbolic acid. If it be applied as a wash, as they have been to two clean raw surfaces, no impediment is presented by the interposition of a bulky foreign substance to their direct and immediate union, and, like them, if sufficiently diluted, not being noxious, its absorption is not injurious. If it be mingled with effused blood in a cavity, coagulation takes place—a solid, unirritating, not easily decomposed substance is formed which, like many other organic compounds, undergoes absorption, and a cure is the result.(e)

(d) "Is there no balm in Gilead? is there no physician there? Why, then, is not the health of the daughter of my people recovered?"—Jeremiah, chap. viii., v. 22.

"Go up into Gilead and take balm, O Virgin, the daughter of Egypt; in vain shalt thou use many medicines, for thou shalt not be cured."—Jeremiah, chap. xlv., v. 2.

"And he went to him and bound up his wounds, pouring in oil and wine, and set him on his own beast, and brought him to an inn and took care of him."—Luke, chap. x., v. 34.

"The very word balsam seems in all ages to have had an idea of excellence and efficacy affixed to it above any other branch of the Materia Medica; for the ancient Physician by this word meant any species of medicine which powerfully recommended itself by a grateful and delicious fragrance, and whose use, both internal and external, was of singular efficacy in preventing putrefaction and resisting corruption."—See the very learned and elaborate article "Balsams," in James's Medicinal Dictionary.

(e) I have instituted numerous experiments by adding various substances to blood just drawn and still fluid, to coagulated blood, to the serum alone; and, also, I have applied several of these, as pure alcohol, permuriate of iron, chloride of zinc, tannic acid, tincture of benzoin, sulphate of alumina, etc., to wounded and lacerated parts, for the purpose of ascertaining their effect, and the power which the resulting compound has of resisting decomposition and of being absorbed. Some of these, as the strong mineral acids, rather change and decompose the blood than simply coagulate it. Though the resulting compound, even when freely exposed to the air, will remain for many months unchanged, they are unsuited for employment; for, if strong, they destroy the tissues, and, if weak, are not effectual. Chloride of zinc forms with the blood a solid mass, which is not so dense or resisting as that formed by carbolic acid or permuriate of iron, and a greater proportion of the substance is required to produce a corresponding effect. Alcohol forms a dense coagulum, tincture of benzoin answers still better, forming an odorous, solid, moderately unchangeable mass, and, I believe, deserves much of the credit so long attributed to the balsams; carbolic acid at once coagulates the blood, and forms a dense leathery mass, which decomposes very slowly; with the serum it forms a similar, but, as might be supposed, a less dense mass, from which fluid exudes. Permuriate of iron, of all these substances, appears to answer best. It acts promptly, a small quantity only is requisite, not more than one-sixth of the quantity of pure carbolic acid being required; it does not destroy or injure the bed-linen, as the acid does. The compound is dense, adherent, very unchangeable, and, being composed of only those substances which normally enter into the composition of the animal body, is more adapted for innocuous absorption, if not for actual assimilation and incorporation with it. Alum forms a firm coagulum, and tannic acid answers admirably, forming a soft leathery mass, which is very unchangeable. Though the compound of blood and iron will remain without decomposition for months, a white mould forms in it much sooner than in the compound of blood and carbolic acid. It is also more soluble in water than is the latter. A small portion of a solid mass of three ounces of blood, with which two scruples of permuriate of iron had been mixed two months before, and exposed to the air with only a paper covering, was put into water, in which it became partially dissolved. A like portion of a compound of three ounces of blood, with two drachms of pure carbolic acid, was similarly placed in water, and, after a month's exposure, hardly any, if any, was dissolved. If solution be necessary for absorption, the experiment would lead us to infer that the iron compound is more readily absorbable than the carbolic acid compound.

In this sense, carbolic acid is an antiseptic, and the treatment is antiseptic; and so it is, just in the same manner, with the other substances I have named, and also many others, but it is not antiseptic in the sense in which it has recently been so prominently spoken of. It does not destroy putrescent producing germs; for, as I believe, they have little or no influence. This speculation of organic germs is, I fear, far more than an innocent fallacy; it is a positive injury, for, teaching, as it does, that those desperate consequences which so often follow wounds result from one cause alone, are to be prevented by attending to it alone, and that in a very simple manner, it leads to the ignoring of those many and often complicated causes, which I have indicated as influencing, for good or evil, the progress of a wounded person, attention to which has hitherto been considered to be one of the most essential parts of a Surgeon's duty, and, as achieved or not, in a great degree, to distinguish the able and skilful Practitioner from the inexperienced and unskilful man.(f)

The advocates of the antiseptic theory, however, triumphantly bring forward successful cases in support of their hypothesis, and declare the efficacy of the treatment indubitably proves the truth of their theory. We may readily admit the truth of many of their facts without believing their premises. Every one of the reported cases may possibly be true, but they may be mere sequents, and by no means necessary consequences. Nothing is more fallacious than such a mode of reasoning. It is very easy and very captivating, but most erroneous. It has been too frequently practised, not only by Medical men, but by all classes. The *post hoc* is constantly confounded with the *propter hoc*, yet it often happens that they have no necessary connexion with each other. The one follows; the other has merely gone before. They do not stand in the relation of cause and effect. No cognisance is taken of any but one favoured antecedent, whereas there may be many others inseparably connected with the result. Look at the false theories, on every imaginable topic, supported by this kind of evidence, which have inundated the world. Every Medical man cannot but recollect how such fallacies have retarded scientific Medicine in all generations. There has hardly been a single disease, or the treatment of it, which, at one time or other, has not been subjected to this process. Thousands of remedies of every kind, which we now know to be absolutely useless, if not worse, have been vaunted as the true cause of cures. Never was such loose and inconsequent reasoning more prevalent than at the present day. Look alone at the assertions within the last few years as to the cause and proper treatment of plague, cholera, yellow, typhus, and typhoid fevers, and other epidemics affecting man and animal. See even how it has influenced, and not unfrequently led to hasty and injurious legislation on such subjects. It is the foundation for most of the evidence upon which every empiric relies, and vaunts and parades his success as infallible. He has done a certain thing to a certain part; it has become well; *ergo*, his remedy has cured the disease. If such be correct, every homœopath has good ground for his assumed success. Recollect the evidence and cases of success which lately were brought forward in support of the asserted cure of cancerous tumours by the injection of acetic acid. Yet who now believes in the truth of the doctrine? Sir. J. Simpson, Drs. Pirrie, Keith, Fiddes, and others, have brought forward cases quite as numerous, and undoubtedly quite as true, in proof of their declaration that the use of fibrous material as ligatures upon arteries is the true cause of all those disastrous consequences which so often follow operations, as have Mr. Lister and others in proof of their assertion, that it is the introduction of septic germs which does all the mischief. They have performed large, important, and dangerous operations of all kinds, merely substituting acupressure in closing the arteries for threads. They have never dreamed of applying antiseptic treatment for the destruction of septic germs, to which, by discarding all dressings, they allow the freest entrance to the wounded part, yet they have reported such a succession of marvellous cures as have fallen to the lot of few Surgeons. Now, will Mr. Lister allow their success was dependent upon acupressure alone? Setons have been used in Surgery from time immemorial, and rowels still are employed in veterinary Surgery, not only in the cure of abscesses, sinuses, and fistulæ, but to establish a drain in many external and internal complaints. M. Chassaignac has found many followers all the world over, in the use of drainage-tubes, made of vuleanised india-rubber, having plenty of holes stamped in them to render them still more patulous, in the treatment of recent abscesses, suppurating joints, and even effusions into the thoracic cavities; cures without number being reported as the happy result of thus affording a broad, direct, and easy road, with food by the way, for the free ingress of septic germs into all these varied cavities. Yet, surely, it can hardly be affirmed, if this treatment and the cures, as is stoutly declared, stand in the relation of cause and effect, that of the antiseptic treatment also does so. If the one which acts by keeping the discharge in, and the exclusion and destruction of the germs, be true, the other, which acts by not only letting the discharges out, but the germs freely in, cannot also be true. Taken as sequents, the reported cures in both may be true, but regarded as consequences this is impossible.

That wounds, whether simply incised or lacerated and contused, often do well when dressed with carbolic acid, is perfectly true; but that they do better than wounds differently treated, I deny. It is useless to bring forward cases, and compare them with other cases, where the circumstances are altogether different. In private practice, as well as in large Hospitals, especially in the latter, circumstances so vary, that to decide by a name alone is worse than useless. Every Surgeon knows that, besides the individual varieties of age, constitution, condition, habits of life, the mode of receiving the injury or disease, there is a general law affecting all. At one time all his operations do well; he hardly loses a case, whatever the operation may be; and at the same time all wounds heal quickly and well, without suppuration; or if pus does form, it is limited, and is laudable: while, at another time, precisely similar cases do as badly, so that even very trivial wounds and operations are followed by death.(g) In our Infirmary, a referenee to the records of operations will show this difference in a striking manner; and everybody also knows quite well that at such times certain erysipeloid diseases are prevalent in the district, and that patients without wounds will fall into a bad condition, and not unfrequently exhibit similar constitutional symptoms. There are undoubtedly phases of unhealthy atmospheric (or, I would rather suppose, telluric) influences, which, in spite of every known hygienic precaution, will make their influence most grievously felt. Hospitals have not unfrequently had to be wholly or in part temporarily closed from this cause. Therefore, to get at a fair comparison of the results of any particular treatment, the same class of cases should be treated at the same time and place. This I have carried out. During the last three years, since "the antiseptic treatment" has been in vogue, I have not allowed one of my patients to be treated with carbolic acid; while my colleagues have very extensively employed it, and I may say, at least at one time possessing the full amount

(f) To show how theory influences practice, and how readily even able men are liable to be led away by hasty conclusions, it is worth calling attention to the extension of the putrefactive germ theory to the existence of pus in the urine. It has been alleged by learned and well-known professors, in more than one of our universities, that the alkalinity of, and pus in, the urine arises from the presence of these septic germs, vibriones, and suchlike organisms, which have been introduced into the bladder by badly washed catheters, and the cure is asserted to be "carbolised catheters" to kill them. This idea is so opposed to all that is known of such affections as only to require being mentioned to be thereby refuted, and wondered at ever being adopted. What Surgeon or Physician has not frequently seen persons with alkaline urine containing pus, who have never had a catheter passed in their lives? Who has not seen such a condition improve at once, and in the end disappear altogether, by the use of frequent daily catheterism? Who has not known scores of cases where persons are going about their daily avocations, and introducing for themselves catheters, which are carried about loosely in the pocket, where they cannot be clean, and yet with the urine perfectly free from pus? Who does not know the frequent consequence of nephritis, cystitis, enlargement of the prostate gland, injury to, or disease of, the medulla spinalis, and stone in the bladder? How are vibriones to get into the bladder in such cases, where no instrument has been used? and if not in them, why in others? Is calculus or abscess in the kidneys, or a rugous mucous membrane in the bladder, to be ignored as the origin of pus in the urine? If such conditions were the result of septic germs, why, having once got into the bladder, and lived there, do they not seize upon the whole system and destroy it, as they are alleged to do when they enter by a wound?

(g) In the General Infirmary at Leeds, from May 1 to October 31, 1865, out of 100 recorded operations, there were 21 deaths. In the following six months, November, 1865, to May, 1866, out of 118 operations, there were 23 deaths. From June to end of November, 1866, there were only 10 deaths out of 115 operations; while from October 1, 1868, to end of March, 1869, out of 140 operations of all kinds, not, however, including the trivial, there were only six deaths; and in the last three months of the period, only one death is recorded. In each of the periods, there was no material variation in the number of operations, and none, so far as I can ascertain, in the nature or gravity of the cases, and yet in the last six months the deaths are not quite 1 in every 23 operations, while in the first the deaths amounted to over 1 in every 5; in the next six months to nearly as many; and in the six months from June to November, 1866, the rate sank to 1 in 12. Seeing the number of patients in the Hospital was the same in each period, there surely must have been some potent unseen cause influencing the result; mere "hospitalism" will not account for it. In the last period, when there was the largest number of operations and the greatest crowding, the fatality was the least. Moreover, the last months of the Hospital, which had been above a hundred years in use, were far more healthy than many periods which had occurred during its long occupation. Only operations of some magnitude are included in this record.

of faith necessary for securing success, fairly tried it. The result is, that my cases without it are as good as theirs with it. They have had some capital cases with it; but I am confident I am not in the least overstating facts when I declare that for every successful case with it, I can show one as good without it. This I consider to be a fair comparison, as the class of cases and other circumstances have been identical. Had I during this time found their success with the antiseptic treatment was greater than mine without it, I gladly should have availed myself of it; but I did not. On the other hand, as an additional proof that it has not been so, it may be mentioned that lately the omission of it, even in large operations, has been more and more frequent, until now its employment has become the exception, instead of the rule; which, had any marked benefit resulted from its use, most certainly would not have happened. Had carefully covering the cut surfaces with carbolic acid yielded great benefit, we should not have witnessed many large stumps left entirely exposed to the air, without any covering whatever upon them. That the two plans are wide as the poles asunder, is obvious to every one. If freely exposed stumps heal up readily and well, it must be at once apparent that those which do so when most elaborately swathed in carbolised wrappings, do so rather in spite of, than as a consequence of them.

One word more, and I have done. I have spoken plainly on the antiseptic treatment, because I have felt decidedly. Let me, however, not be misunderstood. I have no other object in view than the advance of our Profession. I willingly pay deference to, and acknowledge with thanks as warm and as cordial as those who have believed and adopted the antiseptic treatment, what good has been done, and I trust will still be done, by some of those who have been the most decided advocates of the method. To them I would say, in the words which Shakespeare puts into the mouth of Brutus, when speaking in the Capitol to the Roman people over the dead body of Cæsar, "If there be any in this assembly, any dear friend of Cæsar's, to him I say that Brutus's love to Cæsar was no less than his. If then that friend demand why Brutus rose against Cæsar, this is my answer: Not that I loved Cæsar less, but that I loved Rome more." So would I say, not that I value their works and labours less, but that I value Surgical science more. When I believe doctrines and practice to be true, I venture to acknowledge their value; but when I am convinced that they are wrong and injurious I presume to say so.

ORIGINAL COMMUNICATIONS.

NORWEGIAN NOTES.

By JONATHAN HUTCHINSON, F.R.C.S.,
Surgeon to the London Hospital, to the Ophthalmic Hospital, and the Hospital for Skin Diseases.

(*Continued from page* 98.)

To what are we to attribute the disappearance of Radesyge?

I have alluded to the fact that what was formerly called Radesyge is now known to have been tertiary syphilis in its inveterate form. All Norwegian Surgeons with whom I spoke agreed in this. Dr. Bidenkap, at Christiania, was kind enough to show me a portfolio of portraits of skin diseases, some of them the originals from which those of Professor Boeck's atlas were copied. Amongst these were some old ones with the word "*Radesyge*" on them. There could be no hesitation whatever in recognising the true nature of the malady depicted —indeed, one or two of these sketches have been published in the atlas referred to, with the diagnosis altered to "*Syphilis.*" I have mentioned also that there used formerly to be Radesyge asylums in Norway, and that these are now shut up, and that everywhere it is admitted that the disease has almost ceased to prevail. I have further hinted my incredulity as regards both the disuse of mercury and the employment of syphilisation as agents in bringing about this change. To what, then, are we to assign it? Let us examine the facts.

Tertiary syphilis has declined in severity, not alone in Norway, but over the whole world. It has declined where mercury is still used and where syphilisation has no disciples. It has declined in England at least as decidedly as in Norway. The worm-eaten skulls so common in our old museums are now but very rarely met with in our post-mortem theatres. They are relics of the past which antiquarian pathologists will do well to take great care of, for they cannot be replaced, and their value will increase. So also of the sunken nose, destroyed palate, and horrible serpiginous ulcerations. They are all now but rarely seen. Nodes, whether on the skull or the tibia, are, in the present day, "interesting cases," and by no means frequent. The youngest apprentice knows how to cure nocturnal pain in the shins, and is only too glad to get a good case to try his skill on.

The discovery which has worked the wonder was an empirical one. Almost by chance some one found that *Iodide of Potassium* would do good in these forms of syphilis. Others tried it, and reported favourably. The remedy stood its ground, and there forthwith passed away at its bidding an incalculable mass of human misery. Let us realise it well, for by recognising whence our benefits have come we may hope to win others. It is this drug, this iodide of potassium, which has conquered radesyge, and shut the Hospitals for its care. Take away this drug, and, in spite of our improved knowledge as to diagnosis, &c., we should again be almost helpless in the battle. Sarsaparilla, the mineral acids, and the numerous other remedies which enjoyed some little repute, in default of better, are now almost wholly neglected; and it is of interest to note the fact of an unanimity of Professional opinion respecting the virtues of this drug, which perhaps scarcely prevails in regard to any other. To increase our gratitude, we must remember also that tertiary syphilis never shows any tendency to spontaneous cure, but invariably progresses from bad to worse, until met by a specific. In this feature it differs entirely from the earlier symptoms of the disease.

The term "Sibbens" or "Sivvens" is not of Norwegian origin, but was applied in Scotland to maladies probably of the same nature as the Radesyge of Norway.

No Leprosy in Christiania.

In the Christiania Hospital there were two leprosy patients, but both of them had been brought, for the instruction of the students, from the Bergen district. Leprosy never originates in Christiania or its neighbourhood. Dr. Bidenkap, who has devoted much attention to its study, and has frequently visited its habitats, gave me much valuable information respecting it. I shall reserve what I have to record on this head for mention in connexion with the towns which have "Leper Hospitals." It may be well to state here, however, that Dr. Bidenkap does not believe so strongly as some other authorities in the hereditary transmission of the disease, or rather in hereditary transmission as its only mode of origin. He asserts that it may be produced spontaneously. I inquired if he had known instances of persons born in Christiania going to reside in a leprosy district, and becoming there the subjects of the disease. He related to me one definite case in which a man, after a short residence near Bergen, became leprous, and subsequently died. He will, I hope, publish the case in detail, for it is a very important one.

A very Rare Form of Skin Disease.

Amongst the drawings of Skin Diseases, Syphilis, etc., which Professor Boeck and Dr. Bidenkap had kindly got together for my examination, was one which interested me exceedingly. It represented the two hands of a Swede of middle age, with large solid indurations of the skin of the fingers, etc., of a livid purple colour. The patches were irregularly symmetrical, and very persistent, for the portrait of one hand (a photograph) had been taken a year before Dr. Bidenkap's coloured sketch of the other. I have seen but one other example of the same condition of things, and in it the parallelism was most exact. I am not aware that any one has described it. My own case is now under care at Blackfriars. The patient is a man of 45, who suffers much from gout, and whose two hands display large blue livid patches of solid œdema of a most peculiar kind. There are somewhat similar patches on his legs, and one on the left arm. I have had drawings made, and shall probably publish the case in full.

The sight of these portraits forcibly impressed upon me the value of the habit of keeping pictorial representations of rare diseases, and not only of making such, but of exhibiting them on all suitable occasions, so as to give opportunity of recognition to others. The annual museum in connexion with the British Medical Association will, I hope, in the future not unfrequently be the means of bringing to light valuable materials of this kind.

The Christiania General Hospital—Dr. Hjort's Clinique—Amputation at Hip-joint.

On my homeward return to Christiania I again visited the General Hospital, and thus had the pleasure of seeing the Surgical wards under Dr. Hjort's care. Amongst the more interesting cases was one in which amputation at the hip-joint had been performed about six weeks ago. The patient, a man aged 37, is doing perfectly well, and the wound is nearly healed.

The disease was a malignant tumour growing from the back of the femur. Dr. Hjort told me that he had left the wound quite without dressing throughout, merely covered with wet lint. All the arteries (twenty) were ligatured.

Carbolic Acid, Acupressure, etc.

Carbolic acid is used considerably as a lotion, but not in connexion with exclusion of air as practised by Lister. Of acupressure Dr. Hjort did not speak warmly. He said that it was used sometimes, but he thought not so often as formerly.

Diseases of the Eye.

I was struck by the large proportion of eye cases to others. They were of various kinds, cataract, cyclitis, and iritis, and several severe cases of strumous ulceration of the cornea. There was one case of loss of both eyes owing to the wound of one, sympathetic ophthalmitis having resulted in the other. The patient was a lad of about fourteen, who had wounded his right eye three years ago. The pupil of his left is now closed, and the iris much altered in texture. The ophthalmic cases are treated in the general ward. Struma in the form characterised by feeble circulation, with dusky red hands, thick lips, and alæ nasi, and consequent debility of nutrition, appears to be very common in Norway, and I saw numerous marked examples in this Hospital.

Hospital Statistics.

The statistics of the Hospital are regularly published in the Norwegian *Magazine of Medical Science.*

General State of the Hospital.

Dr. Hjort reported well as to the sanitary state of the Hospital. Pyæmia and erysipelas were, he said, rare. The Hospital is old (for Norway) and badly constructed, and there has for some time been a vigorous effort on the part of the Medical staff to have it pulled down and replaced by a new one on modern principles. The plans are ready, and it is to be hoped that the Norwegian Government will carry them into effect as soon as possible. Other reforms are also in contemplation, such as the formation of special departments for diseases of the eye, and other classes of maladies.

In reference to comparative freedom from erysipelas and pyæmia we may note that the wards are numerous and small, and that open windows are avoided. The wards are kept much warmer than is usual in England.

ON THE EARLY PROGRESS OF ARMY SANITATION IN INDIA.

By C. A. GORDON, M.D., C.B.,
Deputy Inspector-General of Hospitals.

Hill Stations,

(*Continued from page* 96.)

It is not necessary to say more than has already been stated against the measure of sending sickly men to the hills. The small experiment lately tried and found to fail in the case of Parisnath hill confirms all previous teachings. I note, however, that, as illustrations of the good results of moving such regiments to healthy stations in the plains, the cases are mentioned of the 79th Regiment from Peshawur to Rawul Pindee, the 101st from Mooltan to Pindee, and 93rd from Peshawur to Sealkote. To these I would add the case of the 27th Regiment, sent from Morar to Gondah with equally satisfactory results, and the 52nd from the former place and Jhansi to Hazarabagh. In the latter case, however, a large number of the weakly men were sent to England; others were selected as fit subjects for a hill climate, and sent to Sinchal, the result being that, although the reputation of Hazarabagh for salubrity does not, as a rule, stand high, the 52nd while there enjoyed a high degree of health. I would mention that on a subsequent occasion the 1st battalion of the 13th Regiment, after having suffered severely at Morar from fever, were sent to Dum Dum, a station immediately outside Calcutta, and that there the regiment was speedily restored to health and efficiency. We also read at page 410 that "the real way to utilise Wellington"—*i.e.*, Jackatalla—"would be to have the headquarters and a wing of two regiments always there, each corps furnishing another wing, one to Trichinopoly and one to Cannanore, both very trying stations as regards climate, and relieving the wings at these places by the others from Wellington every twelve months." Such an arrangement not only implies a system of selection of suitable men for each locality being made by regimental officers, but renders it absolutely necessary; the plan adopted in all corps being under such circumstances to complete companies that are deficient and make such transfers of men among them as circumstances demand.

In the volume for 1868 (i) we find the view expressed, as if it were new, that "not a man more should be kept in the plains than is absolutely necessary for the safe keeping of acknowledged important posts and for the protection of all our arsenals." Further, it is laid down "that little more than *one half* the number who are now worn down by tropical heat and disease would amply suffice for these purposes, might, I believe, be very easily shown," but that "it will not do to adopt any half measures, such, for instance, as were recommended by the late Sanitary Commission for Bengal three years ago—namely, to send the weakly men of corps to form depot battalions in the hills." The writer does not hesitate to acknowledge he endeavoured to show at the time that "such a proposal was injudicious, and that to carry it out would be objectionable, no less on sanitary than on military grounds." "In my reply to the recommendations of the Commission," the same writer further states, "I ventured to record that it then was, and I may now say it still is, my decided opinion (often enough and very plainly expressed during the last five years) that nothing short of accommodation for at least *one-third* of the British force in Bengal will keep that force in good health and in thorough military efficiency. Every regiment, I conceive, should spend the first two years of its Indian service in the hills, and afterwards two years in the mountains after every two years in the plains."

In the above extracts it will be seen that, short as they are, they indicate an oscillation of opinion as to the proportion of our forces who should be stationed in the hills between one-half and one-third. No separate provision is made in them for sending to the hills those classes which, according to all authorities quoted, are specially likely to derive benefit from residence there—namely, the weakly and ailing—nor to prevent the removal to such places of those in whose cases hill climates are shown by past experience to be directly prejudicial—namely, persons affected with diseases of the heart, lungs, liver, bowels, and with syphilis, rheumatism, etc. On the other hand, as is well known to Medical officers of practical experience in India, there are many soldiers serving in that country whose health remains perfectly good in the plains, and therefore, were they sent to the hills, not only would they be so unnecessarily in so far as they themselves are concerned, but their presence there would of course exclude an equal number whose condition would be benefited by the change and injured by their not being permitted to obtain it. Another result of the system of sending entire regiments without any selection and merely in rotation would be to perpetuate the very great evils which the extracts already given indicate very clearly arose in the cases of those corps that were sent from Peshawur and Agra in a low state of health.

We have indeed, in the very Blue Book to which I have already referred, additional confirmation of these views in regard to the impropriety of sending entire regiments instead of selected men to hill stations, as well as of the greater liability of men in a low condition of health to become the subjects of disease than those whose powers are unimpaired. At page 368 it is recorded of the 90th Light Infantry, which suffered in 1867 from epidemic cholera at Soobathoo, that it "was not a healthy body of men on arrival there." "In the Peshawur valley the men had suffered much from fever, both remittent and intermittent;" "and soon after arrival at Soobathoo, intermittent and low remittent fevers were often, nay constantly, being admitted to Hospital." At page 370 it is recorded that, in this regiment, all the persons attacked by cholera on that occasion were weakly; and it is added "I consider that the whole regiment was in an anæmic, nay, feeble condition." Undoubtedly the proper course to have pursued in the case of the 90th would have been to have sent it from Peshawur to a healthy station in the plains—such, for example, as Ferozepore or Rawul Pindee, a careful selection being made of suitable cases to be sent to the hills.

It is right, in a paper such as this is intended to be, that all opinions should be recorded, in order to indicate the steps by which the consideration of the question in hand has reached its present stage. It is no less proper, however, to mention that the arguments alluded to having been fully considered by the Government of India, the responsible authorities there and in this country have been pleased to adopt those expressed by the Sanitary Commission for Bengal. Thus, at page 37 of the

(i) Page 347, *et seq.*

"Memorandum on Sanitary Improvements in India to 1867," the language of that Commission is adopted—namely, "that it was proved by experience that the influence of hill climates on European constitutions is preservative against disease rather than curative, so that men who are sent to the hills should in all cases be selected, in preference to sending whole regiments, and that no general removal of sick men to the hills is proper." And it is satisfactory still further to read that "the formation of hill sanatoria on these principles is one of the works which the Government of India has directed to be carried into effect in the shortest practicable time." When those works shall have been completed, it is to be hoped that the soldiers to be sent to the new stations shall be carefully selected, whether as individuals or as regiments, in accordance with the principles which have, while I write, been adopted, and which had best be indicated by the following extract from one of the Indian newspapers:—"The probable number of European troops to be stationed on the Himalayahs during the hot season of 1869 will be, including officers, somewhat over 6000. The following are the details:—I. Cantonments.—Darjeeling—1st battery 25th Brig. R.A., 3 officers, 79 men. Dugshaie—1st batt. 3rd Foot, 35 officers, 892 men, Subathoo—41st Foot, 29 officers, 895 men. Jutogh—A battery 22nd Brig. R.A., 4 officers, 75 men. Kangra—Detachment 1st batt. 5th Foot, 4 officers, 73 men. Abbottabad (temporarily in huts on Murree Road)—5th battery 25th Brig. R.A., 5 officers, 87 men. Total 80 officers, 2101 men. II. Sanatoria—Darjeeling—Selected details, 7 officers, 120 single, 14 married. Nynee Tal—Selected details, 14 officers, 328 single, 28 married. Landour—Selected details, 9 officers, 187 single, 23 married. Kussowlie—Selected details, 6 officers, 370 single, 26 married. Bhagsoo—Selected details, 6 officers, 110 single. Murree—Selected details, 17 officers, 250 single, 120 married. Total—69 officers, 1365 single, 311 married. Single and married, total 1676. III. Working parties.—Raneekhet—2nd batt., 25th Foot, 7 officers, 200 men. Chuckrata—55th Foot, 32 officers, 170 men. Chumba Hill Roads—38th Foot, 7 officers, 175 men; 85th Foot, 7 officers, 150 men; 92nd Foot, 7 officers, 175 men. Murree and Abbottabad Road—1st batt. 6th Regt., 10 officers, 225 men; 1st batt. 19th Regt., 10 officers, 225 men; 88th Regt., 4 officers, 100 men. Total 84 officers, 2120 men. Grand total 233 officers, 5897 men."(k)

In the above paragraph we have *selection* as a principle clearly indicated; and I would add that, in this somewhat lengthy paper, arguments used by opponents of the plan in reality indicate its advantages as a most important sanitary measure, applied to the general good of our army in India.

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Medical Times and Gazette.

SATURDAY, AUGUST 7, 1869.

THE REPORT OF THE COMMITTEE ON MEDICAL EDUCATION.

In June, 1868, the Medical Council appointed a committee "to consider and report how the various subjects of Medical education which have been deemed requisite by the Council may be taught with most advantage; in what order they should be studied; and how the examinations on them ought to be arranged." The committee so appointed addressed a letter to a large number of gentlemen who were teachers in the various Medical schools of the United Kingdom, pointing out to them that the Council had determined that the requisite subjects of Medical education were ten in number, viz.:—Anatomy, General Anatomy, Physiology, Chemistry, Materia Medica, Practical Pharmacy, Medicine, Surgery, Midwifery, and Forensic Medicine—and had further fixed a term of four years as the minimum time to be given to the study of these subjects; and the committee requested to be favoured with the opinions of the teachers as to the topics which may be most advantageously included under each subject, the period in the four-years' course when each can be most profitably studied, and the length of time which should be devoted to it, and as to the manner in which it can best be taught—by lectures, practical instruction, or otherwise. The committee also invited the gentlemen addressed to add "any further observations or information which may occur to you as deserving of attention in connexion with the subject of inquiry."

One hundred and thirty-one gentlemen were good enough to undertake the labour of complying with the request of the committee, and sent "information of great value on the best modes of Medical education." The committee were also supplied with a report from the Council of the Medical Teachers' Association of London, a report from the Association itself, and an abstract of the systems of Medical education in North Germany, Austria, and France. It must, then, be admitted that the committee had no lack of materials on which to base a report; we should think that, on the contrary, they must have suffered somewhat severely from an *embarras de richesses*. However, they went manfully to work, and on the last day but one of this year's session of the Council they presented their report, accompanied with a thick volume containing all the documents supplied, as above stated, for their guidance, and, in addition, some "Observations on Medical Education" by Dr. Christison, one of the members of the committee. Before proceeding to make any comments on the report, we may as well at once remark that the Council did not attempt to discuss it or to take into consideration any of the recommendations of the committee. Considering that all the members of the Council are eminent men in the Profession, that almost without exception they all are, or have been, teachers or examiners, or both, and that they have had the subject of Medical education before them as a Council for years, it might have been supposed that by this time they were thoroughly well acquainted with it, and would have been ready to proceed to take some definite action on it; but no, they are evidently strongly of opinion that wisdom is to be found in a perpetually renewed multitude of Councils, of committees of Council, and of advisers *ab extra*. And so they directed that the report with the appendix should be submitted to the various licensing bodies, whose nominees and representatives the great majority of them are, "for their consideration and remarks, with a request that their remarks be sent to the Registrar on or before December 1, 1869," and they appointed a committee to receive the comments of the licensing bodies, and to discuss with them the various points raised in the report, and to embody the results in another report, to be sent to the Executive Committee before the next session of the Council.

The report of the committee first touches on "the subjects deemed requisite by the Council." It is recommended that the Council reconsider their resolution excluding botany from the curriculum of subjects, and also the question whether, if a knowledge of botany shall be considered necessary for a Medical Practitioner, it shall be included among the subjects of preliminary or of Medical education. And then the committee observe that some gentlemen suggest that chemistry, and others that only elementary chemistry, should be made a preliminary subject. The committee are of opinion, and rightly,

(k) *Homeward Mail*, March 23, 1869.

that chemistry must be a part of the Medical curriculum, but that elementary chemistry might, if possible, be advantageously studied before Medical education begins; but at present they doubt the possibility of this. And they, not unwisely, recommend that should the Council think fit to make botany and elementary chemistry subjects of preliminary education, they "should take measures to satisfy themselves" that the kind and degree of knowledge deemed necessary is really attained. They then amuse themselves by rearranging and further subdividing the "list of subjects," making them fourteen in number instead of ten; thus—

1. Physics.
2. Chemistry.
3. Medical Chemistry.
4. Anatomy.
5. General Anatomy.
6. Physiology.
7. Pharmacy.
8. Therapeutics.
9. Medicine.
10. Surgery.
11. Pathological Anatomy.
12. Midwifery.
13. Forensic Medicine.
14. Hygiene.

The revised list will certainly present to the student a more imposing and formidable appearance than the original one, even though it be true that, as the committee remark, "he is at present supposed to learn all of these, but the division enables a more complete view of what is taught, and also a better order of tuition, to be attained." The rest of the report is devoted to the three points especially referred to the committee —viz., the order in which these subjects should be taught, the method of teaching them, and the arrangement of the examinations. And the committee conclude by recommending that there be two examinations by the licensing bodies—the first a primary examination, embracing the first seven subjects on the list, at the end of the second winter session, and the second, or pass examination, including all the other subjects, at the end of the fourth year; that the exact order, number of lectures, and amount and kind of practical instruction be left to the schools, a guide being furnished to them by a definition of the area in each subject over which the examinations will extend; and that the schools institute class examinations in all the subjects, and that the certificates of study shall attest that the student has undergone these examinations.

One of the first things that strike us in reading the report is the weight given to the rules and practices of the existing licensing bodies. This is, we suppose, very natural on the part of the committee, but we think that it is carried to an objectionable degree. Thus the committee observe that "the nature of the subjects" to be taught "at once fixes a certain order—anatomy, chemistry, and physiology must necessarily precede Medicine, Surgery, and midwifery." But if this is so, it was at the least unnecessary to add, as a reason for the division of the subjects, that "the rules of the various licensing bodies have already sanctioned" it, and that, "in accordance with their regulations," etc., it is desirable not to mix preparatory and practical subjects. Then they remark that "several teachers suggest that the Annus Medicus should begin in the summer and not in the winter," and that the winter session should be shortened, and the summer session lengthened somewhat; and noting the suggestion as worthy of attention, the committee go on to say that "it would be well for the Council to ascertain from the several licensing bodies if there would be any decided advantages or any difficulties in such an arrangement." We should have thought that it would be much more sensible and practical to ask for information on such a matter from the schools where the teaching is carried on, than from the licensing bodies. In noticing that some apprehension has arisen lest the Council might legislate too much, and interfere too much with the freedom of teachers, the committee have to say only that they think the Council "is not likely to do this to any greater degree than has always been done by the Medical corporations"—a reply the very contrary of assuring, we should say, and one alarmingly indicative of the committee's belief in the perfect wisdom of the corporations. And again, when speaking of "the extent to which the teaching of each subject is to be carried," the committee recommend "that the various licensing bodies be requested to state the extent and nature of the examinations which they require in the different subjects of the curriculum," and that, "on receiving these statements, the Council shall compile a set of rules, which will indicate the most important parts of each subject, and serve as a guide to teachers, *in so far as applies to the preparation of the candidates for the licence.*" This appears to us to be simply making the Council merely the mouthpiece of the licensing bodies, instead of its being, as it is meant to be, the supreme head and authority in all matters relating to Medical education.

(*To be continued.*)

THE WEEK.

TOPICS OF THE DAY.

The session of the new Parliament, which is now closing, apart from its surpassing political importance, has had a special interest for the Profession of Medicine. For the first time in Parliamentary history can Medicine be said to have had anything approaching to adequate representation. Already is the influence of the Medical members of Parliament making itself felt. The general press of the country is becoming alive to the interest of Medical questions, and is beginning to discuss, often with an amusing degree of ignorance, the problems of Medical education and Medical government. Above all, a real act of justice has been done to the Medical Practitioners of one division of the kingdom by the passing of the Medical Officers' Superannuation (Ireland) Bill. These are all most welcome signs of a brighter future. Next session a strennous attempt must be made to obtain better terms for the Poor-law Medical Officers of England and Wales. After what has been done for Ireland, neither Government nor the House of Commons can refuse in justice to give superannuation to English Poor-law officers. But more than this is needed. The remuneration of a Medical officer of the Poor-law service must for the future be on such a scale that he shall be able to do justice to the sick pauper without injuring himself and family. A parochial Surgeon must no longer have to visit his patients over a space of 59,000 acres at a salary which suggests directions being issued to the poor to look out for the doctor in certain trains with "third-class" carriages, as is now the case in districts in Herefordshire, instanced at the last meeting of the Poor-law Medical Officers' Association. If Government and Parliament are alive to the necessity of improving Medical education, diminishing sickness by raising the hygienic condition of the masses, and on economical principles obtaining the most rapid and perfect restoration of the sick pauper which Medicine can afford, they must be prepared to pay adequately a highly trained body of Medical officers. We believe that the prospect of Poor-law Medical reform was never so promising as at present. Much is undoubtedly due to the Poor-law Medical Officers' Association, and to its President, Dr. Rogers, for the uniformly consistent manner in which they have been carrying out the objects for which the Association was formed. We are glad to see that at its last meeting the Association had the support of all the Medical members of the House of Commons, the member for the Universities of Edinburgh and St. Andrews, and of several of the metropolitan representatives. In their report the Association state that already one hundred members of Parliament have pledged themselves to Poor-law Medical reform, and the best augury is drawn from the attitude of the present President of the Poor-law Board in reference to Medical officers. It is now many years since Richard Griffin began the battle which we hope will ere long be crowned with victory. Poor-law Medical reform is not a selfish cry made in the interests of the doctors; it is a cry prompted by humanity, justice, and economy—humanity to the sick poor, justice to the doctors, and economy to the ratepayers.

The Poor-law Board have thought proper to recognise the

licence of the Royal College of Physicians of London as conferring the right to practise Medicine and Surgery, and rendering the Profession qualified to hold Poor-law appointments without further diploma or licence. We presume that this somewhat remarkable step has been taken in consequence of Mr. Goschen having been informed of an until lately forgotten Act of Henry VIII. which gives the College the power to license in Medicine and Surgery. We might remark, however, that this step does not seem quite in accordance with the provisions of the Medical Act, which draws a marked distinction between the practice of Medicine and Surgery, and directs that a man should be registered according to his qualification or qualifications. Neither does it seem quite fair to other examining bodies. The Royal College of Surgeons, for instance, examines in Medicine quite as really as the Royal College of Physicians does in Surgery. Will the Royal College of Physicians be content to see the same privilege extended to the rival institution in Lincoln's-inn? We believe that in the Scottish Universities any Bachelor of Medicine can become a Master in Surgery by the payment of a small fee without further examination. Is the Poor-law Board prepared to give the privilege to all licensing bodies that profess to examine both in Medicine and Surgery? Neither can Mr. Goschen's measure be held to have been dictated by a conviction of the benefits to be conferred by the one Faculty system. Rather it looks like an attempt to grant particular privileges to that one of the Medical corporations which, as measured by efforts in the cause of Medical education, has done less to deserve them than any other. However excellent the examiners in Surgery appointed by the Royal College of Physicians may be, the College does not possess the means of giving the kind of examination in descriptive and Surgical Anatomy and in practical Surgery which is given at the Royal College of Surgeons. Its licence, therefore, can never, *as a Surgical diploma*, rank with that of the College of Surgeons. We cannot suppose that the latter body will submit to the decision of the Poor-law Board without a protest. We are thoroughly in favour of the one Faculty or conjoint examination system, but to be beneficial it must be universal in its operation. To give one of the licensing bodies named in schedule A of the Medical Act exceptional powers and privileges, can have no good effect. It will encourage that very rivalry and underselling amongst the examining bodies—that "battle of the shops"—which is the real bane of Medical education, and which, loud as is the cry on all hands against it, can hardly be reprobated as it deserves.

The sentence of death passed on the convict Fanny Oliver has been commuted, on the recommendation of the judge, Baron Pigott, to one of penal servitude for life—a very illogical, but, as we think, a very wise measure. The failure of Reinsch's test to separate arsenic damaged the scientific proof, and the circumstantial evidence might, in part at least, be explained away. This, we think, is all that could, with the utmost stretch of charity, be said on behalf of the unfortunate woman. On the other hand, the case against her was far too strong to allow, as in that of Smethurst, a free pardon. If she is quite innocent, she is no doubt much to be pitied, but she herself, and not the verdict of the jury, is to blame. A married woman who dictates love letters to a former lover, purchases arsenic, giving the lover's as her own name, who nurses her husband through an illness, and in whose husband's body arsenic is found after death, cannot be surprised if society considers her a dangerous person, and disposes of her accordingly. In its scientific aspect, however, the case suggests the necessity for a grand reform. Dr. Hill's evidence was impugned because it was unsupported. Whilst a conviction for murder rests upon the evidence of one expert, or of one expert mainly, it will always be so. Chemistry itself undoubtedly cannot err, but the best chemical manipulators may. No experiments where a human life is at stake ought to pass unchallenged, and we maintain that no jury ought to be required to decide on the evidence of a single expert. In every trial for murder, the suspected articles ought to be sent to at least three toxicologists of undoubted rank, each of whom should be paid at the public expense, to make a separate examination. By such a plan alone will even the best chemical evidence be cleared from all suspicion of fallacy.

Dr. Arthur Leared has addressed the British Medical Association on the subject of the impropriety of anonymous leading articles in the *British Medical Journal*. Dr. Leared objects to leading articles in general because the writers save the public the trouble of thinking for themselves by thinking for them. Did everybody think as Dr. Leared, the objection, we own, would be a valid one. As it is, the present arrangement seems to be generally agreeable. It is better, we suspect, for people to think other people's thoughts than not to think at all. But to descend from the general to the particular, Dr. Leared objects to one man or set of men being constituted the anonymous mouthpiece of the British Medical Association. He objects to editorial articles because they are given to the world as if sanctioned by the 4000 members of the Association, and he specially objects to clever editors, because stupid articles are comparatively harmless. Now, it is not for us to express an opinion as to the policy of the British Medical Association. If the Association thinks it befitting its dignity, or necessary to its existence, to spend all its funds on a weekly newspaper, and to descend from its scientific platform to trade in advertisements in order to meet its expenses, we suppose they must be allowed to be the best judges of their own affairs, although we think they pay dearly for their whistle. But if Dr. Leared's objections have foundation, and we are far from saying they have not, they cut at the whole root of a weekly journal at once. If scientific articles only are to appear in the journal of the Association, it had much better take a monthly, or quarterly, or half-yearly form. A newspaper without an editor, or a policy, or leading articles, would not fulfil the purposes for which such journals in the present day are published, and would simply not be read. The moral of the whole matter is, that the Association might do better things with their money than they do, and Dr. Leared is not the only person who thinks so.

Dr. Richardson's letter in the *Times*, correcting the account of what occurred at the reading of his paper on painless Surgery, ruthlessly expunges the prettiest little bit of scientific sensation writing which the meeting of the British Medical Association inspired. The picture of the rabbit quietly munching carrots whilst its ears were being cut to pieces by the wonderful revolving knife was worthy of Cid Hamet Ben Engeli, or any other venerable historian of marvels. We acknowledge that the idea of a knife revolving so quickly by clockwork as not to give pain in cutting is a capital one, and may, perhaps, turn out valuable in practice. Dr. Richardson, however, chivalrously disclaims any idea of experimenting with his new instrument on any one or anything but himself. Admiring his spirit of self-sacrifice, it may be urged that there are valid reasons why such an experiment should be tried on a lower animal rather than on the human. It might be suggested that, after the startling phenomenon of exalted special sensation which the *Times* correspondent, for instance, has furnished, a reasonable argument might be advanced for testing such a matter by a more trustworthy, if less delicate, instrument than the human sensorium. A rabbit would most surely exhibit signs of pain if it felt it. In an experiment on oneself, with the strongest intention to be accurate, it is quite conceivable that the objective phenomenon—the cutting by watchwork—might neutralise the subjective phenomenon—the pain. On the whole, we think we would rather trust the evidence of the rabbit.

The war between the new St. Pancras guardians and the Poor-law Board is proceeding vigorously. We reserve all

further comment on the charges against Mr. Harley until the close of the inquiry and the publication of the decision of the Poor-law Board.

A builder and quarryholder, one Robert Dixon Smith, has been proceeded against by the Lunacy Commissioners for, as it is alleged, illegally detaining an insane lady possessed of considerable property, named Wood. It is reported that Smith kept Miss Wood in a garret measuring two yards by four and a half yards, of which he had the key. She used to be seen in a state of nudity at the window by the neighbours. He is said to have removed her from her home, obtaining entrance by a ladder, four years ago. The scene of this story is Bradford, nearer home than Cracow.

THE MEETING OF THE BRITISH MEDICAL ASSOCIATION AT LEEDS.

We must refer to the letters of our correspondents in another column for the details of the conclusion of this, which seems to have been one of the most successful and agreeable gatherings of the kind. We feel sure that every visitor will agree with what our correspondents say of the munificent hospitality of the members of the Medical Profession, and of the liberality of the mayor and municipal authorities, and of the members of the Philosophical Society in their efforts to provide for the recreation of the visitors. We must not omit our thanks to Dr. Henry, the acting editor of the *British Medical Journal*, for enabling us to lay the addresses of Sir W. Jenner, Dr. Chadwick, and Mr. Nunneley *in extenso* before our readers; nor yet to the representative of another contemporary for some most courteous assistance, as well as to the honorary secretaries of the various sections, and the authors of papers who have kindly placed their communications at our disposal.

POISONOUS SOCKS AGAIN.

This very obscure matter is at length, we believe, to be investigated under the direction of the Medical Department of the Privy Council. The facts known about it are few and striking, but by no means clear. There is no doubt but that some persons who have worn silk socks, dyed with sundry brilliant colours, have suffered from most severe irritation of the skin, peculiar redness, vesication, intense pain, and general illness. The affected patches of skin have corresponded exactly with the coloured portions of the socks; and of all the colours red and scarlet have proved the most severe in their effects. The socks have been washed, and the colour has been washed out, but still, we are assured, the irritating qualities have remained. Eminent chemists have thrown little light on the matter, but they agree that coal-tar furnishes the substratum of the colour, and it is certain that arsenic is an occasional, if not a constant, ingredient. This last is the opinion of the indefatigable Mr. Webber, who has forced this subject on the attention of the public. Why it is that so few persons have suffered from such articles of common wear, or should not have made their sufferings public, is a mystery; but whether or no poisonous colours are used, as we are told, to colour sweetmeats, wines, and soaps, the matter seems one which a competent commission would soon solve.

CHOLERA AT THE GAMBIA.

A correspondent writing on July 7 informs us that cholera has almost disappeared from Bathurst, after having caused the enormous mortality of 1500, out of a native population of 4000, in about six weeks. A few cases of modified intensity were still occurring among the civil population, but the troops were free from the disease, and all ordinary duties, which had been suspended during the epidemic, had been resumed. The detachment of the 1st West India Regiment, 140 strong, lost 14 men. The disease was reported to have appeared in Senegal and Goree in the end of last December. In April it broke out with great violence in McCarthy's Island, and in the beginning of May extended to St. Mary's, Gambia. The first case among the troops occurred on May 5, and between that and the 24th there were 24 cases and 14 deaths. Only one case occurred subsequently; it was of mild nature, and terminated favourably. It appears from a letter lately published in the *Daily Telegraph* that a considerable amount of dissatisfaction has been felt by the English mercantile inhabitants of Bathurst at the inertness of the admiral who holds the office of political administrator of the settlement. He is said to have neglected the necessary sanitary precautions in anticipation of the epidemic while still only threatening, and that during its progress the measures which he adopted were inadequate and injudicious, and, in some instances, in opposition to the advice of the Medical officers. Such charges demand full inquiry at the hands of the Home Government.

CHOLERA AMONG EUROPEAN TROOPS IN INDIA.

We are informed that cholera made its appearance at Nusseerabad, in the Bombay Presidency, on June 6. Up to July 2 twenty-five cases and fourteen deaths had occurred, chiefly among the 2nd Battalion 1st Foot. Staff-Surgeon Major T. E. White, C.B., was despatched by Lord Napier to report upon the circumstances of the outbreak and the sanitary condition of the station, Deputy Inspector-General of Hospitals W. M. Murphy having been prevented by ill-health from performing this duty.

GRADUATION CEREMONIAL AT EDINBURGH.

The ceremonial of graduation of students of Medicine took place on Monday last in the General Assembly Hall, which was filled by a gay assemblage of ladies and gentlemen. The graduates, dressed in their robes, occupied the central area of the hall. Vice-Chancellor and Principal Sir Alexander Grant presided. Most of the members of the Senatus Academicus were present. There were twenty-six candidates who received the degree of Doctor of Medicine under the new statutes, and five under the old statutes. Thirty-nine candidates received the degree of Bachelor of Medicine and Master in Surgery, and five received the degree of Bachelor of Medicine only. The proceedings opened with the conferring on Sir Roderick Impey Murchison the degree of Doctor of Laws. A short speech was then made by Professor Balfour, and the Vice-Chancellor capped the gentlemen mentioned by the promoter (Professor Balfour). Two medals were afterwards awarded for distinguished theses, one to Dr. John Haddon, the other to Dr. John Miller Strachan. Besides these, the thesis of Dr. Lightfoot "On Carbolic Acid, chemically considered," was thought worthy of competition for a medal, and he has been marked with two stars; while the theses of Dr. James Ormiston Affleck and of Dr. C. Currie Ritchie have been commended, and have been marked each with one star. The medals were formally presented to the graduates by the Vice-Chancellor. The Ettles Medical Scholarship was conferred on Dr. Henry Alleyne Nicholson, who had greatly distinguished himself at the University. The proceedings terminated with an able and eloquent address to the graduates by Professor Balfour.

BILLROTH *v.* KRAUS.

We have received from Dr. Pann, counsellor, of Vienna, the following paragraph:—

"The Imperial Court of Chancery at Vienna as jury, by the sentence of the same court, July 22, 1869, No. 12182, has convicted Dr. Bernhard Kraus, as responsible editor of the *Allgemeine Wiener medicinische Zeitung*, of the offence of neglect of proper carefulness, in the publication of a false notice, that Dr. Counsellor Billroth conducted a case of ovariotomy in his clinics, and that it happened in this operation, after the section, that the removal of a sponge was found to have been omitted; and therefore condemned him to a fine of a hundred florins, or in default to twenty days' imprisonment, and to payment of costs."

MEDICAL WITNESSES.

Dr. Bateman, of Norwich, brought before the British Medical Association, at Leeds, a very important question. He stated with much force and ability the disadvantage under which a Medical witness labours in being obliged occasionally to answer questions which involve a breach of Professional confidence. It is justly argued that in this respect the members of our Profession are not placed upon an equality with lawyers and clergymen. The lawyers, in particular, shelter themselves behind "privilege" upon even the most frivolous pretences. As a rule, the judge admits the "privilege." If a clergyman be recalcitrant, he is protected. But a Medical witness is peremptorily called upon to state facts to a jury which may have no real bearing upon the issue, but which may, nevertheless, inflict serious injury upon unoffending persons. Surely this is a state of things which should not be allowed to continue. It cannot for a moment be contended that the confidence reposed in a Medical attendant is of a less sacred nature than that which is given to a lawyer or a clergyman. In fact, it is generally more important. How many secrets are confided to the "family doctor" that are withheld from the lawyer or clergyman? Secrets, too, that are especially necessary to be held sacred, not only for the peace of families, but often for the honour of individuals of both sexes. Why, then, should the Medical witness be placed in the painful position of being called upon to unfold those secrets? A witness, no doubt, could be committed by the judge for contempt, if he refused to answer; but we are of opinion that few judges would resort to such a proceeding, more particularly if the witness claimed his "privilege," and protested against answering the question, because it might injure individuals and would involve a breach of Professional confidence. It is difficult to legislate upon such a subject; but, as we are now more strongly represented in the House of Commons than at any former period, we may rest assured that if any bill is introduced having reference to the question, our interests will be well taken care of.

THE EDINBURGH CLASS OF CLINICAL SURGERY.

An address was presented to Mr. Joseph Bell by the students attending the class of Clinical Surgery in the University of Edinburgh at the close of the summer session. They say that—

"We desire, before the close of the session, to express to you our appreciation of the manner in which that class has been conducted by you during the illness of Professor Syme. . . . We feel it to be as much a pleasure, as it is certainly a duty, to assure you that you have obtained our admiration and esteem, as possessing, and that in an eminent degree, those qualities which are so essential in a teacher of Clinical Surgery; and, while, by the clear and forcible way in which your lectures were delivered, their subject-matter was impressed upon our memories, the hours spent in your class-room were rendered as pleasant as they have been profitable."

MR. CHADWICK ON COTTAGE IMPROVEMENT AND PUERICULTURE.

Mr. Edwin Chadwick, C.B., has devised the useful word "puericulture" to designate the art of breeding healthy children; and inasmuch as the greatest obstacle in the way of the poor is the dear and unwholesome kind of dwellings attainable, he has endeavoured to promote the building of cottages at once cheap and wholesome, and has lately invited a large number of sanitary folk to inspect a model cottage built in his own grounds at East Sheen. His remarks on the subject deserve to be widely circulated:—

"The great sanitary evil to be contended against in the cottage and house site and the habitat for puericulture is damp—which lowers temperature and lowers strength; generates painful diseases—rheumatism—and, lowering strength, predisposes to all other passing causes of disease, and especially to consumption. The first article to be insisted upon in a sanitary specification is, that by drainage of the site, if it be necessary, 'the water-table shall be lowered not less than three feet below the surface.' My first condition, as respects the construction of the house itself, is 'that the flooring shall be impervious to rising wet, the walls to driving wet, and the roofing to falling wet or to snow, and that they shall be absolutely damp-proof.' Common bricks absorb as much as a pint of water. Supposing the external walls of an ordinary cottage to consist of 12,000 bricks, they will be capable of holding 1500 gallons, or 6½ tons of water, when saturated fully. To evaporate that quantity of water would require nearly a ton of coal. These bricks give off their moisture slowly. It is unsafe to inhabit, in less than nine months or a year, the houses constructed of the common materials. When I examined, as a reporter, the model dwellings built at Paris by the Emperor, I found the appearances of damp on some of them that had been built two years. The *concierge* who showed one block had her head bound up, and was suffering from an attack of rheumatism, connected with the dampness of the houses. The Medical officers at the recently constructed Hospital at Netley have been afflicted with rheumatic fever, arising from the excessive dampness of the brick construction of their quarters. I consider a construction of vitreous tiles or bricks the best possible, but, for trade reasons, they are unattainable at present. The late Captain Fowke first directed my attention to concrete as the most advantageous and the cheapest material available for cottage construction. My specification, 'that the walls and ceilings shall be impermeable to water or damp,' is complied with in this instance by the contractor, Mr. Nicoll, by the use of a new material for wall and roof construction, of which Portland cement concrete forms a part. You may imagine, as adopted for houses, the Crystal Palace principle of construction, with iron framing and bearers, but, instead of glass, opaque slabs, made of a web of straw compressed to about one-fourth the space of loose straw into a mat, which is spread over a framework of iron wire. Upon this compact web of straw layers of hard bitumen are put on both sides. Over the bitumen is placed a layer of concrete. If the bitumen be of sufficient thickness and hardness, and properly spread, it appears impossible that wet can penetrate that walling, and although the outer layers of concrete might, if not well made, for a time imbibe some portion of moisture, it could not pass through the bitumen. The straw, kept dry—and it should be kept completely dry—by the bitumen, is, as we know, a non-conductor of heat, and the bitumen should be preserved in hot weather by the non-conducting power of the outer layer of concrete, which is also an entire non-conductor of damp. The next articles of a sanitary specification applicable to cottage construction are, 'that the walling shall be washable,' 'that it shall be such as not to harbour vermin,' and 'that it shall be of a light, agreeable colour.' It is a sanitary rule, as applicable to closely occupied dwellings, that the walls shall be cleansed at least once a year. The cost of lime-washing as often as it is required to be repeated is a serious tax. The wall facings that have been given by Mr. Nicoll in the several rooms of the cottage are at from one-tenth to one-twentieth of the Hospital prices. The sanitary specification that the flooring shall be of a good non-conducting material, and be water-tight and damp proof, you will see is attained by squares of the cheaper wood laid upon a layer of bitumen. The next great point of a sanitary specification is, 'that the ventilation shall be—that is to say, in cold weather—with air that is warm as well as fresh.' All common modes of cottage ventilation ventilate by cold air. The new method, invented by Captain Douglas Galton, R.E., is by a fresh-air flue, in which the air is warmed. There is an arrangement by Mr. Nicoll by which the same fire-place that gives radiant heat, and warming, and ventilation to the front room keeps a boiler and an oven at work in the next. Another article of a sanitary specification is 'that the complete construction of the house shall be such that if it be left clean, unoccupied, and closed for any time, it shall remain dry, free from any close, musty, or foul smell, and shall be immediately habitable, without the need of fires or of any special preparations for safe occupancy in winter or in summer.' This cottage is detached, and unconnected with any system of sewers; and the plan in use here is a movable pail under a seat, into which pail are to be put all the soap-suds, house-slops, etc., which serve to dilute excreta, the whole being removed daily, or before decomposition can commence, and deposited in a trench, or applied, at the discretion of the gardener, as liquefied manure, the principle of the plan being to take the manure to the prepared soil, instead of bringing prepared soil to only a part of the house manure, as is the principle of the earth-closet system."

Mr. Chadwick summed up his requirements as dry foundations, dry and warm floors, perfectly damp-proof walls and

ceilings, walls washable and fair to see, and ventilation with air that is warm as well as fresh.

Such of our readers as are interested in cottage-building may consult with advantage a set of "Cottage Plans" by the Earl of Cawdor,(a) which give the particulars of construction for cottages with the greatest amount of convenience at the least possible cost.

PARLIAMENTARY.—CONTAGIOUS DISEASES (ANIMALS) BILL—THE PHARMACY ACT AMENDMENT BILL—DR. MACLOUGHLIN—VOTE FOR IRISH HOSPITALS—CAPITAL PUNISHMENT—METROPOLITAN POOR—INFANTICIDE—SANITARY LEGISLATION—NITRO-GLYCERINE—CRIMINAL LUNATICS.

In the House of Lords on Thursday, July 29,

The Contagious Diseases (Animals) Bill was read a second time.

Their lordships having gone into committee on the Pharmacy Act (1868) Amendment Bill,

Lord Colonsay urged the propriety of repealing the 23rd section of the Act of last year, which, as he understood it, in conjunction with a former statute, prevented Medical Practitioners in certain cases from dispensing medicines even to their own patients. He hoped the question would be postponed.

Earl Granville said he was not prepared to admit the correctness of the noble and learned lord's construction of the section. He could not, therefore, consent to postpone the Bill.

The Bill then passed through committee.

Mr. Brady asked the Under-Secretary of State for War why Dr. Macloughlin had not been restored to his position in the army, in accordance with the several recommendations of the Commander-in-Chief.

Captain Vivian replied that, in the very voluminous correspondence which existed on this subject in the War Department, and which chiefly consisted of letters from that gentleman, there was no trace of his ever having been recommended to be reinstated in the service. The case had been considered by various Commanders-in-Chief and Secretaries of State for War, by the Duke of York, Lord Hill, the Duke of Wellington, Lord Palmerston, Lord Panmure, Mr. Sidney Herbert, and General Peel, all of whom had concurred in opinion.

In Committee of Supply £19,015 were voted for Hospitals and infirmaries in Ireland.

In the House of Lords on Friday, July 30,

The Contagions Disease (Animals) Bill passed through committee.

The report of amendments on the Contagious Diseases Bill and Pharmacy Act (1868) Amendment Bill was received.

In the House of Commons,

Sir G. Jenkinson gave notice that, unless the Government undertook to deal with the subject of capital punishment, he would ask leave early next session to introduce a Bill to alter and amend the existing law in regard to the present system of the revision and commutation of capital sentences; and he would now ask the Home Secretary to grant a return of all convicts, male and female, who had been reprieved from the execution of capital sentences passed upon them during the last ten years.

Mr. Bruce said that if the hon. baronet would give notice of the information he wanted it should be granted as an unopposed return.

On Saturday, July 31, in the House of Commons,

Mr. W. H. Smith gave notice that early next Session he should call attention to the operation of the Poor-law and the action of private charities and benevolent institutions on the condition of the poor of the metropolis.

On Monday, August 12,

Sir L. O'Brien gave notice that early next Session he would call attention to the continued increase of infanticide in England.

The Sanitary Act (1866) Amendment Bill was, on the motion of Mr. Bruce, read a second time.

On Tuesday, in the House of Lords,

The Contagious Diseases (Animals) Bill was read a third time and passed.

The Nitro-Glycerine Bill was read a second time.

The Criminal Lunatics Bill was read a second time.

In the House of Commons,

Mr. Raikes asked the Secretary of State for the Home Department whether it was the intention of her Majesty's Government to introduce any measure during next Session with the object of enabling juries to convict persons guilty of infanticide without exposing them to the sentence of death now necessarily pronounced, but never carried out in such cases.

Mr. Bruce: I am unable to give any pledge on this subject, more especially as I am in doubt, as at present advised, whether it would be proper to consider infanticide apart from the general question of murder.

The Attorney-General for Ireland obtained leave to bring in a Bill to amend the Sanitary Act (1866) so far as it relates to Ireland.

On the motion of Sir C. Adderley, an address was granted for a copy of a letter from the Sanitary Commissioners to the Home Secretary, dated July 30, 1869, and the answer thereto.

On Wednesday, in the House of Commons,

The Contagious Diseases (Animals) Bill, and the Sanitary Act (1866) Amendment Bill were read a third time and passed.

The Sanitary Act (1866) Amendment (Ireland) Bill was read a second time.

(a) Published by Ridgway, Piccadilly.

BRITISH MEDICAL ASSOCIATION.

(*From an occasional Contributor.*)

(*Continued from page* 121.)

The President's Conversazione—Debates on Hospitalism.

Saturday, July 31.

My last letter was hastily written on Wednesday evening in the midst of a fog as black as Erebus, which rendered it quite impossible to see one's paper by 6 p.m. Now let me take up the thread of my discursive remarks (if there be a thread running through them), and attempt a short commentary on the events that followed. After a very agreeable dinner, we adjourned to the Town Hall to attend Dr. Chadwick's conversazione. There was a universally felt suspicion, only too sadly realised the next day, that what was feared had happened, and that he was away consoling the family bereaved of their young mother, whilst his Professional friends were enjoying the intellectual entertainment which he had provided. But I suppose it could not be helped. "Labitur et labetur in omne volubilis ævum." Life and death are strangely intermingled, but the world cannot stop; so we must pay a passing tribute of sympathy and move on. The Town Hall is a most spacious building, whose size is only less impressive than it otherwise would be from its classic style and proportions. It was superbly fitted up; the strains of that magnificent organ, given forth under Dr. Spark's skilful fingers and feet, were marvellous for sweetness, variety, and power; the refreshments were abundant and good; the ventilation perfect; the adjoining rooms contained a choice variety of philosophical puzzles; many a lesson was given in the art of explaining the incomprehensible; and any one who witnessed the demonstration of the "Stratified Discharges of Coloured Light in Giessler's Tubes," as exhibited to ladies, might have comforted himself with the conviction that this world contains some mysteries yet. I must, as before, give their due to the local *savants* and exhibitors, as evidencing an appreciation of science in its most advanced state; and if I give prominence to the names of Messrs. Harvey and Reynolds, it is not merely from the fact that their laboratories yield products as multifarious as they are excellent, medicines, extracts of meat, photographs, thermometers, as if Messrs. Savory and Moore, Van Abbott, and Ladd, were rolled into one firm, but because of their thoughtfulness in freely supplying the members of the Association with all the varieties of refreshing drink they manufacture, soda, Seltzer, aërated water, etc. No more grateful gift could have been devised, for the excitement of these meetings makes one terribly thirsty. I may mention Mr. Tuffen West's specimens of parasitic fungi on plants as illustrative of the causes of skin disease, because I believe the drawings were originally published in the *Medical Times and Gazette*.

On Thursday morning, after a debate on the direct representation of the Profession in the Medical Council, in which the Rev. Professor Haughton advocated, as you and others have done, the idea that the first step ought to be the direct representation of graduates and licentiates in their own Colleges, which would render a representation of the Colleges and of the Profession one and the same, Captain Douglas Galton read an

excellent paper on the construction of Hospitals. The speaker took the architect's side of the question; that is, leaving it for the Medical authorities to define objects and principles, he proposed to show how the architect should carry them out. The main object of a Hospital was stated to be that it should enable the sick to recover in the shortest possible time; the best means to this end, pure air, pure water, perfect cleanliness, a site in the open country on a dry porous soil, sheltered from north and east, on an elevated platform with falling ground all around. He spoke of the "ward" as a unit, consisting of all the appliances necessary for the greatest number of patients capable of being housed in one dormitory; and in the course of his remarks gave a fair criticism of the new Leeds Infirmary, and especially blamed the juxtaposition of the three pavilions at the rear of the building, facing, as they do, rising ground, and insufficiently parted from each other.

This brought on a discussion on Hospitalism, which was continued in various Sections till the end of the meeting. Curious were the diversities of opinion on fundamental matters. What makes a Hospital unhealthy? Age, frowsiness, old floors ceilings and walls, say one party. Hence, say they, operations can be performed in new Hospitals with success which would be fatal in old ones. Hence the expediency of dividing Hospitals into small separate wards, and of taking care that nothing from one can gain access to and infect another. On the other hand, Mr. Hutchinson (following out, as regards Surgery, the line taken by Budd and Snow, and enounced by Davies, of Bristol, in the Health Section) affirms that, no matter how foul a Hospital may be, you will not get specific disease, such as erysipelas, pyæmia, and the like, without the specific germ of the disease; and he said he believed he had traced the introduction of the germ in many instances to the admission of a bad case of tertiary syphilis. Again, Dr. Hughes Bennett, as a believer in what we may call development by juxtaposition, is a thorough disbeliever in the existence of the specific germs. Hutchinson, Macleod, and others spoke warmly in favour of carbolic acid as an antiseptic and germ destroyer. Sir James Simpson spoke of the use of carbolic acid in soap as a mere superstition, and so far as regards a dilute vapour or solution we believe Sir James is right. What Mr. Nunneley thinks of it may be easily seen from his masterly address. Anyhow, the incessant blows delivered by Sir James Simpson and others against the "palatial system" are beginning to tell; and to my knowledge some of the Leeds people, who had heretofore looked on their "noble institution" not only as a great ornament to the town, but as the best thing for the sick poor, are seriously shaken in their ideas. At any rate, small wards for cases requiring isolation will be more the order of the day.

I could well say more were it not that I fear to occupy space more worthily devoted to other pens than mine. Let me conclude by hoping that the next meeting under Dr. Charlton at Newcastle may be as prosperous and enjoyable as the present one has proved.

(*From Correspondent No.* 2.)

July 31.

Practical Value of Sir W. Jenner's Address—Dr. Farr's Address in State Medicine—Dr. Blanc on Animal Vaccination—Dr. Ballard on the same—Dr. Philipson on the Registration of Disease—Mr. Oliver on Atmosphere of Towns—Bad Sanitary State of Leeds—Thursday's Proceedings—Temperance Breakfast—Debate on Hospitalism—Leeds Infirmary—Dr. Beatty's Address in Midwifery—Dr. Ballard on Sanitary Laws—Drs. Davies, Dyke, Acland, on the same—The Dinner—Mr. Nunneley's Address in Surgery—Visit to Harrogate.

The letter I sent you from Leeds last Wednesday brought the proceedings up to the conclusion of Sir Wm. Jenner's excellent address. I have heard nothing but commendation of it. It is calculated to be useful not only to our own Profession by the gathering together as in a garner the harvest of truths which the laborious culture of the last few years has brought about, but also because of the impression which it is likely to produce out-of-doors. I see that already the *Times* newspaper has taken possession, for the public at large, of one of the most important of those truths which have thus received from Sir Wm. Jenner the stamp which is to render them current, as we hope, through all the households and communities in the civilised world. I allude, of course, to the fact, now established beyond the possibility of further dispute, that typhoid fever and cholera are propagated most readily and most certainly through the drinking of water contaminated with the specific products of these diseases. Of course every one was present at the reading of this address, but afterwards, when the several sections were opened, the members were so distributed that no one individual could be present at all of them. Engaged as I was at the one section whose business chiefly interested me, I can, therefore, do no more than state what occurred there, leaving it to some other correspondent to post you up in the proceedings in other rooms. The section of State Medicine, which was inaugurated last year at Oxford, met at two o'clock on Wednesday, in the Council Chamber of the Town Hall, under the presidency of Dr. Farr. He commenced his address, which lasted about half an hour, by pointing out that the wants recognised by public hygiene came into the same category as those which communities alone could supply by combined action, such as sewering, lighting, watering, etc. Diseases and disasters consequent to the neglect of these wants have at various times befallen armies and aggregations of men in all ages of the world's history; they befell the Greeks before Troy and the British army in the Crimea; and very recently the pestilence among cattle became a ministerial question among ourselves. When the first Public Health Act was passed, this national responsibility was first recognised by the Government. Since that time various sanitary Acts have been passed, testifying to the goodwill of the Legislature, while the establishment of the Medical Department of the Privy Council, under the able direction of Mr. Simon, has operated in the way of advice and control, and in the promotion of sanitary and scientific inquiries, with the happiest results. Sanitary law without sanitary officers must be a dead letter, and before long the duties now performed by the Home Secretary and the Medical Department of the Privy Council must be devolved upon a Minister of Public Health. Ere long it must come to pass that every large town will have its town Physician or Medical Officer of Health, and then a variety of important questions will come up and have to be decided with respect to the duties, status, and qualifications of such an officer. Dr. Farr then proceeded to exhibit briefly the aims of public Medicine and the indispensable conditions of a healthy existence. One of these conditions is a supply of pure water for drinking purposes, respecting which he observed that the dangers of water contaminated with sewage were well known except to a class of scientific witnesses who had succeeded in inducing a certain Royal Commission to call such water a wholesome beverage. How out of the existing seed to raise races of men to a divine perfection was the final problem of public Medicine. The first paper read in this section was by Dr. Blanc, on "Animal Vaccination." He contended, in favour of the adoption of vaccination direct from the heifer, that, in face of the fact of compulsory vaccination in this country, those who dreaded the operation on account of its supposed dangers when the virus is taken from a child's arm should have the opportunity afforded them of a choice between human and animal lymph. He maintained the truth of the conveyance of syphilis occasionally by vaccination from arm to arm, and of the deterioration of the qualities of the vaccine virus by repeated human transmission. But he went further than this, and attempted what has never been attempted before—namely, to prove that not only was the virus of current vaccine less active than that of the inoculated calf or the first few human beings through which it was transmitted, but that the anti-variolic power of the vaccination was also reduced—in short, that vaccination had become from Jenner's time to now gradually less and less protective. With this object he quoted the increasing numbers of vaccinated persons admitted into the Small-pox Hospital—a proportion exceeding what it should be when compared with the vaccinated persons in our population as given by Seaton and Buchanan—and also the increasing fatality of post-vaccinal small-pox, as shown by the records of the same Hospital. Dr. Braidwood and Mr. Steele followed with papers on the same subject. Mr. Steele took the very opposite view to Dr. Blanc, maintaining that, when properly managed, human transmission of vaccine did not necessarily involve deterioration, and that there was no danger at all in arm-to-arm vaccination. Dr. Ballard, being called upon by the President, expressed himself decidedly in favour of vaccination directly from the heifer, but not to the exclusion or abandonment of arm-to-arm vaccination. Besides studying the subject on the Continent, he had experimented upon it largely here. He thought, however, that the line of argument adopted by Dr. Blanc was unfortunate, as not only unwarrantable, but as calculated to leave a bad impression upon the public mind, since, if pushed to its extremity, it would tend to the total abandonment of arm-to-arm vaccination—a proceeding not only highly convenient, but, on the whole, free from any extraordinary danger. He criticised the statistics brought for-

ward from the records of the Small-pox Hospital; first, on the ground that the vaccinated patients admitted there were mostly adults, while the proportion of the vaccinated given by Drs. Seaton and Buchanan related to children; and next he showed that no steady increase of fatality could be fairly proved among the vaccinated in the manner attempted by Dr. Blanc, since he compared the average fatality of sixteen years with that of 1863 and 1864, when a small-pox epidemic broke out with unusual virulence and high death-rate among the unvaccinated as well as among the vaccinated. He then detailed his own observations on the activity of animal virus when preserved in tubes or upon points when kept for various periods, and as it apparently varied with different methods of inoculation. Judging from the energy of the discussion which followed, it must be inferred that the importance of the subject was fully recognised. Dr. Philipson, of Newcastle, then read a paper on the subject of the registration of diseases, urging its necessity, and that the expense would be fully repaid by the benefits it was calculated to confer. A paper on the atmosphere of towns in its sanitary aspect was read by Mr. Oliver, of Redcar, which brought up Dr. Robinson upon the subject of smoke consumption in Leeds. One of the things which struck me and others on first coming into the town was its smokiness, which seemed to say that the Corporation permitted the manufacturers to have pretty much their own way in this matter. Even in a very open part of the township of Hunslet, half a mile beyond the boundary of Leeds proper, I found that not even the lilac could be got to flower, and that gardens were little else than patches of waste ground. And now that I am speaking of the shortcomings of the local sanitary authorities, I may mention that in the lower part of the town, near the parish church, my nose was assailed by the effluvia proceeding from a long open sewer running, black as ink, beneath the windows of dwelling-houses, and carrying the sewage of Leeds into the filthy Aire. This sewer, as bad as the old Fleet-ditch used to be, is at last to be covered, the works having recently commenced. Mr. Proctor, in a paper on the infant mortality of Bradford, referred the great excess in that town to a great extent to the employment of mothers in the mills, and to the extensive use of soothing cordials.

In the evening the President's *soirée* took place in the Victoria Hall. The room was full, though not inconveniently crowded, and the arrangements for the entertainment of the visitors were admirable. It was enlivened by the presence of a large number of ladies, and I believe all that were there concurred in having spent a most agreeable evening. The only drawback to the general contentment was the rumour which spread rapidly of the death of Dr. Chadwick's daughter, to whose bedside he had been summoned at the conclusion of his address tho day before. Great sympathy was felt and freely expressed with this amiable gentleman under his sudden bereavement.

The proceedings of the Association commenced on Thursday by the acceptance by many of the members of the hospitality of Mr. Baines, M.P., the Vice-President of the National Temperance League, who invited them to a public breakfast at the Great Northern Hotel. About 150 were present. In his speech which followed the satisfaction of the matutinal appetite of the Medicos—an appetite which, judging by its results, many who are not habitual physic-takers might well have envied—Mr. Baines advocated the object of the League as similar to that which the Medical Profession had always in view. He claimed for it the place of an auxiliary to Medical and sanitary progress, and urged upon all present that they should use the immense power they possessed in stemming the tide of intemperance. The Rev. Mr. Hannay endeavoured, not very wisely, I think, to import into the proceedings something in the character of a discussion by inviting any who were opposed to the principles of the League to state their objections. Several speeches followed, which, as might have been expected, left the question of teetotalism much where they found it. Still, such conversations as this do good by setting people thinking, and if the cause of teetotalism should not be advanced no doubt that of temperance gains by them.

The third general meeting, which took place at 10 o'clock, was engaged with the reports of committees, the first of which was that of the Representation Committee. It stated that the movement in favour of direct representation of the Profession in the Medical Council had been greatly strengthened by a memorial to the General Council which had received above 8000 signatures, and that there was good reason to believe that, with the views held by the Government, no further Medical Council would be formed without the introduction of members of the Profession in the proportion of one-fourth at least of the whole number. Captain Galton's paper on Hospital construction was then read. It was so full and thorough that it is almost impossible to summarise it, and it was listened to with marked attention. Many of those present and taking part in the discussion that followed, and notably Dr. Evory Kennedy, criticised severely some of the arrangements at the New Leeds Infirmary, and especially the winter garden which connects the pavilions of which the Hospital consists. Having myself paid a visit to the Hospital, and viewed every corner of it, I must say I concur in very much of this unfavourable criticism. One arrangement I observed is simply monstrous, and it is this—that the bed-room of one of the Medical officers is approachable only through a corridor or passage leading to the women's water-closets. I have not ceased to wonder how the amazing impropriety of this could have failed to be perceptible to the managers of the institution.

The address in midwifery was given by Dr. Beatty, of Dublin. He reviewed the history of midwifery, and staked out, as it were, the ground which it was the business of the modern accoucheur to occupy. Confining himself then to a review of some of the modern improvements in the practice of midwifery proper, he dwelt upon the advantages which had accrued from the use of anæsthetics, of which chloroform was the most conspicuous, and expressed his opinion of the benefits which have followed its employment in natural, difficult, and instrumental labour, the only ill-effect of it apparently being that it tended to favour post-partum hæmorrhage. The greatest applause was elicited when he uttered a strong denunciation of the doctrines which recently found expression in the Dialectical Society, and of the audacity of those who invoked the co-operation of a respectable Profession in their base endeavour to place a limit upon the increase of families. In the State Medicine section, which alone I attended, Dr. Ballard read a paper "On the Defects of our Existing Sanitary Laws, with Suggestions for their Amendment." He stated that, although his opinions were based upon observations carried on in the metropolis, yet similar difficulties to those he had himself experienced must be felt in other large towns. He advocated consolidation of the sanitary laws, unification of local authority, central State control, by means of a public health department, the rendering much of our permissive statutes obligatory, the general appointment of Medical Officers of Health, who should preside over large districts, and be paid on a scale to be determined by the number of the population, and who should, among other things, make preliminary inquiries into suspicious deaths, general registration of sickness, improvement in the law relating to overcrowding, the constant as distinguished from the intermittent system of supply of water in towns, and the adoption of measures now only applicable to extraordinary epidemic outbreaks, such as cholera, in respect of the ordinary epidemic maladies of the country. This paper was followed by one by Mr. Davies, of Bristol, in which he detailed the character of the work which he and his assistants accomplished. He complained of the anomalous nature of the post he held as a "Medical Inspector of Health," and of the fact that the duties of his office had never been defined. However this may be, it must be held that this gentleman deserves every commendation for the energy he has displayed in his difficult position, and in the elevated view he has taken of his responsibilities. Dr. Dyke, in a paper on the practical working of the Sanitary Act, 1866, and of the Diseases Prevention Act, 1865, drew attention to one of the greatest trials of the temper of a health officer—namely, the circumlocution which had to be encountered before sanitary laws could be put into force.

The President, at the conclusion of these papers, called on Professor Gairdner, who, speaking of Scotland, did not think that the failure of the Sanitary Acts depended so much on their imperfection as pieces of legislation as on the indisposition there was to put them in force. In Glasgow the drunkenness and degradation of the lowest classes was getting worse and worse, and would continue to do so until they were provided with better houses. I must explain, however, that in many respects the sanitary laws of Scotland are much superior to those of England. Dr. Acland, who was next called upon, entered on something like a defence of the Sanitary Commission, of which he is a member. He agreed with much that Dr. Gairdner had said, and, so far as could be gathered from his very desultory speech, did not seem to think that much amendment in the law was wanted. Had Dr. Acland been a Health Officer, and, like those who read these three papers, been engaged in the practical everyday labour of trying to make them work, we cannot avoid thinking that his opinions would be somewhat different. It was generally understood that this day's meeting in the State Medicine Section would be of the nature of a convention of the Medical Officers of Health throughout the kingdom. Cer-

tainly a goodly number were present. The only part of Dr. Aeland's speech which could be regarded as at all satisfactory by the English Health Officers was that in which he promised Mr. Adderley's favourable consideration of any statement of a skilled officer which might be sent in, pointing out where the law broke down. It would have been more satisfactory still if he had said that it was the intention of the Commission to examine those Health Officers personally whose experience was most extensive, and who could give them at once the very information it is presumed they desire to obtain.

I am afraid I have been grumbling a little in this letter, notwithstanding that I have, with all who are present, enjoyed my visit to Leeds immensely. But from all I can hear I should have been still more dissatisfied had I been present at the dinner in the Victoria Hall on Thursday evening. For I am informed by those who were there that I may congratulate myself, as one of the *οἱ πολλοὶ*, on my absence. It was great cry and little wool—an elaborate carte, with just such a selection of viands as is included in what is known as Hobson's choice. Besides which something made a good many ill; one gentleman I heard of got an attack which terminated in hæmatemesis, and a great many had their night's rest disturbed by untimely calls to the temple of Cloacina, which, not being normal results of dinner, must be attributed to something eaten or something drunk by the many which ought not to have been given them to eat or to drink. In the absence of the President, Dr. Heaton was selected to occupy the chair, and filled it to the entire satisfaction of all who could hear him in a building which it is most difficult to speak in.

Mr. Nunneley's address on Surgery was delivered at ten o'clock on Friday. After alluding to the advance which instruments of precision, such as the ophthalmoscope, the laryngoscope, the sphygmograph, and the clinical thermometer, had enabled Surgeons to make in diagnosis, and so in the practice of their art, he proceeded to dwell upon the operation for the removal of the entire tongue, which he had performed nineteen times without any untoward symptom. He next referred to the methods in use and proposed for the arrest of arterial bleeding, and, after giving a brief history of the subject, came to the consideration of acupressure. He himself had never felt very sanguine about it, and he has observed that after trying it for a time his colleagues at the Leeds Infirmary had quietly let it drop out of their practice. Neither had the antiseptic treatment of wounds found more favour with them. He went so far as to say that he regarded the fancy that carbolic acid is a specific against purulent infection, or that it acted by destroying septic germs, as little else than an *idolum theatri*.

Being engaged to make holiday at Harrogate, I only heard one of the papers in the State Medicine section—namely, the very excellent account of the sanitary state of Bombay given by Dr. Hewlett. The paper was illustrated by a large number of drawings, so characteristic that they almost told the tale of the paper by themselves.

The visit to Harrogate was one of the greatest successes of the week. Over 100 of the members, including some of the most distinguished of them, who had been working hard all the previous days in the Council and at the sections, accepted the invitation to luncheon forwarded to them by their Medical brethren established at this place. We started by a special train about one o'clock, and, on our arrival, were met by Dr. Deville, the genial and happy-looking secretary of the committee, who delighted us all by his cordiality. He was absolutely ubiquitous, and, while evidently directing every detail, did so without fussiness, and had a pleasant word for every one. Although most of us knew him only by name, we seemed to look upon him as an old friend. The gentry of the neighbourhood sent their carriages to meet us at the station, and we were escorted to them through a vista of visitors and residents who had assembled to greet us. At the Queen's Hotel, to which we were first driven, we were received and welcomed by Dr. Bennett, in whose name the invitation had been issued, and by the rest of the Medical men of the town. After a few minutes the carriages were again in requisition, and we were taken to see the lions. First we were driven to see the view of the town from an advantageous stand-point near the observatory, and from thence we were taken to the several wells and pump-rooms, the unique spring of chloride of iron at the concert-room being particularly pointed out. These rooms were all severally decorated for our reception, residents, visitors, town commissioners, and Medical men all uniting their efforts to do honour to the Association, and to give pleasure to its representatives. At 3 o'clock we sat down to a noble luncheon at the Queen's Hotel, which, it was understood, was the expression of the welcome given by its host and hostess. Several toasts were drunk, and some good speeches made by Dr. Bennett, Dr. Radcliffe Hall, Dr. Myrtle, and other Practitioners in Harrogate. We left about 5 o'clock, all highly delighted with our excursion, and especially carrying away with us a lasting recollection of the kindness and good fellowship so strongly stamped upon the events of the day.

GENERAL CORRESPONDENCE.

ATTENDANCE OF MEDICAL OFFICERS AT THE ROYAL ALBERT HOSPITAL, DEVONPORT.

LETTER FROM DR. FRED. ROW, AND MESSRS. R. J. LAITY, C. BULTEEL, AND W. P. SWAIN.

[To the Editor of the Medical Times and Gazette.]

SIR,—Our attention has just been drawn to the evidence given by Mr. W. G. Romaine, late Secretary to the Admiralty, before the Select Committee of the House of Commons on the Contagious Diseases Act, 1866, wherein he states (page 46, Answer 905, compared with page 47, Answer 914) "that the Medical Officers of the Royal Albert Hospital, Devonport, visit their patients only once a week, and that very often in consequence a patient is kept longer in Hospital than is necessary." We are of course quite unaware of the source of Mr. Romaine's information, but we lose no time in expressing our surprise that statements should have been made so entirely at variance with fact. The patients are visited daily by the House-Surgeon, and always twice a week by the Surgeons of the Hospital, and oftener when required. It is impossible that patients can be kept longer than is necessary: the very opposite allegation has, in fact, reached us, and as Mr. Sloggett, the Visiting Surgeon, was in attendance on the Committee, we presume that he was absent when those statements were made, or he would certainly have contradicted them.

We trust Mr. Romaine will furnish us with his authority for the above statements, the more especially as he appears anxious, by Answer 905, to supersede the present staff of our Lock Hospital, or place them under the supervision of a Medical officer paid by the Admiralty.

We are, &c.

FRED. ROW, M.D.
R. J. LAITY, M.R.C.S.
C. BULTEEL, F.R.C.S.
W. P. SWAIN, F.R.C.S.

Royal Albert Hospital, Devonport, July 29.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

[To the Editor of the Medical Times and Gazette.]

SIR,—Last night I was present at the annual dinner of "the Poor-law Medical Officers' Association." I had travelled a long distance in order to be present on the occasion. Nothing could have been more gratifying than the proceeding, with one, to my mind, lamentable exception. Late in the evening the toast of "The Press" was proposed in very eulogistic terms by the President. The toast elicited great applause, but I was grieved, as were many of those about me, to listen to the responses of two out of the three gentlemen whose names were associated with the toast. Sir John Gray, the veteran reformer, and the staunch, eloquent, and able advocate of the rights of his brethren, was manly and to the purpose. The two gentlemen who followed him, though men of position and character, replied, not on behalf of the press, but confined their observations to praising up the merits of a Medical journal with which they are connected. Not one syllable was said by the proposer of the toast, or by those who responded to it, of yourself or of your contemporaries, with the exception to which I have alluded. Surely this was a mistake, Sir; it is scarcely possible to conceive that it was a premeditated insult. The veteran Brady, in one of the most remarkably effective speeches I ever heard, insisted upon the necessity of unity and union amongst Poor-law Medical officers to carry out the reforms which are required. It seemed strange to me that immediately after this eloquent address the President, who proposed "The Press," and the two gentlemen who responded to that toast, appeared at least to ignore that unity and union of action. If they had forgotten your earnest and constant labour in our cause, I had not. The *Medical Times and Gazette*, if not so loud and sensational in its demonstrations in our support, has been at least as effective as those of any other

journal. Moreover, I am a member of the British Medical Association. I felt, as a member of that body, personally insulted that no reference was made to the benefits conferred upon Poor-law Surgeons by that Association, and by the journal which is the recognised exponent of the opinions of the Association. When, Sir, are these little jealousies and unseemly squabbles to cease? I, for one, shall retire from the Poor-law Medical Officers' Association in disgust if at the next anniversary meeting I shall be compelled to listen to tawdry speeches which are framed upon the principle of "Caw me and I'll caw you." I am, &c.

A Country Poor-law Surgeon.

THE POOR-LAW BOARD AND THE LICENCE OF THE ROYAL COLLEGE OF PHYSICIANS.

We have been requested to publish the following letter:—

Poor-law Board, Whitehall, S.W., July 16, 1869.

Sir,—I am directed by the Poor-law Board to acknowledge the receipt of your letter of the 7th inst., in which you transmit, for their information, a copy of the form of licence to be granted henceforth by the Royal College of Physicians, London.

I am directed to state that the Board will in future recognise the licence in question as conferring the right to practise both Medicine and Surgery, and thus rendering the holder of such licence legally qualified for the office of Medical officer under the regulations of the Board.

I am, Sir, your obedient servant,

Arthur W. Peel, Secretary.

Henry A. Pitman, Esq., M.D., Registrar,
Royal College of Physicians, Pall-mall East, S.W.

NEW INVENTIONS.

CHOCOLATE FROM COPENHAGEN.

(*Manufactured by Christian F. Kehlet, Copenhagen. Imported by A. Borgen and Co.*, 142, *New Bond-street, London, W.*)

This new specimen of chocolate is an additional proof, if any were needed, of the increasing taste for this very wholesome and nutritious beverage. It is clear that the Scandinavians are not behind the rest of the world in their manufacturing skill. We believe this chocolate to be pure, unmixed with aught save sugar, and nicely aromatised; and people who want a good substantial breakfast, and who are wise enough betimes not to enslave their stomachs to the teapot, will do well to try the product of Mr. Kehlet's factory. It is not extravagant in price.

MEDICAL NEWS.

University of London.—The following are lists of the candidates who have passed the recent examinations in Arts and Science:—

First B.Sc. Examination.

First Division.

Aveling, Edward Bibbins, University College.
Ball, Walter Wm. Rouse (First B.A.), University College.
Bott, Henry Septimus, Owens College.
Clowes, Frank, Royal College of Chemistry, and private study.
Elwes, John William, King's College.
Harding, Thomas Olver, B.A., University College.
Hartog, Marcus Manuel, University College.
Hodson, Charles William, Chester College.
Lees, David Bridge, B.A. Camb., Owens and Trinity College, Cambridge.
Routledge, Robert, Owens College.

Second Division.

Jameson, Hampden Gurney, University College.
Osler, Sidney Follett, University College.
Rigg, Charles, Chester College.
Roberts, Robert Davies, University College.

Preliminary Scientific M.B. Examination.

First Division.

Ashby, Henry, Guy's Hospital.
Ball, Walter Wm. Rouse (First B.A.), University College.
Bott, Henry Septimus, Owens College.
Colgate, Henry, University College.
Crocker, Henry Radcliffe, private study.
Duncan, Peter Thomas, University College.
Dyson, William, University and Wesley Colleges.
Eastes, Thomas, Guy's Hospital.
Fennings, Allen, Charing-cross and St. Mary's Hospitals.
Hartog, Marcus Manuel, University College.
Harvey, Charles William, University College.
Houghton, Walter Benoni, University College.
Hubbard, John Waddington (st. before 1839), St. Thomas's Hospital.
Humphreys, Henry, University College.
Rossiter, George Frederick, private tuition.
Russell, Ebenezer Geer, Guy's Hospital.
Schafer, Edward Albert, University College.
Skerritt, Edward Markham, B.A., University College.
Taylor, Herbert, St. Bartholomew's Hospital.
Whittle, Edward George, University College.

Second Division.

Appleyard, John, University College.
Baily, Frederic William, King's College.
Bettany, George Thomas, Guy's Hospital.
Blake, Samuel Hahnemann, University College.
Bomford, Gerald, King's College.
Branfoot, Henry Seymour, Guy's Hospital.
Breeze, Richard Goodwin, University College.
Browne, George Buckston, Owens and University Colleges.
Coates, William Harrison, private tuition.
Crespin, Edgar Reginald Legassicke, Guy's Hospital.
Dawes, Richard St. Mark, University College.
Duncan, Andrew, King's College.
Dundas, George Albert, Guy's Hospital.
Erith, William Edward Norton, University College.
Firth, Charles, Norfolk and Norwich Hospital.
Gould, Alfred Pearce, University College.
Hickman, Richard, St. Mary's Hospital.
Homan, George William, King's College.
Hope, Samuel Wilson, St. George's Hospital.
Jameson, Hampden Gurney, University College.
Knox, David Neilson, M.A. Glasg., University of Glasgow.
Lees, David Bridge, B.A. Camb., Owens and Trinity College, Cambridge.
M'Cann, Thomas Anthony Aloysius, University College.
Nicholson, Arthur, King's College.
Philpot, Joseph Henry, King's College.
Rat, Joseph Numa, King's College.
Roberts, Robert Davies, University College.
Steil, George Robert, University College.
Sturge, William Allen, General Hospital, Bristol.

Royal College of Surgeons of England.—The following candidates, having undergone the necessary examinations, received their diplomas in Dental Surgery at a meeting of the Board of Examiners on the 4th inst.:—

Baylis, George William, Cheltenham.
Chisholm, William, Edinburgh.
Tomes, Charles Sissimore, M.R.C.S. Eng., Cavendish-square.
Scully, John, Grenville-street, Brunswick-square.
Washbourn, Edward Norman, Southgate, Gloucester.
White, Richard Wentworth, Norwich.

Apothecaries' Hall.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, July 29, 1869:—

Deshon, Frederick Peter, East Coulston, Wilts.
Gaitskell, Edward Forbes, Streatham.
Purcell, Edward Godfrey, Holloway-road.
Roberts, William Lloyd, Festiniog, N.W.
Saunders, Henry William, Oxford-street, London.
Taylor, Frederic Eyres, Norwich.
Thompson, William George Washington, Ballymoney, Ireland.

As Assistants in compounding and dispensing medicines:—

Hemingway, Walter, Portman-street, W.
Rooke, James Henry, Swansea.

The following gentlemen also, on the same day, passed their First Examination:—

Carter, Alfred Henry, University College.
Duke, David, Guy's Hospital.
Evans, Alfred Henry, Guy's Hospital.
Fendick, Thomas Rowing, St. Bartholomew's Hospital.
Herman, George Ernest, London Hospital.
Johnson, Charles Hargett, Hull.
Kay, Thomas Valentine, Liverpool.
Newton, Charles John, St. Bartholomew's Hospital.
Nicholls, Howard H. J., Guy's Hospital.
Stedman, Frederick, University College.
Turner, Henry Crockford, Guy's Hospital.
Vickers, Charles William, London Hospital.
Warburton, Edmund Samuel, Liverpool.
Wilson, George, University College.

MILITARY APPOINTMENTS.

War Office.—The following appointments have been made:—7th Dragoon Guards: Surgeon Andrew Knox Richards, from 87th Foot, to be Surgeon, *vice* Surgeon-Major Robert Marshall Allen, who retires upon half-pay. 17th Foot: Surgeon William James Ingham, from the 64th Foot, to be Surgeon, *vice* Francis Odell, who exchanges. 53rd Foot: Surgeon Philip Henry Eustace Cross, from half-pay, late 58th Foot, to be Surgeon, *vice* Robert McNab, M.D., appointed to the Staff. 64th Foot: Surgeon Francis Odell, from 17th Foot, to be Surgeon, *vice* William James Ingham, who exchanges. 87th Foot: Staff Surgeon-Major Frederick Douglas, M.D., to be Surgeon, *vice* Surgeon Andrew Knox Rickards, appointed to the 7th Dragoon Guards. Medical Department: Surgeon Robert M'Nab, M.D., from the 53rd Foot, to be Staff Surgeon, *vice* Staff Surgeon-Major Frederick Douglas, M.D., appointed to the 87th Foot. Staff Surgeon Emil Beeher, M.D., from half-pay, to be Staff Surgeon.

BIRTHS.

Asbury.—On July 29, at Broxbourne, Herts, the wife of C. J. Asbury, Surgeon, of a daughter.

COGHILL.—On August 1, at 30, Blacket-place, Newington, Edinburgh, the wife of Dr. J. G. Sinclair Coghill, F.R.C.P.E., of Shanghai, of a son.

HAMILTON.—On July 27, at 1, Prince's-road, Liverpool, the wife of Robert Hamilton, F.R.C.S., of a daughter.

LATHAM.—On August 4, at 17, Trumpington-street, Cambridge, the wife of P. W. Latham, Esq., M.D., Fellow of Downing College, of a son.

THURSFIELD.—On July 29, at Leamington, the wife of T. W. Thursfield, M.D., of Leamington, of a son.

MARRIAGES.

BOWMAN—TURLEY.—On July 29, at St. Paul's, Herne-hill, Surrey, Thomas William, second son of the late Rev. John Bowman, vicar of Buttershaw, Yorkshire, to Isabella Rosa, youngest daughter of the late E. A. Turley, Esq., M.D., of St. John's, Worcester.

BRYAN—GILLARD.—On July 29, at All Saints' Church, East Clevedon, Somerset, John Morgan Bryan, jun., Esq., M.D., of Northampton, to Margaret Davis, only daughter of the late Lewis Gillard, Esq.

CHANNING—BRYANT.—On July 21, at Trinity Church, Boston, Mass., U.S.A., Francis Allston Channing, Fellow and Tutor of University College, Oxford, only son of the Rev. William Henry Channing, of Boston, and Kensington, London, to Elizabeth, eldest daughter of Henry Bryant, M.D., of Boston, Mass., U.S.A.

HEWLETT—OAKES.—On July 28, at St. Mary's, Harrow-on-the-Hill, Richard Whitfield Hewlett, Esq., of Naples, M.D., second surviving son of Thomas Hewlett, Esq., to Emily Mary Charlotte, third daughter of the late Richard Montague Oakes, Lieut.-Col. H.M.'s 1st Life Guards, of Elmsfield, Harrow.

HOARE—TOVEY.—On August 3, at St. Matthews, Duddeston, Birmingham, by the Rev. F. Smith, assisted by the Rev. Jno. Swann, Reginald Ratcliff Hoare, Surgeon, only son of Wm. Hoare, Esq., M.R.C.S., to Amy Jane, third daughter of the late Chas. Tovey, Esq., of Abbey-place, Pershore.

PYWELL—DODD.—On July 29, at St. Mary's, Lambeth, William Hodgson Pywell, M.R.C.S. and L.R.C.P. Ed., to Agnes, youngest daughter of E. Dodd, Esq., M.R.C.S. and L.S.A., of Westminster Bridge-road, Lambeth.

SNAPE—NASH.—On August 3, at St. Mary's, Beaumaris, by the Rev. John Williams, rector, George Henry Snape, M.R.C.S., of Liverpool, to Julia Caroline, eldest daughter of J. G. Nash, F.R.C.S., of Cheltenham, late J.P. and Colonial Surgeon, South Australia.

WELLS—RING.—On July 24, at Clifton, William Howley, eldest son of the Rev. F. B. Wells, rector of Woodchurch, Kent, to Ann Maria, daughter of the late Dr. Ring, R.N.

WINTERBOTHAM—LEONARD.—On August 3, at Clifton, by the Rev. D. Thomas, Lauriston Winterbotham, of Arundel House, Bays-hill, Cheltenham, Surgeon, to Selina, daughter of the late Solomon Leonard, Esq., of Buckingham-villas, Clifton.

DEATHS.

MILNER. MARY IEANE, wife of Charles Milner, Esq., M.D., and daughter of the late General Ready, Governor of the Isle of Man, at Tubingen, in Würtemburg, on August 2.

WHEELER, LOWE, Esq., M.R.C.S., at his residence, Lionel-villa, Overton-road, Brixton, on July 31, in the 72nd year of his age.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

BOURNEMOUTH GENERAL DISPENSARY.—Resident Surgeon. Candidates must be registered, and must possess a qualification in Medicine as well as Surgery. Testimonials, diplomas, etc., to be sent, under seal, to the President of the Bournemouth Dispensary on or before September 9.

ISLE OF MAN HOSPITAL AND DISPENSARY.—Resident Medical Officer. Information may be obtained by applying to the Hon. Sec., Mr. John Moore, to whom testimonials must be sent on or before August 11.

KENT AND CANTERBURY HOSPITAL.—Assistant House-Surgeon and Dispenser; must be legally qualified to practise under the Medical Act of 1858, and he unmarried and not more than 40 years of age. Applications and testimonials to Thomas Southee, Esq., Secretary, on or before August 27, election the same day.

ROYAL HOSPITAL FOR DISEASES OF THE CHEST, CITY-ROAD.—Physician; must be F. or M.R.C.P. Eng. Applications and testimonials to Charles L. Kemp, Esq., Sec., on or before August 23, election on September 7.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Braintree Union.—Mr. Henry J. Shirley has resigned the Finchingfield Disirict; area 8387; population 2441; salary £50 per annum.

Kingsbridge Union.—Mr. R. C. Wallace has resigned the Seventh District; area 16,203; population 3,587; salary, £56 10s. per annum.

Prescot Union.—Mr. John Rayner has resigned the Prescot District; area 5679; population 12,374; salary £55 per annum; and the Workhouse; salary £60 per annum.

APPOINTMENTS.

Cranbrook Union.—Henry B. Wood, M.D. St. And., M.R.C.S. Eng., L.S.A., to the Frittenden District.

Knighton Union.—Henry O. Brown, M.R.C.S. Eng., L.S.A., to the Knighton District.

Monmouth Union.—George Mayon, M.D. St. And., M.R.C.S. Eng., L.S.A., to the Trelleck District.

Ripon Union.—Edward Smith, B.M. and M.C. Glas., to the Third District.

DR. SKINNER, of Liverpool, has been elected a Corresponding Member of the Gynæcological Society of Boston, U.S.A.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following is the list of College officers nominated by the Council and elected by the College on July 29, 1869:—*Censors:* Edmund Lloyd Birkett, M.D.; Henry William Fuller, M.D.; Andrew Whyte Barclay, M.D.; Edward Henry Sieveking, M.D. *Treasurer:* Frederic John Farre, M.D. *Registrar:* Henry Alfred Pitman, M.D. *Librarian:* William Munk, M.D. *Examiners:* Anatomy and Physiology, Henry Hyde Salter, M.D.; John Syer Bristowe, M.D. Chemistry, Materia Medica, and Practical Pharmacy, Samuel Osborne Habershon, M.D.; William Odling, M.B. Medical Anatomy and the Principles and Practice of Medicine, George Owen Rees, M.D; Patrick Black, M.D. Midwifery and the Diseases peculiar to Women, Robert Barnes, M.D.; William Overend Priestley, M.D. Surgical Anatomy and the Principles and Practice of Surgery, Thomas Blizard Curling, F.R.C.S.; Timothy Holmes, F.R.C.S. *Curators of the Museum:* Frederic John Farre, M.D.; Thomas Bevill Peacock, M.D.; William Wegg, M.D.; Francis Sibson, M.D. The following is the list of Members nominated by the Council and elected Fellows by the College on July 29, 1869:—John Thomas Arlidge, M.B. Univ. Lond., Newcastle-under-Lyme; John Cockle, M.D. Univ. R. College Aberd., 13, Brook-street, London; Matthew Alexander Eason Wilkinson, M.D. Univ. Edin., Manchester; John Langdon Haydon Down, M.D. Univ. Lond., 39, Welbeck-street, London; William Alexander, M.D. Univ. Edin., Halifax; William Henry Ransom, M.D. Univ. Lond., Nottingham; Owen Daly, M.D. Univ. Dub., Hull; Henry Day, M.D. Univ. St. And., Stafford; George Fielding Blandford, M.B. Univ. Oxfd., 3, Clarges-street, London; Henry Maudsley, M.D. Univ. Lond., 38, Queen Anne-street, London; William Henry Broadbent, M.D. Univ. Lond., 23, Upper Seymour-street, London. *Members:* James Watt Black, M.D., Univ. Edin., 15, Clarges-street, Piccadilly; Francis Cooke, M.D. Univ. Edin., Cheltenham; Thomas Trollope, M.D. Univ. Camb., St. Leonard's-on-Sea. *Licentiates:* Thomas Holbein Hendley, Charlton, Kent; Urban Pritchard, 87, St. Paul's-road, Highbury; Arthur Henry Sandiland, Bicester.

A MEDICAL D.L.—The *Daily News* states that Mr. Brady, the member for Leitrim, has been appointed by the Earl of Hardwicke, Lord Lieutenant of Cambridgeshire, a deputy-lieutenant of that county, in which he has property.

INDIA.—By the last advices, it appears that cholera and small-pox were raging very severely in the Jubbulpore district. In the week ending June 12, there were 381 cases of small-pox and 37 deaths, 811 cases of cholera and 578 deaths. A cattle plague was prevailing in some districts.

MAURITIUS.—A correspondent writing from the Mauritius on July 1 informs us that there has been a great improvement in the health of the island, as compared with this time last year. The daily mortality of the civil population of Port Louis has fallen to about the ordinary average, and the general health and appearance of the troops have improved very much during the present cool weather.

TESTIMONIAL TO MR. ANGUS.—On Tuesday evening, the 27th ult., the Court of Foresters, No. 1867, on the occasion of its twenty-fourth anniversary dinner, took the opportunity of marking its high sense of the indefatigable exertions exercised and skill displayed in its service by Mr. John Angus, of Frith-street, Soho, the respected Medical officer of the Strand Union, by presenting that gentleman with a testimonial—viz., a tea-urn, which we are assured is "at once classical in design, commendable in execution, and characteristic of the kindly feelings intended to be conveyed by its presentation."

PRESENTATION OF A TESTIMONIAL.—On Tuesday evening the workmen of the Dockyard, Sheerness, presented Dr. R. T. C. Scott, R.N., late Staff Surgeon of Sheerness Dockyard, with a testimonial, in the shape of a handsome silver salver and an address upon vellum, in recognition of the kindness with which both Dr. and Mrs. Scott have alleviated the sufferings of the sick families of the dockyard employés during a period of five years. The utmost enthusiam prevailed, Captain Miller, of H.M.S. *Pembroke*, speaking in the highest terms of the conduct of Dr. Scott during his long service of thirty-six years.

THE *Times* of July 30, which contained the list of new Fellows of the Royal College of Physicians, wherein not the least distinguished name is that of Dr. John Cockle, contains also the *Gazette* of July 29, in which is announced that the Queen has been pleased to grant the dignity of Knight of the United Kingdom to James Cockle, Esq., Chief Justice of the Supreme Court of the Colony of Queensland, a brother, we believe, of Dr. Cockle's. The numerous Professional friends of Dr. Cockle will join us in congratulating him on the double honours thus associated with his name.

A MEETING of Medical men practising in and around Liverpool was held on Tuesday, the 2nd inst., in the large theatre of the Medical Institution, for the purpose of considering the question of club remuneration. Considering the unfavourable season—many Practitioners being away from town—the attendance was large. The chair was occupied by Dr. B. Townson. A series of resolutions were introduced, and passed almost without modification, and with scarcely a dissentient voice, the substance of which was to express approval of the system of sick benefit societies, but disapproval of the present average remuneration of the Medical gentlemen attached to them. When the facts stated by Dr. Hill during the meeting are considered—viz., that in one club of 100 members, the average duration of sickness per annum for each member was seven and a half days, that these members lived widely apart from each other, and that, in addition to those regularly returned as sick, there were a number who called at the Medical man's house and there received advice and medicine—the average payment of 3s. per member per annum does seem ludicrously insufficient. It was ultimately determined to suggest to all the committees of sick benefit societies in and around Liverpool that on and after January 1, 1870, the minimum rate of remuneration for the Medical attendants of such societies should be 4s. 1d. per member per annum. What appeared to be a very reasonable proposition—viz., that of demanding a small fee from each applicant for admission who should be examined by the society's doctor—was not carried, probably from a fear in some gentlemen's minds of having to engage to take so small a sum as a shilling. It was admitted by everybody, however, that the trouble of examining applicants ought not to be incurred without some remuneration, and it was therefore, after some discussion, determined that a fee in all such cases should be requested from the committees of the various clubs. The entire trouble of convening the above meeting, and collecting a great deal of information concerning its objects, was, we believe, voluntarily undertaken by Dr. Daniel W. Parsons, with a public spirit which, considering that he has no personal interest in clubs, cannot be too highly commended.

TRIALS FOR CHILD MURDER AND CONCEALMENT OF BIRTH IN DORSETSHIRE.—Amongst the trials at the late Dorchester Assizes were some of a singular character. In one case of trial for concealment of birth, it seems that the child dropped into a privy, and the prisoner was acquitted. In a second case a poor wretch was delivered of a triplet, one female, and two male children. She pleaded guilty, and said she did not know what she did, as she was in a very weak state at the time. She was sentenced to a month's imprisonment. In a third case, on which we briefly commented last week, the unhappy mother had cut out the infant's tongue. The main facts are comprised in the evidence given by Mr. W. Druitt, F.R.C.S., as follows:—"I was sent for to examine the body of a male child, full grown. The first thing that struck me was a cut in the right angle of the mouth, partly externally, and partly internally, made from the inside, about three-quarters of an inch long and half an inch wide; it was a gaping wound, with the edges retracted. Passed my finger into the mouth and found the tongue entirely absent. Then examined the lower part of the face and passed my finger inside the jaw, and found it had been fractured in four places from violence on the outside; the broken fragments of the bone protruded into the mouth, one in the centre, one on the right side, and two on the left side. The jaw might have been fractured with one blow, with not more than ordinary force, supposing the child to have been lying on its back. A simple fall would not have produced the injuries. Never saw a jaw so injured, except from a gun-shot wound. Observed two severe bruises on either side of the forehead, just above the eyes. From the appearance of the wounds I can swear that the child was alive when they were made; they would not have had the same appearance in a still-born child or a dead body. Passed my finger to the posterior part of the throat; found the tongue removed; there was some bloody serum. Desired the tongue to be searched for. The mouth was partially open. Handled the body, and found it in a state of rigor mortis; the limbs had stiffened in a bent position; a still-born child would not have that rigidity. Examined the umbilical cord; it was broken off about two inches from the body, and there was no bleeding. The appearance of the cut in the right side of the mouth alone would have convinced me that the child was born alive, for unless the tissues had been living at the time, neither they nor the skin would have retracted one-twentieth part. In a still-born child the lips of the cut would have hung together; there is no retraction in a dead body. When I saw the tongue, I found it had been removed with a clean cutting instrument, introduced at the left side, from left to right, with the right hand. A child may breathe, and yet not live separate from the mother. My opinion is that the cut could not have been made before the child left the mother; she could not have reached it to do it herself unless it had been fully born. There must have been an independent life." The girl was found "Not Guilty" of murder, but was sentenced to two years' imprisonment with hard labour for concealing the birth.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Dr. E. C. will pardon us if we doubt the possibility of altering the moral and political natures of man.

H. D. T.—The President of the College of Surgeons is Mr. Edward Cock, of Guy's Hospital, and the Vice-Presidents are Mr. Samuel Solly, of St. Thomas's Hospital, and Sir William Fergusson, of King's College.

Dr. H., Liverpool.—Mr. John Simon, F.R.S., is the Medical Officer to the Privy Council. The salary attached to the office, according to a "Blue Book," is £1500 per annum.

Tasmania.—We are glad to inform you that the Council of the College of Surgeons has caused the name of the person to whom you allude to be removed from the list of Members, and the General Medical Council has removed or will remove it from the Register "for infamous conduct."

Dr. van B., Southampton.—It is said that Van Roonhuysen recommended the Moxa as a remedy for the gout about 1662. Greatrakes, the rubber, appeared in London the following year.

Machaon.—The library and museum of the College of Surgeons are always closed during the month of September.

BERRY DEFENCE FUND.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—The Committee will be obliged by the insertion of the following list of subscriptions:—Amount already acknowledged, £20 9s.; Dr. Morell Mackenzie, £1 1s.; John L. Davis, Esq., Notting-hill, 10s. 6d.; W. F. Forsyth, Esq., George-street, Hanover-square, £1 1s.

Aug. 4. I am, &c. E. SANDWELL, Hon. Sec.

Simla.—Dr. De Renzy has issued a very elaborate and able report on the present water supply of Simla, in which he shows by analyses the very impure state of the present water supply, and points out the remedy or remedies.

A British Mother displays good sense and good taste in her letter to the editor of the *Victoria Magazine* (August number), entitled "A Few Thoughts on a recent 'Baby Show.'"

Omega will obtain the information he requires by referring to a very useful little work entitled "The Vaccination Acts," by Mr. Danby P. Fry.

The London Mirror, in an article on "Horses in Hot Weather," suggests that the Royal Society for the Prevention of Cruelty to Animals should take up the question of the treatment of horses who fall in the street from fits or exhaustion. That it should issue a few plain rules by which we should be informed "how to distinguish a *fit* from a mere slip or stumble when a horse is down, and what to do under the circumstances." This, when printed, "should be in the hands of every coachman, groom, cabman, and ostler in the kingdom." Looking at the gross ignorance which prevails even amongst "horsey" men, we commend the suggestion of our contemporary to the Society.

MR. CLARKE'S PROFESSIONAL REMINISCENCES.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In answer to very numerous inquiries, will you allow me to state that I have endeavoured, in the articles I have communicated to you, to make each one of them complete in itself? I have snatched a few hours from a laborious practice to write them. But I have not forgotten my promise. I hope within the compass of the remaining portion of the present year to supply you with information on the early history of Medical journalism. This will embrace original anecdotes of most of the celebrated Surgeons and Physicians who were in practice fifty years since. The publication of the lectures of Astley Cooper, Abernethy, and others will form a prominent feature in these contributions to the *true* history of the Profession. I must here, with your permission, once for all, express my regret that the personal pronoun "I" is so often used by me. I cannot help it. Personal recollections and experiences would be nothing without it.

I am, &c. J. F. CLARKE.

Sir Dominic Corrigan and Foreign Degrees.—"A Graduate of the University of Erlangen" protests in the strongest terms (in terms far too strong for our pages) against the allegations made by Sir Dominic Corrigan in his late speeches in the Medical Council against the character of foreign universities. Such an egregious scandal as traffic in diplomas does not, our correspondent assures us, exist in Continental universities, the doctorate in which can be obtained by no man—be his British or Irish qualifications what they may—without satisfactorily performing the regular written and oral exercises. Our correspondent assures us that these imputations are entirely unfounded, and raise the strongest feelings of surprise and disgust amongst the authorities of the universities alluded to.

F.R.C.S.—The name of the Royal personage who was so largely indebted to Mr. Keate was communicated by him to our contributor. It was obviously suppressed in the "Reminiscence." There is no objection, however, to communicate it to our respected correspondent privately.

R.—Wardrop, like Radcliffe, was no courtier. He was once consulted by a nobleman who was celebrated for his gastronomic performances and the weakness of his intellect. "I am in pain in my head and stomach," said the noble patient. "Oh!" said Wardrop, "d——n your stomach, that is strong enough; the weak part is the head."

THE LUNACY MEDICAL SERVICE AND THE COUNTY ADMINISTRATION BILL.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—The question raised in your journal as to the present status and future prospects of the Medical Practitioners in this branch of the public service is one of vital importance to them and to the Profession at large, from which they are recruited.

In 1857, on the occasion of the harsh removal of the Superintendent of the Bucks County Asylum, a vigorous but unsuccessful attempt to excite public sympathy on their behalf (*vide* vol. iii. p. 180 of the Asylum Journal) failed in consequence of the Association addressing their grievance to the Lord Chancellor, who may be considered as the incarnation of the spirit of the law, instead of to the House of Commons, the guardians of public justice. The profound discouragement experienced at this time prevented further attempts at remonstrance on another occasion. The withdrawal of the County Administration Bill by Mr. Secretary Bruce, wherein infliction of penalties of dismissal without inquiry or appeal was conferred on a delegated committee from the guardians and the sessions, has given the Profession an opportunity of stating their claims to the attention of Government before it is reintroduced in the next Session of Parliament. The claims are, that these Medical men shall have the same rights conferred upon them as are possessed by other branches of the public service, Medical and general. The question, indeed, resolves itself into this: What constitutes an officer if he has no more rights than an ordinary servant? The powers of the Lunatic Asylums Act make no distinction between these two classes, and the attention of the various Medical corporations ought to be directed to this long-neglected point of law. The Medico-Psychological Association includes a greater proportion of persons interested in its solution, but the General Medical Council, the College of Surgeons, and the British Medical Association are the proper parties to take up the question, representing, as they do, the general body of Practitioners. Valuable assistance might also be rendered by the members of the new Medical Club. Powers of dismissal of the chief officer without appeal to the Secretary of State ought not to be conferred on the new board of elected managers. Until the Profession have gained this right of appeal, nothing is obtained that may not be resumed at the caprice of a delegated local committee.

London, July 30. I am, &c. A LATE ASSISTANT.

COMMUNICATIONS have been received from—

Dr. LEARED; Messrs. LETTS, SON, AND CO.; Mr. T. HOLMES; Dr. PITMAN; Dr. BAKEWELL; Mr. J. JACKSON; A LATE ASSISTANT; M. A. B.; Dr. EDWARDS CRISP; Mr. LAWSON TAIT; Dr. C. P. COOMBS; Dr. E. O. WILLIAMS; Dr. ARNOLD PANN; Dr. WILSON FOX; P. M.; Mr. TRÜBNER; Dr. SKINNER; Dr. C. P. TAYLOR; Mr. J. HUTCHINSON; Dr. LIONEL S. BEALE; Mr. T. BRYANT; DR. T. E. SANDWELL.

BOOKS RECEIVED—

Balfour's Further Observations on the Treatment of Aneurism—Fry's Vaccination Acts—Practitioner, No. 11—Richardson on the Detection of Red and White Corpuscles in Blood-Stains—Twenty-third Report of the Commissioners in Lunacy—Pharmaceutical Journal, No. 122—Edinburgh Medical Journal, August—Fotherby's Oration on Scientific Associations—Resolutions of the General Medical Council on State Medicine—Journal of the Scottish Meteorological Society, April—What is Matter? By an Inner Templar—Brearey's Medical Guide to Scarborough.

NEWSPAPERS RECEIVED—

New York Medical Gazette—Scotsman—Toronto Evening Tribune—Liverpool Daily Post—Harrogate Herald—Medical Press and Circular.

VITAL STATISTICS OF LONDON.

Week ending Saturday, July 31, 1869.

BIRTHS.

Births of Boys, 1066; Girls, 1076; Total, 2142.
Average of 10 corresponding weeks, 1859-68, 1999·5.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	863	783	1646
Average of the ten years 1858-67	774·7	729·6	1504·3
Average corrected to increased population	...	...	1654
Deaths of people above 90	...	...	...

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-cough.	Typhus.	Diarrhœa.	Cholera.
West	463388	...	6	3	...	7	1	65	...
North	618210	2	4	21	...	11	19	106	...
Central	378058	...	3	16	...	8	6	33	...
East	571158	...	8	31	1	25	13	90	...
South	773175	2	12	17	2	16	5	90	...
Total	2803989	4	33	88	3	67	44	384	...

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·786 in.
Mean temperature	64·0
Highest point of thermometer	79·8
Lowest point of thermometer	49·7
Mean dew-point temperature	56·4
General direction of wind	S.W.
Whole amount of rain in the week	0·41

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, July 31, 1869, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the year 1869.	Persons to an Acre. (1869.)	Births Registered during the week ending July 31.	Deaths. Corrected Average Weekly Number.	Deaths. Registered during the week ending July 31.	Temperature of Air (Fahr.) Highest during the Week.	Temperature of Air (Fahr.) Lowest during the Week.	Temperature of Air (Fahr.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3170754	40·7	2142	1462	1646	79·8	49·7	64·0	0·41	41
Bristol (City)	169423	36·1	100	76	*68	74·9	46·2	61·4	0·38	38
Birmingham (Boro')	360846	46·1	183	175	151	75·9	47·4	60·6	0·50	51
Liverpool (Boro')	509052	99·7	346	295	352	71·0	48·0	59·5	0·28	28
Manchester (City)	370892	82·7	237	210	*262	76·0	45·0	60·1	0·57	58
Salford (Borough)	119350	23·1	92	60	62	74·7	44·0	59·6	0·60	61
Sheffield (Borough)	239752	10·5	170	126	115	77·0	44·5	61·1	0·09	9
Bradford (Borough)	138522	21·0	74	71	68	73·9	48·5	61·0	0·20	20
Leeds (Borough)	253110	11·7	201	129	146	77·0	46·0	61·9	0·35	35
Hull (Borough)	126682	35·6	75	59	42	77·0	45·0	59·8	0·10	10
Newcastle-on-Tyne, &c.	130503	24·5	84	69	64	70·0	45·0	57·0	0·26	26
Edinburgh (City)	178002	40·2	120	86	70	70·7	44·0	57·6	0·70	71
Glasgow (City)	458937	90·6	337	268	285	71·7	43·3	58·6	0·74	75
Dublin (City, etc.†)	320762	32·9	155	158	122	72·2	43·0	59·8	0·39	39
Total of 14 large Towns	6516587	35·5	4313	3244	3453	79·8	43·0	60·1	0·40	40
Paris (City)	1889842	...	...	...	807 Week ending July 24.	...	...	...	...	...
Vienna (City)	(1863) 560000	...	...	...	...	Week ending July 24. ...	...	...	...	...

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·786 in. The barometrical reading increased from 29·64 in. on Monday, July 26, to 29·94 in. on Friday, July 30.

The general direction of the wind was S.W.

Note.—The population of Cities and Boroughs in 1869 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous.

* The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

† Inclusive of some suburbs.

APPOINTMENTS FOR THE WEEK.

August 7. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 1½ p.m.

9. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 1½ p.m.; St. Peter's Hospital for Stone, 2½ p.m.

10. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.

11. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.

12. *Thursday.*

Operations at St. George's, 1 p.m. Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

13. *Friday.*

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

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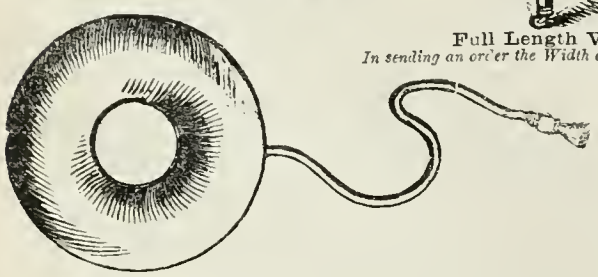

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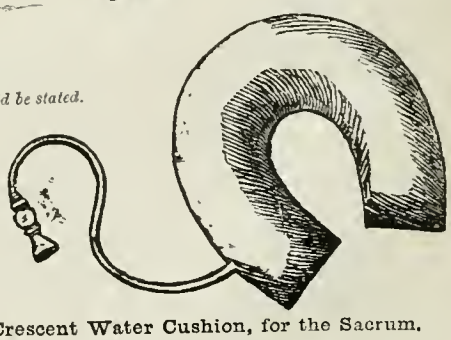

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ORIGINAL LECTURES.

LECTURES ON EXPERIMENTAL AND PRACTICAL MEDICINE.

By BENJAMIN W. RICHARDSON, M.D., F.R.S.

ON FURTHER RESEARCH WITH THE LARGE INDUCTION COIL OF THE ROYAL POLYTECHNIC INSTITUTION.(a)

Preliminary Notes.

Gentlemen,—Before I proceed to any experimental illustration, permit me, in earnest but brief terms, to acknowledge the numerous communications, in the form of cases, references, pamphlets, and suggestive inquiries, which have been made to me on the subjects discussed in this part of our course. It would be an appropriation of my time I could not well afford, to answer every one of these communications in written detail, and I therefore take this opportunity publicly to thank the various writers, and to beg them to accept my regrets at being unable to command the leisure for framing in each case a reply.

There is one particular subject towards which the minds of the majority of those who have communicated with me most distinctly tend. I mean the relation of electrical phenomena to the phenomena of life. At some future day I will discuss this question at greater length. Now, I have a specific object before me—that, viz., of questioning Nature by an instrument which imitates her ways, and of putting the replies she returns publicly forward by direct demonstration—so that I cannot give to the question the attention it demands.

In a sentence or two I may, nevertheless, touch on one or two points, repeating perhaps much that I said in the Lettsomian course of Lectures on Life delivered in 1860, but speaking with a better knowledge, and aiming, as preliminary to a more definite study of principles, to bring the mind back to the first or elementary parts of the subject.

And first, I would observe that whoever may endeavour to construct a purely electrical theory of life, must fail, because he will be trying to construct on too exclusive and too narrow a basis. It was by reason of this that the works of Galvani himself, great as they were, lost their hold. The truth is that the animal body in its material part is physically adapted, during life, for the reception and utilisation of force in any and all of its manifestations. When a musical strain reaches the brain through the ear; when a horse is pulled up by its rider; when an animal is felled by a blow, we have mechanical acts which, though different in mode and effect, are in their way equivalents of electric excitations or electrical shocks. The same holds true in respect to effects of light and of heat.

The simplest view to take is that the material part of the body, in its ultimate divisions, is charged with a common and universal, though not in all parts equally distributed, elastic and subtle medium, which force of any kind can set in undulation. Whether this refined medium be an atmosphere surrounding the elementary forms of matter, whether it be a product of change of matter, or whether it be itself a representation of what is called force, we need not stay to inquire. It is sufficient for the moment to think of it as separating the material atomic parts, as controlling their cohesion, and as affording in them the conditions for motion.

With this idea before us—the idea of material substance, in fine subdivision, and held, separated and mobile, by a refined elastic medium, a medium to be compared only with a gas of incomparable lightness—we may presume that either the communication or withdrawal of force, of heat, electricity, light, or motion, will disturb the previously existing conditions of matter by the influence exerted on the medium surrounding the matter. The addition of force will separate or rend. The withdrawal will induce to repose or rest. We can see further that electrical force can at most be only one form of force concerned in living action.

I would remark, in the second place, that, presuming there be in the animal organism development of electrical action—and truly, though we have not yet directly proved this belief, there is much in favour of it—presuming there be such development of action, it is an entire fallacy to assume that the mechanisms or means at work for the action are confined to the nervous system. To suppose the nervous system an electrical apparatus in itself, with centres like batteries and nerves like cords, must be error. If there be an apparatus, the body altogether is the apparatus, and the nervous system is a part only—a part as distinct in the body as the secondary wire in this coil. Neither can there be any difference of function between nerve and brain, for the one is but the extension of the other; neither can there be any current along nerves in the presence of a column of healthy blood holding all parts together and connecting the nervous system with all parts.

Lastly, I would repeat what I tried to prove in the Lettsomian course, that the nervous system is one great centre, every point of which is itself a centre; that—as I have shown over and over again by experiment—the process of arresting nervous function in any part of the system is confined to the part operated upon; and that from no one point of the nervous substance can the whole of the nervous matter be charged with, or deprived of, force.

There is another topic on which I must for a moment dwell I mean the analogy between violent electrical shocks and sun shocks and simple mechanical concussions, in respect to the unconsciousness produced by these agencies. Looking upon concussion, however produced, as the same in effect as electrical concussion, it is natural that after a sufficient fall or blow there should be, as after electrical shock, complete unconsciousness of the fact. I am indebted to Dr. Braxton Hicks, F.R.S., for the particulars of a striking illustration of this kind. A boy 10 years old fell from a height of twelve feet on stone, striking the side of the head and face. He was rendered totally insensible, remained so for four days, and partially so for the remainder of the week. Gradually he improved, and in three weeks was able to converse a little, but on being told of the accident he had met with, such was his complete ignorance of it, he was greatly excited, not from knowing the truth, but from having heard what seemed to him an untruth, told by his parents. Immediately before his accident he had crossed a plank and fetched a bird's egg which he had discovered, and he was about to recross the plank when he fell. As he recovered he gradually recollected up to the time he was going to return across the plank, but has even now no consciousness of anything more. The fall itself and a moment or two preceding it remain a perfect blank.

In this experience we have presented to us the same phenomena in respect to sensation as we have seen from electrical and lightning shock, and the identity of physical cause is well exhibited. The facts in both classes of cases open, as Dr. Hicks suggests, the question—How long must a fact have occurred to produce such an impression on the mind that it shall be retained in the memory?

And, indeed, they open up to my own mind another question very practical in its nature, to which I hope to ask your attention again at an early period. I feel that our knowledge here may be applied to the further advancement of Surgical art, and that, taking advantage of velocity of action as opposed to recognition and fixity of mental impression, I may be able to construct a cutting instrument which shall act with such velocity, it shall not register the impression of its work in the mind. I have the design for such an instrument in hand.

Additional Note on Marks left on the Body after Death by Lightning.

Passing from what is as yet in the domain of the speculative, I should like, in the first place, to add a fact relative to the marks which may be left on the body indicating that lightning has made its way through metallic conductors. I described these marks in my last lecture—impressions, that is to say, of metallic substances—as simple ecchymoses or bruises. In the majority of cases this is the fact, but since I made the statement I have been forced to the conclusion that the marks may be occasionally different from ecchymoses. Cases bearing every evidence of truth are on record in which something more than a bruise has marked the line of the natural electrical discharge along a metallic conductor. In these cases the fusion of the metal itself and the distribution of its particles in fine division have left what we may fairly call metallic impressions on the surface of the body. Take, for instance, a case like the following, recorded in the *Medical and Physical Journal* for 1810. "On June 1, 1809, a lady was struck by lightning at Bordeaux. She was not killed, recovered her voice in two hours, and her

(a) Delivered at the Royal Polytechnic Institution on Tuesday, June 22.

recollection in six hours, but as is common, perhaps universal, in these cases of shock, had not the faintest remembrance of the injury that had befallen her. She wore at the time of the accident a chain of gold round her neck, which, says the report, was melted and oxided by the lightning. Her whole neck was covered by a black lace band. About her neck there were seven burns, resembling the marks produced by the application of a hot iron. Their surface was of a purple colour. A stripe passed in a zigzag direction from the left side of the bosom to the armpit of the same side, and there ended in a round spot equally purple. On the left arm was found a similar stripe, extending below the bend of the arm, where the part was covered by the clothing. The purple hue resembled a skin coloured by a solution of gold, and could only be ascribed to the oxide of that metal. The zigzag stripes indicated the passage of the lightning, conducted by the gold, which was melted and oxided in its passage. The round spot which terminates the stripe at the armpit would seem to have been occasioned by a longer continuance of the gold and of the fulminating agent upon that part."

This case seems of itself sufficiently conclusive of the possibility of metallic staining of the surface of the body. Experiment supports the evidence. Mr. Pepper has a beautiful demonstration bearing on this point, which he will be so good as to show us. He lays across a board a length of fine gold wire, with a piece of white paper in contact. He discharges the Leyden battery through the wire, by which the metal is entirely distributed, yielding, we may say, a cloud of minute particles, and leaving a deep mark across the paper. He changes the experiment by making silver wire take the place of the gold, and again the discharge is followed by dissipation of the metal, but with a differently coloured line upon the paper.

The same phenomenon may be produced by laying a chain of wire along the body of a narcotised animal, and discharging the battery through the wire. The animal will not die from the shock, though it may be stunned, but it will be marked, in the course of the wire, by a broad metallic line. The line indicates neither a contusion nor a burn, but a stain—a stain so distinct that the nature of the metal may be told from it. Here is a white rabbit on which a line of gold has thus been struck. The mark extends down to the skin, and the light purple tinge is most distinct; but, beyond the stain, there is no injury of the animal structures. In order that the metallic mark, as distinct either from ecchymosis or burn, should be developed on the body, two conditions must coexist. The metallic conductor must be sufficiently fine to offer resistance to the electrical current, and the electrical current itself must be an accumulative discharge of moderately low tension. That flaming discharge which resembles so closely sheet lightning does not produce the effect, although it will produce a burn, and the tense discharge which we obtain from the jars in cascade will not produce the effect. We require, in fact, the discharge from the ordinary Leyden battery, and that of sufficient power in regard to the wire to cause fusion of the wire. In my first experiments I used a wire that was too thick, and which conducted the current too readily, and so I failed to obtain the result looked for; and, in cases of lightning-stroke where the metallic substance worn on the surface of the body is thick, nothing more than simple burn or bruise may occur. But where a thin metallic chain is worn, as in the case of the lady at Bordeaux, the resistance to lightning shock, of the character described, may be quite sufficient to lead to fusion of metal, and to the phenomenon of metallic marks on the surface of the body. It is possible, indeed, that the character of the metallic substance which has been worn—whether, for instance, it were gold or silver—might be determined by the colour of the impression left on a body—a diagnosis, in a Medico-legal point of view, which might prove of the utmost importance.

On Conduction by Animal Fluids.

On the last occasion, at the close of my lecture, I illustrated by a very simple means the capacity for conduction of electricity possessed by some animal structures. I compared the spinal cord with blood, blood with water, and so on, illustrating in the end the general truth that in the animal body blood is the most perfect conductor. I have since carried this line of research out further, instituting comparisons between the different parts of blood itself, and between specimens of the same blood holding different agents. The results are most interesting, and I proceed to bring them before you on the same approximate scale as before. With this object, I take up a series of tubes of glass, all of the same length, all of the same diameter of bore, all insulated at their ends in the same way, and armed at each end with a similar piece of conducting wire. Each tube is filled completely with the substance the conducting power of which is to be tested. I will take up tube No. 1 which is filled with perfectly fresh defibrinated blood, having a specific gravity of 1058. I will connect this tube with a Gassiott's vacuum cascade by one of its conducting ends, while I carry the opposite end so as to bring it into connexion with the positive pole of the coil; next I will connect the cascade with the negative pole of the coil. Thus the column or cord of blood, which is precisely 20 inches long by the sixth of an inch thick, forms part of the circuit from the positive pole, through the vacuum chamber, to the negative pole. I will now make a discharge through the blood, when you will see the beautiful light in the vacuum apparatus flowing over the glass which is contained within, and producing what is called the cascade of light. Next, for comparison's sake, I will set up another of Gassiott's apparatus, and will connect it with the two poles as before by a new conductor, which in this case shall be copper wire throughout. Now you will see, when the discharge is made, that the light appears only in the vacuum connected with the copper wire. The discharge had another route—viz., through the column of blood and the other vacuum, but it has preferentially taken the course of the copper, which is a better conductor. Again we will remove the copper wire, and, leaving the blood as before, will place a wire of lead in the place of the copper wire. The current, you observe, again prefers the course by the metallic wire; the vase connected with the coil by the column of blood is not illumined. From these observations we will, if you please, pass to others relating to blood itself as a conductor under varying states and conditions.

Diluted Blood.—Keeping the standard of natural blood in its place, we will put a column of diluted blood in the position lately occupied by the metallic conductor. The blood has been diluted with distilled water to the extent of 50 per cent. You will see now that the standard specimen, the natural blood, is preferentially selected as the conductor. The vase connected with the coil by the diluted blood is perfectly dark; the vase connected by the line of natural blood is brilliantly illumined.

Condensed Blood.—We will remove the column of diluted blood and replace it by a column of condensed blood. The blood has been condensed by a process of very gentle evaporation of blood clot until half the weight has been removed, by loss of water. The mass thus left is an iron-coloured soft paste. As the serum and the salts of the serum have been largely removed by the spontaneous separation which attends coagulation, the mass is composed in great part of blood corpuscles and fibrine. You will see that this condensed blood when it is tested as a conductor by the side of the natural blood takes all the conduction. The vase connected with the coil by the ordinary blood is quite dark; the vase connected with the condensed blood is brilliantly illumined.

The temptation is great to rest at this observation, and connect the facts we have seen with some of the facts we see in the course of disease, and with other facts which we have studied in experiments on the addition of water to and the removal of water from the blood of living animals. You will recall, or some of you will, how, when once I introduced into the blood of animals excess of water, there followed a complete passiveness of muscular action, a drowning, as it were, of muscular power; while, when once I removed water from the blood by introducing saline solutions into the cavities, there was instantly called forth convulsions almost tetanic in character. Again, we shall all recall the condition of the muscular power in cases of dropsy or extreme anæmia as compared with the condition in cases of cholera; and from these and other observations we might be induced to inquire what the state of the blood in regard to fluidity or condensation during life has to do with its capacity as a conductor of force. But this field of inquiry is too new and too vast to be entered upon at the present moment.

Blood treated with various Agents.—I thought it would be worth the labour to try if, on the addition of some powerful and well-known agents to natural blood, the conducting power would be increased or decreased, and with this object in view I have made columns of blood containing chloroform, ether, alcohol, strychnia, quinine, morphia, nicotine, and hydrocyanic acid. Our standard of blood is by this time, owing to the many discharges which have been passed through it, losing its power to conduct, it contains some free gas; but I will, nevertheless, try one or two other tubes by the side of it. I will put in a tube containing five parts of choloroform to ninety-five of blood; the natural blood in this case carries nearly all the current. The same is the case when I exchange the blood holding chloroform for blood saturated with ether or for

blood holding $\frac{1}{500}$th part of nicotine. Blood holding 10 per cent. of alcohol conducts, as you see, well. Blood holding $\frac{1}{300}$th part of strychnia is now doubtful, but when our standard specimen of blood was fresh, it conducted better than at present, and there was a difference in favour of its conduction. I will devise a plan, based on this preliminary research, for determining these differences with more exactitude. Meanwhile we may accept the general truth that conduction through blood is materially modified by various agents when they are present, even in small proportions, in the blood.

The Effect of Electrical Discharge on the Colour of Blood.

I have observed in all the animals that have been killed by the electrical discharge and by every form of the discharge that the blood is rendered darker in colour; the same rule holds good if newly drawn blood be subjected to the discharge —that is to say, if the blood be made a conductor. To show this, I fill a glass tube with blood newly drawn and thoroughly well oxidised, so that it possesses a brilliant red arterial hue. Now, if through this blood I pass the discharge from the coil, there will be the change in colour to which I have referred, as you will see. In so far as colour is concerned, we have by this process transformed arterial into venous blood. If I go a step further, and drive this blood into a little reservoir of oxygen, and expose it freely to the gas, I restore the red colour. Again, passing the blood through the tube connected with the coil, and subjecting it to the discharge, I make it once more venous in appearance, and this process I could repeat a considerable number of times, until, in fact—if means were taken for the due escape of the gases and water vapour evolved—the fluid were reduced to such consistency as to flow with difficulty, or until it underwent a kind of coagulation which would obstruct the current.

This experiment, simple as it is, has the most curious bearing on the whole question of the difference of colour between venous and arterial blood. It shows that the electric discharge produces some chemical change which is afterwards rectified by simple exposure of the blood to oxygen, and by the absorption of the gas. The same change of colour of red blood is observed when the discharge passed through it is from the Leyden jar.

Secondary Effects of Electrical Discharges on Animal Bodies.

When animals have been exposed to powerful electrical discharges which have not been sufficient to kill, or when human beings have been exposed to lightning shocks and have not been killed, various secondary symptoms have been observed which deserve our notice. I would take the more prominent of these in detail.

Fever of Reaction.—In some instances where the body has been struck by lightning with the production of severe external injury, recovery from the prostration has been followed by severe reactionary fever and delirium. My friend Mr. Erasmus Wilson has favoured me with an excellent illustration of this condition taken from the *American Journal of the Medical Sciences* for April, 1869, the reporter being Dr. William Holton, of New Harmony, Indiana. According to this report a tree was struck with lightning on March 25, 1868. "From the tree the shaft of electric fluid darted through the wall of a shed and lighted on the knot of hair at the back of a woman's head, attracted by the hair-pins with which the knot was fastened; it then passed on to an earring; thence to the busk of her stays; next it flashed along the wires of her crinoline to the steel clasp of her garter, and ultimately burst through the heel of one of her boots. In its course it made a semi-spiral turn, striking the left ear above, reaching the right leg by the intervention of the crinoline wires, and issuing through the heel of her right boot. The break of the current was in each instance accompanied by a burn of the skin; the first of these burns, and the most severe, occurred on the scalp, where the hair was singed; the second occupied the lobe of the ear; the third, the upper part of the chest, which presented a blistered surface three inches in diameter, with a broad erythematous areola beyond; the fourth, which was next in severity to that of the head, was a foot in length, and extended from the left side of the abdomen to the pubes; the fifth was situated on the patella immediately above the garter buckle; and the sixth along the leg below the garter buckle, the intermediate space having escaped. Her clothing was a little burnt here and there, and the lower end of the steel busk and some of the crinoline-wires partially melted. After the shock, the woman, who was 61 years of age, and had been suffering previously from indigestion, vertigo, and numbness of her limbs, remained insensible for twenty minutes, uttering an occasional groan. When consciousness returned, she stated that she had felt nothing at the time of the accident; but, on the recovery of her senses, she complained of nausea and oppression about the chest, which were relieved by vomiting. Her skin at this time was cold and clammy from perspiration, and her pulse extremely weak. Subsequently she was attacked with fever, accompanied with delirium, and not until the end of ten weeks was she reported as having recovered her usual strength, the burns being at the same time healed. At this time it is stated that 'she is quite cheerful, except when left alone, when she is disposed to sleep too much; a feeling of great lassitude announces to her the approach of a thunderstorm before its coming is perceived by others.'" "The case," adds Mr. Wilson, "is one of deep interest in its illustration of the influence of nervous shock, and its phenomena are most suggestive;—for example, a concussion of the nervous system, the loss of consciousness, the sickness of the stomach, the oppression of the lungs, the prostration of the heart, the reactionary fever, and last, but not least, the morbid sensitiveness of the nervous system to electrical impressions, enduring for a time, and probably for life. Is not this the oft-told tale of many of our fevers?"

Apoplexy.— Symptoms of a distinctly apoplectic character have been observed in the lower animals after the electrical shock, and also after lightning stroke in the human subject. I am indebted to my friend Mr. Streeter for reference to a purely typical case of this nature, reported by Dr. Alexander Macaulay in the *Transactions* of the Medical and Clinical Society of Edinburgh for the year 1824. The facts narrated were observed by Macaulay on the *Coldstream* East Indiaman, near the line, on April 16, 1812. The vessel was struck with two shocks of lightning at an interval of about fifteen seconds. The effect was terrible. The main topgallant sail was burnt, the main topgallant mast was shivered into splinters, the main topmast shivered, and pieces were driven out of the main mast six feet long. Marks of fusion appeared on a brass pulley at the top of the mast. A Lascar was killed instantaneously, and his body showed no external mark. Another Lascar was rendered insensible, but recovered in a quarter of an hour, and three Englishmen were severely injured. It was in one of these Englishmen the typical apoplexy was developed. The condition of this man was as follows:—His countenance was livid and bloated, his whole body was covered with a cold clammy sweat, his breathing was oppressed and stertorous, his pulse strong and full, and the powers of sense and voluntary motion suspended. The stupor and other urgent symptoms were removed by the abstraction of blood to the extent of fifty ounces, and the man recovered. During recovery he had much pain in the region of the liver.

In these apoplectic cases we see the effect, in its fullest extent, of a discharge of quantity and low tension. Between this shock by lightning and what is called sunstroke there is a distinction, I had almost said, without a difference.

Convulsions and Epilepsy.—Convulsive actions and epileptic or epileptiform seizures have been recorded as following upon lightning stroke. In the accident above mentioned two men who also were struck exhibited after-symptoms of this kind. One of these men had repeated and severe attacks of epilepsy, which were preceded by the idea of a figure coming towards him; the man was freely bled, and in two days the seizures ceased altogether, and did not return. It was, however, observed of him afterwards that when he took an excess of spirits the intoxication produced was loud and turbulent, unlike his former manner under similar circumstances. In the second case, a soldier of the St. Helena Regiment was seized after the shock with epilepsy, without any peculiarity of the symptoms, and the seizures recurred for several weeks. It was considered they were prevented by venesection. This patient was said to have been subject to epilepsy, but during his voyage he had shown no sign of the disease previous to the storm and the accident to which he was subjected by the lightning. Dr. Macaulay concludes his report of these cases by remarking that two of the patients complained of pain in the region of the liver.

Paralysis.—Paralysis has been observed to follow both electrical and lightning stroke. I have twice seen a temporary paralysis in animals upon receiving the discharge, and it is worthy of remark that in these cases, as well as in cases where the shock has occurred from the lightning stroke, the hinder limbs have been those most distinctly affected. This does not seem to be due to any localisation of the shock, for it may occur when the discharge is not directed through the limbs at

all, but through the head and the spinal column. It is as though the lower part of the cord had received a concussion. For a time there is an equal paralysis of sensation and motion, and during recovery sensation returns first. Of the mode in which the electricity acts in producing the paralytic condition I am unable to speak; indeed, I could not, and cannot, by any method so pass the current as to insure paralysis, nor could I, in any case where an animal was struck insensible by shock, predicate whether paralysis would or would not follow. A shock passed directly through a limb will produce a temporary rigidity of limb, and for some time an incapacity for movement; but this is not paralysis in the strict sense of the word, nor is it the condition of true paralysis I have spoken of above.

It is an equally interesting and curious fact that paralysis as a pre-existing disease has been cured by lightning stroke. A good illustration of this kind was reported in the year 1803 to the great American Physician Benjamin Rush, by Dr. Thomas Humphreys. In this case a lady, after severe chill from long exposure to intense cold, suffered from paralysis of both arms, which condition lasted three years. She was often electrified during this period, but without benefit. In July, after rising from the dinner table about 3 p.m., just as she had reached the side of her bed, she fell across the bed to all appearance dead; but she gradually recovered, and after recovery suddenly discovered that she had entirely regained the use of her paralysed hands. Twenty years after this event she remained well, having had no return of the paralysis.

Catalepsy.—The phenomena of catalepsy have been observed after lightning shock. I am indebted to my friend Mr. Richard Fryer, of Pickwell, for having informed me of a case of this kind, and to my friend Dr. Jackson, of Somerby, for having collected the facts, which are as follows:—A man named Thomas Sharpe was driving across Grinsthorpe-park in a cart during a severe storm. The cart was struck by lightning, and two dogs in it were also struck, one being killed at once, the other blinded. The horse was struck not fatally at the time, but so severely that he died from what was called general wasting and weakness—a kind of general paralysis, in fact—within a week after the accident. The cart was much damaged. It is difficult to determine whether Sharpe himself was rendered unconscious, for although he was struck too, he managed to get to his home. He was extremely ill, was confined to his bed many weeks, became greatly emaciated, could not take food, and at last sank into the condition of catalepsy. In this state he was thought to be dead, was laid out by two women, and was tolled for in due order. He stated to Mr. Fryer that he fancied he knew all that was going on, but that he was quite unable to move until he heard voices talking about his death, and distinguished the knell of the passing bell. Then, under the impression that he should certainly be buried alive, he made a great effort to move, and succeeded in moving one of his thumbs. This act attracting the attention of the women who were laying him out, the process was stopped, he was treated as one still alive, and he gradually recovered.(b)

During his convalescence Sharpe was annoyed by a strong smell of sulphur, which seemed to come from his own body. The symptom has been observed in other cases after lightning shock, and is detailed with much care by Gaultier Claubry, who experienced it himself, while recovering from lightning shock, for several days. Claubry calls the odour that of "*gaz hydrogène sulfuré*," also hepatic odour and taste. He says it exhaled from the secretions of the alimentary canal, the skin, and the urine, and was almost intolerable.

Blindness.—Blindness has been observed to follow both electrical shock and lightning shock. This fact was observed first by Priestley, after a discharge from sixty-two square feet of coated glass through a dog of the size of a common cur. The animal was struck through the head, all his limbs were extended, he fell backwards, and lay without any motion or sign of life for about a minute. Then followed convulsions, but not very violent, in all his limbs, and after that a convulsive respiration, attended with a small rattling in the throat. In about four minutes from the time that he was struck he was able to move, though he did not offer to walk till about half an hour after, in all which time he kept discharging a great quantity of saliva, and there was also "a great flux of rheum" from his eyes, on which he kept putting his feet, though in other respects he lay perfectly listless. He never opened his eyes all the evening in which he was struck, and the next morning he appeared to be quite blind, though seemingly well in every other respect.

Having despatched the dog by shooting him through the hinder part of his head, Priestley examined one of his eyes (both of which had a uniform bluish cast, like a film over the pupil), and found all the three humours perfectly transparent and, as far as could be judged, in their right state; but the *cornea* was throughout white and opaque, like a bit of gristle, and remarkably thick.

Before this experiment Priestley had imagined, he says, "that animals struck by lightning had probably a *gutta serena*, on account of the concussion which is seemingly given to the nervous system by the electric shock; but this case was evidently an inflammation occasioned by the explosion being made so near the eyes, terminating in a species of the *albugo*. One of the eyes of this dog was affected a little more than the other, owing probably to the stroke being made a little nearer to one eye than to the other." Priestley intended to direct the stroke about an inch above the eyes.

The suspicion of the nature of the blindness thus expressed by the great physicist is, I have no doubt, essentially correct; for this change of structure of the cornea can be produced on the eye of an animal recently dead. We will do the experiment on the eyes of a recently killed sheep with the primary discharge from our coil. When now we examine the eye, we find the change to opacity is instantaneously produced; and Priestley, though right in the main, erred, I think, in tracing the change to any after inflammatory process. The change seems to me to consist in the coagulation of the plasma of the cornea, and to take place between the conjunctiva and the middle elastic coat. Beyond this injury I can find, in these cases, no other changes. The aqueous humour, the crystalline lens, and the vitreous humour are uninjured.

There is another form of blindness occurring occasionally in animals after shocks of great tension, in which there is no visible cause for the phenomenon. The eye itself seems perfect in all its parts, nor does any visible lesion occur in the optic nerve or the brain. I can attribute the injury, therefore, to nothing more definite than to nervous shock.

In some of our experiments, where the animals have been killed, we have observed one pupil closely contracted, the other widely dilated. In these instances the shock has passed on the side of the head on which the pupil is contracted.

Blindness from lightning stroke in the human subject is so rare that it has been but little investigated. Mr. Bader, whose researches on the pathology of the eyeball we know so well, tells me he has never dissected an eye that has been destroyed by lightning, but remembers one case in which suppurative inflammation of the choroid and retina set in, in the region of the yellow cyst, from the accident, as the patient thought, of looking into a flash of lightning. Mr. Bader saw another case in which the same disease came on in an eye suddenly exposed to sunlight while taking telescopic observations; and, lastly, he saw a third case of the same disease occurring in both eyes, and attributed to long exposure of the organs to the blaze of a furnace. These cases, the connexion of which will be at once seen, were probably due to intense exposure to the excitation of light, for in the case where the patient looked at the lightning flash there is no history of shock.

Taking all the facts I can collect in respect to blindness after lightning-stroke, I infer, for the present, two conditions—(1) a direct change in the structure of the cornea, and (2) nervous shock without visible change in the organ. To these may be added, as supplementary, inflammation of the choroid and retina due to the excitation of light from the lightning flash without shock.

In my next lecture I shall consider the changes of the internal organs after death by lightning and electricity.

(b) Since the delivery of this lecture, Dr. Winn and several other correspondents have directed my attention to the narrative in the "Diary of a late Physician" of a similar case to that of Thomas Sharpe. I have since seen the distinguished and learned author of the "Diary," Mr. Warren, D.C.L., F.R.S., and am permitted to state from himself that his narrative was really founded on a fact related to him by Mrs. Warren.

Tent Hospitals.—At the request of M. Léon Lefort, M. Husson has authorised the construction, in a meadow attached to the Cochin Hospital, of a spacious well-ventilated tent for the reception of Surgical cases, in imitation of the successful procedures at the Berlin Charité. The *Gaulois* contrasts these proceedings with the stupendous Hôtel-Dieu now completing, and which, for the accommodation of 700 patients, is to cost 40,000,000 fr.—*i.e.*, about 56,000 fr. per bed. As a matter of economy, it observes, it would have been better to have hired apartments on the Boulevard Haussmann at 2500 fr. per patient. In the tent Hospitals each bed is to cost 500 fr.

ORIGINAL COMMUNICATIONS.

NORWEGIAN NOTES.

By JONATHAN HUTCHINSON, F.R.C.S.,
Surgeon to the London Hospital, to the Ophthalmic Hospital, and the Hospital for Skin Diseases.

(*Continued from page* 168.)

The Bergen General Hospital.

The town of Bergen, one of the oldest and largest in Norway, is 300 miles from Christiania, and although further north, yet being situated on the west coast and bathed by the Gulf stream, is somewhat warmer. Its harbour and the neighbouring *fiords* (very long and very deep) are always open in winter, whilst those of Christiania are usually blocked by ice. Bergen has a population of 33,000, and is much frequented by sailors and fishermen. In this district fish is perhaps more largely used as an article of diet than in any other part of the world. Fish is throughout the year cheap and plentiful, whilst all other kinds of food are comparatively dear. The Bergen Hospital stands in the middle of the town, in a street, and is not distinguishable outside from a large private house. It is supported by the local government, and receives patients from the town and district. It has one resident Medical officer, who is both Surgeon and Physician, and who has sole authority in the establishment. He receives a salary, but is not debarred from private practice. This office, as might be expected, is, I believe, usually held for long periods by each incumbent, and is one to which we have nothing in English institutions quite parallel. It is at present held by Dr. Holmboe, a gentleman of great intelligence and professional zeal.

The Hospital has sixty-seven beds, and is usually full. At the time of my visit it was crowded, so that a number of soldiers, under treatment for itch, were put up in a garret. The Hospital is badly constructed as regards size of passages and many other details, and it is old and in very bad repair. Its wards are numerous and small. The windows at the back of the building command a fine view over the bay, and admit a sea-breeze when open. Dr. Holmboe, with great courtesy, showed me over the Institution, and gave me the fullest information on all points which I had time to inquire about. Having spoken disparagingly of the building, I ought, in justice to him, to add that he is engaged in an active agitation for a new one, and will probably succeed before long.

Plastic Operations—Operation for Mal-united Fracture, etc.

Dr. Holmboe showed me some photographs of a case of extensive destruction of one cheek, in which plastic operations had been performed with great success. I saw also a little boy, still under care, in whom an excision of bone had been practised for the remedy of distorted union, after fracture, of the tibia and fibula. The bones had been united at an angle with the bend forwards, so as to make the limb almost useless. The result of the operation had been most satisfactory as regards the position of the limb and healing of the wound. The leg is now perfectly straight, and the soft parts well healed. The only drawback is that the union is not firm, although several months have elapsed. I have seen the same result after similar operations in several children in England, and also in two, under the care of Dr. Giraldès, in the Hospital for Children in Paris. (a) The risk of non-union seems to be considerable. In Dr. Holmboe's case it is by no means hopeless, as the time elapsed is as yet only short.

Other Operation Cases.

Amongst the operation cases under care at the time of my visit were two in which large fatty tumours had been removed, and one of excision of cancer of the skin of the chest. There were also two cases of severe compound fracture of the tibia, in each of which (I think) bone had originally been removed, and which were doing well. One of these had, however, suffered from inflammation of the cellular tissue of the limb, and abscesses were still threatening. I did not see any stumps or cases of amputation. Lithotomy, I was informed, is very rare, so much so that only one case could be recollected. Excisions of the knee, hip, etc., are not performed. Dr. Holmboe told me that amputations usually did very well, and added,

"We have no Fear of Pyæmia or Erysipelas!"

He spoke of undertaking all operations which seemed necessary without any regard to those scourges which so often deter us in London institutions, or, at any rate, enter very seriously into our calculations of risk. I did not understand him to assert absolute immunity, but I certainly envied the degree of confidence which he evidently entertained. No Erysipelas! and no Pyæmia!! Good news. I glanced somewhat eagerly round the ward in which these words were uttered, and earnestly asked myself the question,

"If not, why not?"

Dr. Holmboe will, I am sure, excuse the liberty I take in making his institution the object of a little special inquiry on this head. My remarks would be equally applicable to any other small Hospital. Nor will he, I feel confident, be in the least offended when I assert that, as regards ventilation, cleanliness, cubic space, and general clinical comfort, the Bergen wards have no advantage whatever over those of the London or St. George's Hospitals, where erysipelas and pyæmia are fairly frequent. No special precautions of any kind are taken either as regards ventilation, cleanliness in dressing, disuse of sponges, use of antiseptics or germ-killers. In saying this, I do not mean that any precautions are neglected—I mean simply that the Bergen patients have not, as far as I could judge, any advantage over those in our own large Hospitals. My attention was drawn to the polished wood floors. For a moment I thought "Here is the secret; we wash our floors, whilst these are dry-scrubbed;" and I remembered having been told by a House-Surgeon to the Derby Infirmary many years ago that by a change in this matter they had practically put down erysipelas there. Next, however, my mind's eye passed off to the Paris Hospitals, which have their floors so bright and slippery that an untrained Englishman is in some risk of finding himself on his back, and which yet have pyæmia and erysipelas in abundance. No, it cannot be the floors, at any rate not altogether. Nor is it that the Hospital is a new one, or that it makes any approach to the cottage or tent principle, or that it is all on the ground floor. It is old, in one block, with free passage communication, and three stories high. The Hospital with which I felt most inclined to compare it was one of which some years ago I had a long and intimate experience. I allude to the Metropolitan Free. This Hospital was much smaller than Dr. Holmboe's, and, I grant, managed on yet more economical principles as regards ward luxuries. Its wards, when I was connected with it, were always overcrowded. It received the poorest of the poor, who were accommodated in the rooms of two old dwelling-houses thrown into one, four stories high, and with free passage communication. Under these apparent disadvantages we used to operate freely, and exult (as Dr. H. now does) that we knew nothing of erysipelas or pyæmia, and scarcely ever lost a patient. Our operations were very various, and many of them extensive and severe. Nearly all, however, presented this peculiarity—they had reference to disease, and not to injuries. We admitted very few wounds, and still fewer compound fractures; a primary amputation was the rarest possible event, whilst excisions of joints and amputations for disease were not uncommon. In looking back and comparing my experience of that institution ten years ago with what I have since had of the London, so much larger, so much better managed in every way, I can feel no doubt that the risk attending operations of the kind we used to do was very much less in it than it is in the latter. Then I never felt the least scruple in urging a patient to submit to an operation; now I always estimate most carefully the question whether, considering the risks, it would not be better to advise him to bear the ills he has than flee unto those about which I dare not speak to him with any confidence. The fact is a painfully important one. It would lead me too far from my professed subject of "Norwegian Notes" if I were to attempt to explain it here. I will, however, mention a few circumstances in which I think that the Metropolitan Free Hospital and the Bergen General Hospital are alike, and to the combined influence of which they owe it that they can boast of exemption from the two Hospital curses erysipelas and pyæmia.

1st. They have no Medical schools; no dressers to come fresh from the post-mortem or the dissecting-room to ward duty.

2nd. They do not receive in any large number the most dangerous class of cases—to wit, wounds and compound fractures of the leg or skull.

3rd. The comparatively small number of wounds admitted renders the chance occurrence of erysipelas much smaller, and thus, of course, reduces the risk of its spreading by contagion. Wound cases have a double danger—first, that the patient may himself have erysipelas (spontaneous or otherwise); and, secondly, that he may become the source of the disease in others by contagion. The risks of a Hospital may perhaps be measured by the extent of its casualty practice.

(a) Mentioned, I think, in my "Paris Notes."

4th. They have no wards set apart for operations or for accidents, but mix these cases in the general wards, thus reducing the chance that a new patient may be put into or near an infected bed, or that the floors, walls, etc., may become impregnated, or that the same nurse may chance to attend upon a patient who is just sickening with erysipelas, and another with an open wound. In neither Hospital are even the Medical and Surgical patients separated with any strictness.

5th. In both the wards are small, and thus a degree of isolation of cases is effected.

6th. In neither is over-ventilation insisted on. By this I mean that in neither are the windows kept open night and day, and patients with recent wounds compelled to sleep (or lie awake) with a draught of cold air, it may be from the east, pouring upon their beds. Some people can stand this, others cannot. In many I believe there is no more successful method of exciting erysipelas (contagion excepted) than exposing the wound to a draught. It is needless to remark that a single case of erysipelas thus originated becomes the focus of contagion for many, if there be patients with open wounds, etc., near to the bed.

7th. As there are scarcely any pyæmic patients, so there will be scarcely any pyæmia post-mortems, and thus a risk of becoming the means of contagion is escaped both by Surgeons and dressers. Pyæmia and erysipelas are diseases which, being contagious (and probably intercommunicable) tend to increase by their own prevalence, and to a large extent independently of external conditions.

8th. Post-mortems for any kind of disease are very rare events, and those who have to do with the living seldom touch the tissues of the dead.

(*To be continued.*)

ON THE

TREATMENT OF CHRONIC CASES OF SORE-THROAT BY THE LOCAL APPLICATION OF STRONG NITRIC ACID.

By DANIEL MACKINTOSH, M.D., C.M.

The preponderance of cases of sore-throat presenting themselves for treatment in the spring and autumn of each year is manifest to the Profession generally, but more especially to Practitioners carrying on their vocation in low marshy districts; and not unusually chronic cases of sore-throat with enlarged tonsils and occasional ulceration, from their obstinate nature and difficulty of cure, become alike a source of anxiety and annoyance to the Practitioner and the patient, the former losing confidence in his medicines, and the latter in his Medical attendant. It was whilst labouring under such difficulties that I had been induced to try the effects of nitric acid of its commercial strength in those diseases, and the results obtained more than satisfied my most sanguine expectations, and I doubt not that the treatment will be found as efficacious in the hands of others as, I am happy to say, it has proved in mine.

In the agricultural and manufacturing districts, the great majority of cases that appear for treatment have already assumed a chronic character. The tonsils are enlarged and appear dotted over with white specks or little abscesses; the uvula is elongated, frequently titillating the fauces, and giving rise to the sensation of a foreign body which the patient wishes to clear away by cough. This is the grand state of things where the application of nitric acid will appear to most advantage. Although in practice I do not usually care to draw very "hard and fast lines" as to the acute or chronic nature of the inflammatory action or morbid changes, I invariably apply the acid where the above symptoms exist, and as invariably find, after one, two, or at furthest three applications, the patient is greatly relieved or permanently cured.

In the application of the agent I direct the patient to take a deep inspiration, and to hold his breath steadily during the process of operation, which he is quite able to do. The mouth being widely opened and the tongue well depressed, the agent is freely applied over the extent of the morbid surfaces by means of a well-sized camel-hair brush, to which a conveniently long handle is attached. A powerful expiration of course follows, which effectually clears the air-passages of the fumes arising from the acid during its application. A glass of water or alkaline solution is at hand to gargle the throat and rinse out the mouth with. This treatment is repeated once, or in severe cases twice daily according to the effects produced, until the cure is completed. Contrary to what might be expected, the patient experiences little or no pain or other untoward symptom beyond a slight feeling of sickness from the reflex action produced by the manipulation on the fauces. The effect of the application on the parts is shown by its changing them to a greyish-white colour, which soon disappears. The secretion from the mucous surface weakens or dilutes the agent sufficiently to render it only stimulating or slightly caustic in its effects. A new and healthy action is set up, the patient is relieved, and the parts assume a healthy appearance. While local applications are by far the most important part of the treatment, sight must not be entirely lost of remedies to be addressed to the system generally, and, among others, saline cathartics and the gum resin of guaiacum are the most serviceable.

I have also found nitric acid invaluable as a local application to the foul ulcers commonly met with in the sore-throat of severe cases of scarlatina, and in diphtheria; although I cannot write with the confidence of experience in its use, I consider it well worth a trial from the Profession.

Littleport, Cambs.

ON THE QUESTION OF SHOCK,

AND THE

BEST TIME FOR OPERATING IN CASES OF SEVERE ACCIDENT NECESSITATING AMPUTATION.

By JAMES FETTES, L.R.C.S.E.

Apropos of the report in the *Medical Times and Gazette* (June 26) of the discussion at the Société de Chirurgie, and the views and experience of French Surgeons as regards the results of amputations and other treatment for injuries of the limbs in railway accidents, perhaps the following case will be of interest, especially from its bearing upon the question of shock and the best time for performing amputation.

J. T., aged 14, was working about the railway platform here, and fell with his arms extended just before an advancing train in quick motion. Fortunately for the poor fellow, he had long hair; and a guard who was standing by had the presence of mind to catch hold of it, and drag his head up out of the way. The train passed over both arms, the wheels grazing his forehead and taking some skin and hair off.

When I saw him, half an hour after the accident, I found both arms mangled and crushed, the right, to within five inches of the shoulder, and the left, to about the middle of the humerus, the integuments being quite pulpy, and the different tissues almost undistinguishable.

About an hour after the accident, I proceeded to operate upon both arms. Being most anxious to leave as long stumps as I possibly could, I amputated as close to the injury as was at all compatible with a chance of success; indeed, in the case of the left arm I preserved a piece of slightly bruised integument, the removal of which would have obliged me to amputate two or three inches higher up. Both operations were modifications of the flap method. The patient very soon began to rally, and in about three or four hours was pretty comfortable. Everything went on well until the ninth day, when there was a slight hæmorrage from the left stump; this was soon stopped by the application of cold water. It again appeared on the sixteenth day, but not to any extent; on the eighteenth, however, the bleeding became so profuse that I was obliged to cut down upon the bleeding point, which I found near the bone in a sort of sac to all appearance of an aneurismal character. It was impossible to pick out the vessel, so I passed a ligature through the tissue at the side of the point, and embraced in a sort of loop a portion containing, I have no doubt, artery, nerve, and vein. I then dressed the stump in the usual manner, and both arms did well from that day.

I may mention that there was no particular pain after the application of the ligature just mentioned.

This occurred some years ago, but I have a vivid recollection of all the circumstances, and copious notes were taken at the time. I saw the man to-day. He has not had a day's sickness since the stumps healed, and now gets a living by keeping a shop; he also paints beautifully, holding the brush in his mouth. Of course he is quite helpless in the way of dressing and feeding himself, etc., but he is so happy in his present condition that he has not consented to try anything in the way of artificial arms. The stump of the right arm is about three inches long, and that of the left about seven inches.

Now this was a case in which the traumatism was of a most severe character, and the shock to the nervous system must have been excessive. However, here there was none of the incapacity of reaction which M. Tillaux has been unfortunate enough to find in all his cases of a like nature, and I think that this case goes far to show that M. Perrin is right in attributing it to the delay in operating, rather than to the severity of the traumatism itself. My experience in other cases of a similar nature convinces me that the period at which the operation is performed is all-important. I had a case of a man, whose thigh I had to amputate for an injury caused by the wheels of a railway wagon passing over and shattering his knee. He also did well, and is still alive. The operation in his case was performed within a very short time of the occurrence of the accident.

Again, as to the point of operation. As a general rule, it would assuredly be advisable to get quite clear above all tissues bruised in the least, but in the case I have detailed I made use of a piece of bruised integument with complete success. I do not by any means wish to hold this up as a precedent, but I think that in cases, where an inch or two extra in the length of a stump may be all-important to the usefulness of it afterwards, all the tissues which are in the slightest degree injured should not be summarily rejected as useless.

I may mention that the previous health of the patient was good, and his family very healthy, and I must say that I was very fortunate in having to treat him in a comfortable cottage in an airy village, instead of a crowded Hospital, or in an unhealthy town.

Sir James Simpson is welcome to this as an illustration of his latest theory.

Laurencekirk, Kincardine, N.B.

A CASE OF EXTREME CONSERVATIVE SURGERY. A THUMB SAVED.

By V. STONE, L.R.C.P. and S. E.

THREE months ago, J. W., aged 15, was brought to me with his right thumb said to be trapped off. On examination, I found the thumb cut, or rather crushed through, at the metacarpo-phalangeal joint, and hanging quite loose, a piece of integument half an inch broad alone keeping it from being completely separated from the hand. The injury had been caused by the boy, who was unharnessing a horse and cart, letting the whole weight of the cart fall down upon his thumb, which was between an iron bar and chain.

Of course, the first thing thought of, and probably, according to all rule, the proper thing to do, was to amputate; but I was deterred from this by two things—viz., the boy's distance from home, and the fact of not having suitable instruments by me (it was in the country). I proceeded to remove some loose small particles of bone, and clean the wound; then, having placed the bones in proper position, and replaced the skin, I secured the latter by three stitches of stout silver wire through the palmar side, and applied a water dressing with a light bandage to keep all secure. I thought of amputating the thumb next morning, and proceeded to the patient's home prepared for doing so, but on removing the dressings, I was so much struck with the appearance of the wound (which looked remarkably well, considering the injury), that, on the boy telling me that he had little or no pain, I made up my mind to delay for a little time, and see how things would go on. I again applied water dressing, with the addition of a little Condy, and ordered it to be changed twice a day, taking care that the parts should be kept in good position. Two days afterwards, the wound still looking healthy, I continued the Condy dressing, watching carefully for indications of anything going wrong; however, nothing appeared, and, with the exception of a slight oozing at the lowest point of the wound, which I had left open to allow anything to drain off, it promised to heal quickly. At the end of a week I applied a thin pasteboard splint to the back of the thumb, over the sound piece of skin, to keep the bone from being disturbed. The Condy was still being applied. In another week—that is, about a fortnight after the accident—the wound was quite healed. I then very slightly flexed the thumb, so that it might be in as useful a position as possible, and so bound it up that it was protected from movement or injury till the bone was firmly united.

At the end of a month one would have seen very little the matter with the thumb, as far as appearance went, and in two months' time the boy had a very useful hand, and the thumb, though still stiff at the metacarpo-phalangeal joint, capable of a considerable amount of motion (for, from practice, the mobility of the other joints seemed to increase), and a very valuable opponent to the fingers.

I saw the boy the other day, and he does all his work (that of a farm servant) with comfort, holding the plough, and grasping anything quite well. If this lad had lost his thumb, he would have been incapacitated from many kinds of work which he now manages with ease.

This case is, I think, a warning how careful we ought to be in coming to a conclusion when there is a question of amputation of the thumb or fingers; for I have no hesitation in saying that, in nine cases out of ten, a thumb or finger is removed for an injury like the one described—it seems almost done already, only a little finishing off required—but give nature a fair chance and a little assistance, and the result is sometimes astonishing. Again, the question of amputation in the case of an injury of this description to a thumb or finger is removed from all comparison with that in case of a similar injury on a larger scale—*e.g.*, at the wrist or ankle—for in the former case the risk of constitutional effects is comparatively trifling, whereas, in the latter, it is a very important element in the consideration of the question. A word, before I finish, as to the dressing. I attribute the absence of gangrene or a serious amount of suppuration entirely to the Condy's fluid used, which I think quite as good as carbolic acid and much more pleasant, the smell of the latter being almost insufferable to some patients. The action of both is about the same, and I see no reason for preferring the acid.

Laurencekirk, N.B.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

THE MIDDLESEX HOSPITAL.

MALIGNANT TUMOUR OF THE FEMUR—EARLY FRACTURE — SUBSEQUENT DEVELOPMENT OF THE TUMOUR—AMPUTATION OF THE THIGH—RECOVERY.

(Under the care of Mr. CAMPBELL DE MORGAN.)

H. L., aged 19, a delicate-looking girl, a housemaid, was admitted into Bird Ward on Feb. 20, 1869, under the care of Mr. De Morgan, with a fracture of the right femur into the knee-joint.

History.—Patient was one of a healthy family, and had always enjoyed good health herself until two months before admission, when she fell down and "sprained the knee," as she fancied. She had suffered from some pain in the joint for a little while before, but after this fall the pain and stiffness of the joint were more marked, although she noticed no swelling, and continued until the day of her admission, when, slipping on a bit of orange peel in the street, she again fell heavily, and, not being able to stand, was lifted up and brought at once to the Hospital.

On admission, there was much effusion into the right knee-joint, and intense pain with the least movement. She kept the joint half bent. On grasping the condyles and moving one on the other, some obscure crepitus was felt.

The limb was therefore arranged on a long splint, and ice kept constantly applied to the knee. For the next few days she complained of pain in the knee, but of more in the abdomen, which was very severe until relieved by purgation. She took quinine and iron, with meat and beer for dinner, but the appetite was indifferent, and the pain and swelling about the knee continued to increase.

On April 5 she began taking five grains of iodide of potassium in a bark mixture, three times a day, with a pill of iron and quinine.

By the 16th the swelling of the knee extended nearly half up the thigh, and the superficial veins began to enlarge, the largest circumference of the swelling being now sixteen inches, the pain being of a continuous aching character. A week later the circumference had gained half an inch, the length of the tumour being ten inches. It was now hard, and unyielding to the outer side, but softer and more elastic above, and extended round into the popliteal space. The pain meanwhile increased,

and the patient began to be feverish, the temperature in the axilla ranging from 100° to 102·6° Fahr., and the pulse keeping over 120, the circumference of the tumour gaining half an inch a week. There was general pulsation of the swelling in the ham, and with the stethoscope a distinct bruit was heard over nearly all its extent.

The diagnosis of a very vascular and probably malignant growth about the lower end of the femur being formed, on May 5 Mr. De Morgan decided to remove the limb. Chloroform was administered, and amputation performed at the junction of the middle and upper thirds of the thigh, with lateral flaps. There was very free hæmorrhage. The vessels were secured by ligatures, and a solution of chloride of zinc (forty grains to the ounce) sponged well over the flaps, followed by as free an application of strong sulphurous acid, which blackened the oozing surface, and sent up stifling sulphurous fumes as it was poured in. The flaps were then brought together, and two stout threads passed through the thickness of the stump close to the end of the bone, and secured to two bits of elastic catheters placed on the outer surface of the stump, thus keeping the deep parts of the stump firmly in apposition, whilst ordinary sutures secured the free edge. A fold of lint soaked in sulphurous acid lotion was placed over the wound, and the patient taken back to the ward. After the operation the girl made an exceedingly rapid and good recovery, with hardly any suppuration about the wound, which might almost be said to heal by first intention. The deep sutures with catheters were removed on the fifth day, sulphurous acid applications being constantly in use, and eight ligatures removed on the twelfth day. The evening temperature ranged from 99° to 101°, and by May 31, twenty-six days after the operation, the girl was up and out in the garden in a wheeled chair, with restored strength and good colour in her cheeks. She left the Hospital quite recovered on June 14, with no sign of mischief about the stump or elsewhere.

Dissection of the part removed discovered a soft fleshy tumour springing from, or at least invading, the medullary canal at the lower end of the femur, and growing out from thence the growth infiltrated the surrounding soft structures largely, not quite reaching the skin. The whole mass was nearly as large as the head of a newly-born child, of a pale yellow colour, dotted and streaked with crimson, and with large bloodvessels traversing it in all directions. Spicules of bone were imbedded in various parts of the tumour. The femur had been broken transversely through the condyles, vertically between these, and again obliquely through the shaft just above. There had been no attempt at bony union, the fragments being bound together by the tumour structure. Microscopically this was found to be a large round-celled sarcoma, most of the large round or oval cells being separated by an abundant granular, sometimes fibrillated, matrix, although in some places the cells, closely packed in the oval meshes of a fibrous stroma, were strongly suggestive of true cancer as anatomically defined by Virchow.

Remarks.—The main interest in this case attaches to the treatment, for the exceedingly favourable and rapid recovery, under the somewhat disheartening circumstances of the patient, prompts one to look carefully to any points in the treatment which might seem to have secured such a result. It is worthy of remark that although the great vascularity and rapid growth of the tumour needed an unusual vascular supply, and hence an unusual number of ligatures in the stump, the amount of suppuration may be compared favourably with the brilliant examples of primary union recorded to have accompanied the employment of acupressure. The advocates of this method have contrasted the speedy union so secured with the profuse and protracted suppuration attending the use of ligatures, but there can be no doubt that what has been called the "antiseptic" treatment of amputation wounds has materially lessened any disadvantages the thread ligature formerly possessed. We have ourselves frequently noted this in operation cases in the Middlesex Hospital as well as in other places, since the introduction of this practice by Mr. De Morgan. Long before carbolic acid was the favoured antiseptic dressing, we had seen at this Hospital very remarkable results following the application of strong solutions of chloride of zinc to fresh wounds, and from what we have lately seen of the employment of sulphurous acid by the same Surgeon we look forward to yet happier effects. Another point which struck us in connexion with the operation was the use of the long sutures binding together the deep parts of the stump and so preventing any tendency to bagging. We believe that Mr. Marshall has employed the same means in two or three amputation cases in the University College Hospital during the present year, with excellent results. For the operation with equal flaps the method seems likely to be of much use in insuring speedy firm union.

THE DRIFFIELD COTTAGE HOSPITAL.

DISEASE OF KNEE-JOINT AND AMPUTATION OF THE THIGH.

(Under the care of Dr. BRITTON.)

W. L., aged 50 years, a labourer, was injured on the left knee when working in a railway tunnel fifteen years ago. The knee was much swollen and very painful. He thinks it was from a blow, and working in a damp place. He was twelve months under Medical treatment, when an abscess burst on the inner and lower side of joint. It discharged a great deal of matter for six months, and then healed. The knee had become contracted, and he walked on his toe. He worked eleven years before it caused him any inconvenience. In April, 1867, it began to swell and be very painful, and several abscesses formed, and have been discharging more or less ever since.

March 11, 1869.—He came into the Driffield Cottage Hospital to-day. The knee is much swollen, and also contracted at right angles to the thigh. The abscesses discharge from small wounds on the inner edge of the top of tibia, also the anterior edge of tibia, and the upper and outer part of the external condyle of the femur. There is much swelling and a sense of fluctuation as far as the junction of the middle with the lower third of femur. He has constant, though not severe, pain in the joint; appetite good; tongue clean; secretions generally in good order; pulse 68, and very feeble. He is very poor, and has been living badly for the last twelve months.

April 12.—His strength having much improved, the thigh was amputated at the middle third by the circular method. On examining the joint it was found completely disorganised, the cartilages entirely gone, and the ends of the femur and tibia much diseased. There was a large collection of matter above the joint and under the patella. The periosteum was destroyed for some distance up the femur. There were four arteries and one vein tied, and water dressing was applied.

The ligature on the femoral artery came away on May 14, when the stump was quite healed with the exception of the course of the ligature, and on the 18th that closed, and he was well.

INJURY TO ABDOMEN, AND DEATH FROM BLOW.

(Under the care of Dr. BRITTON.)

T. J., aged 10 years, was playing with his sister, a little girl 12 years old, and small for her age, when she struck him a blow with her doubled fist over the umbilicus. He immediately complained of great pain, which soon went off, and he went to school after dinner, but had to return in an hour, on account of the pain coming on again very severely. This continued through the night, and the following day, November 14, 1868, they sent for Dr. Britton, whose locum tenens found the boy suffering from peritonitis. The next day typhoid symptoms came on, and on November 17, on Dr. Britton's return, he found him suffering from intense pain in the abdomen, and vomiting incessantly; the tongue and lips covered with sordes, and the pulse 130 and feeble. He ordered the body to be covered with linseed-meal poultices, and an effervescing mixture, with hydrocyanic acid. On the 19th the pain left him, but the vomiting continued at long intervals.

November 21.—Vomiting quite stayed. Pulse 90, very feeble; no pain nor swelling in the abdomen; can bear pressure on it; bowels regular; urine free in quantity, and not so highly coloured; skin moist; tongue and lips cleaning, but excoriations on mouth and lips. To have chlorate of potash five grains every four hours. From this time he got gradually weaker, but the symptoms of fever entirely left him. He refused his medicine and all food and wine, but drank two or three pints of ale daily.

28th.—To-day he suddenly commenced to eat, and from this day his pulse gradually got stronger, but his limbs and body wasted to skin and bone. He complained of no pain anywhere.

December 11.—He can get up and go downstairs. Appetite good; pulse steady; no pain; body very much wasted.

13th.—Seems to be getting stronger. The abdomen was greatly distended and red at the umbilicus. He did not complain of any pain except on somewhat hard pressure. Dr. Britton diagnosed abscess, and ordered poultices.

19th.—The abscess suddenly burst, and discharged at least four pints of pus. Body very flaccid; pulse feeble; no pain.

20th.—Has discharged two pints more. Pulse very feeble; appetite good.

22nd.—Still discharges very large quantities of pus. He is quite sensible. Eats well. Pulse so feeble that it could scarcely be felt, and impossible to be counted.

23rd.—He gave over eating, and died on the 26th, without a struggle, the discharge continuing very large all the time.

No post-mortem allowed.

CASE OF AMPUTATION OF FOOT.

(Under the care of Dr. BRITTON.)

R. A., aged 14 years, was out with a gun loaded with shot, when it went off accidentally, the shot penetrating his boot (a very thick ploughboy's boot) on the inner side of the right foot. It passed through the boot *en masse*, making a hole the size of a crownpiece. It then divided, and shattered the whole of the metatarsal and tarsal bones to pieces except little toe, and lodged in the sole of the foot. Dr. Britton performed Hey's operation, the flap being made from the plantar muscles, on August 11, and the case got well by September 8. It was treated in a cottage, as the parents were labouring people. The only application was water dressing.

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Medical Times and Gazette.

SATURDAY, AUGUST 14, 1869.

THOMAS MARKBY ON MEDICAL WOMEN.

We never conceal our opinion that women get the worst of everything in this world. With bodies more frail and minds less vigorous, they are especially liable to get the worst of it when they are driven, instead of being helpmates, to be rivals with men in the struggle for daily bread. So long as a large number of women are forced to shift for themselves, and till men, as a class, can render women independent of labour, every reasonable effort that they may make to extend the sphere of possible employment ought to be looked upon by men with consideration and indulgence.

The worst, perhaps, of the evils that befall women is the want of thoroughness in the education they get. They ought, at a cost of time and money no greater than what is now spent on them, to be able to get such an education as would enable them to do their own work well. For example, why should not a mother be able to teach her boys their Latin grammar and Delectus? It is needless to say that all occupations which women can hold should be thrown open to them. Women might replace a number of male booksellers, clerks, accountants, hairdressers, and a whole army of counter-skippers. But it is a significant fact that, as yet, men are preferred as teachers of music, drawing, languages, arithmetic, and, in fact, most other matters in which the best of its kind is desired and can be paid for.

Then the question comes—Shall women practise Physic? We have always taken the liberal line on this question, on which we believe argument to be a waste of breath, as it must be settled by the ordinary laws of supply and demand. If women can be found with health and strength enough to bear the fatigue, with money enough to bear the expense, with education good enough to start with, and with power of application to carry out the design, and if there is a *clientèle* large enough to pay them, all we can say is, that we think they might find many better investments than Physic. Still, if they choose to carry out the scheme, that is their affair, and no one need hinder them; nor do we see any reason why women should not receive special licences or diplomas, according to their qualifications or deserts.

But not the least of the misfortunes of women is the womanish tone taken by many well-meaning advocates of "woman's rights," of which we find a notable instance in a pamphlet entitled "Medical Women, by Thomas Markby," the author of which, we fear, is a Cambridge clergyman, an active promoter of better education for women, who once was considered a man of sense, but whose present publication is a lamentable example of what a man may come to who mixes too much with women's affairs, and learns to talk and argue after their fashion.

He begins by saying that one Englishwoman is practising Medicine with distinction, "and that there is no conceivable reason why thousands should not follow her example"—a conclusive statement of the sort that women delight in. Why do not they do so, then? Or, if there are difficulties in the way of obtaining a full Medical qualification, and if, as Mr. Markby avers in one part of his pamphlet, women desire to practise only in the diseases of women and children, and to do the lighter and more insignificant part of the work and to accept a lower rate of pay, why not do it? Why not set up a respectable school, pursue such studies as they are competent for, and then come forward to practise on such ailments of women and children as people may choose to consult them for? Why grasp at the higher branches of Medicine, and neglect the lower? Women are quite competent to dispense ordinary medicines; there is a large portion of the public that chooses the dose from a chemist's shop in preference to the advice of a Medical man; counter practice is easy, devoid of responsibility, only requiring a little natural shrewdness to keep out of mischief; here is a wide scope for female labour. Such an education as is given by the Pharmaceutical Society is quite enough for persons who do not meddle with poisons, and the public would not be worse served if women were to take that branch of practice—a kind of domestic Medicine—which is now carried on across the counters of chemists' shops.

But this would not satisfy the ambition of the androgynous. Their incoherent advocate, therefore, puts forward a double claim—first, that women shall be the Medical attendants in parturition and in all other diseases of women; and, secondly, that they shall share with men the instruction in Medical schools.

As to Medical schools, Mr. Markby strangely considers that separate schools for women are out of the question, and that a sufficient number of female students could not be got together to maintain them. Where, then, are the "thousands" whom he began by speaking of? He next supposes that it would be difficult to find teachers, and says that the present Medical Schools find it no easy matter to keep up their staff of lecturers. Therefore, he argues, let the two sexes learn together. Boys and girls up to a certain age do very well together in national schools. Most families contain a mixture of boys and girls. Many of the Professional lectures at Cambridge are attended by women; and in these there must have been numberless topics treated of that required careful and delicate treatment. "The truth is that there is no branch of moral or natural science that may not be kept pure or made prurient at the will of the expounder."

If, he continues, you have "purity of thought and propriety of expression, there is nothing which may not in fit time and

place be spoken of between men and women." So we say with regard to the attendance of men on women. Yet, with the ridiculous incoherence which infests every part of this pamphlet, Mr. Markby first denies, and then affirms, the seemliness of allowing persons of both sexes to frequent the dissecting-room together. So he claims a separate dissecting-room for women, apart from male students, and a female demonstrator, if one can be got, but if not, a discreet man must be demonstrator; for he says if a young Surgeon of 25 may examine the person of a living girl of 18, why should not a man be present with women in the same room with a piece of earth—for a corpse is no more? If we may parody his style, we would "reply by the inquiry" why may not a man treat a living woman if he may expound the anatomy of a dead one to one of her own sex?

Such is a specimen of the see-saw arguments by which Mr. Markby pleads for the admission of women to Medical schools and dissecting-rooms. Those by which he claims their exclusive right to attend on women are equally incoherent. He admits that women may innocently and modestly avail themselves of the services of men for the relief of suffering, and does not make the least insinuation that Medical men act otherwise than with propriety and purity. Yet, in the same breath, he asserts that the presence of man at the time of parturition is odious and mischievous; he has the rashness to state that childbirth was not more destructive of life in days when midwives were always employed than at present; that "it is notorious poor women get through their hour of trial more easily than their wealthier sisters;" and that some cases of labour are "rendered dangerous by the presence of a man!" He then goes on to be the mouthpiece of an hysterical complaint that the "compulsory attendance of men on women in special ailments is one of the bitterest and shamefullest cruelties which the stronger sex has ever practised on the weaker." "God has endowed women with a peculiar sensitiveness or sense of modesty, so acute that I think a man cannot understand it." Is it agreeable to the will of God that these fine delicate feelings should be "lacerated, torn, put to exquisite torture?" Then follow stories of women who died or went mad because they had been put under a Doctor's hands for special treatment. We reply, to the pure all things are pure; and aver that man truly cannot comprehend an exquisite sensitiveness which seeks the atmosphere of the dissecting-room and the function of a demonstrator of anatomy.

We might point out some piece of incoherence in every page—as, for instance, when the author distinctly declares that he demands for women only the privilege of treating women and boys under seven, and forbids their prescribing for men, yet says he hates specialities, and respects General Practitioners. But we will merely add three words.

In the first place, young men have feelings; and we hold that women ought not to be admitted to their Medical schools and dissecting-rooms, because it is unfair to young men to subject them to the disgust caused by seeing women pursue studies which only necessity renders other than barbarous and revolting.

In the next place, it is mere womanish malice to cast any slur on women who seek men's aid in illness or childbirth. Women prefer the services of men because men are stronger, truer, more trustworthy, more merciful, less capricious, and altogether more helpful than women are to each other. Certainly, they are not, as a rule, less modest. Men have been resorted to in all civilised countries in difficult parturition. The diseases of women are not things apart from, but most closely connected with, all pathology; and pathology, as a whole, can be studied only by men.

Lastly, we must confess our dismay, having always argued in favour of a higher education and larger range of occupations for women, at finding one of the men who, we hoped, would have raised the education of women, showing in this pamphlet all the faults and weaknesses which are supposed to render women ridiculous, and from which Mr. Markby and his associates ought to deliver them. He shows the radical feminine vice of writing on a subject which he knows nothing about, for he confesses that he knows not "how long it has been customary for childing women to call in the help of the Doctor." In order to give the custom a bad name he, womanlike, insinuates that "the fashion was set by one of Louis XV.'s mistresses." Had Mr. Markby shown the true instincts of a scholar which we should have credited him with, he might have read the account which Celsus gives of artificial delivery, and might have learned that the attendance of men upon women grew out of the natural desire to have the best available help at hand. Womanlike, he knows the use of nicknames, and appeals to "*nature*" as imperatively demanding the attendance of women upon women, and stigmatises as due to "the slow and irresistible influence of *fashion*" that resort to men which the instincts of husbands and wives alike demand as best and safest. He indulges in appeals to the name of the Supreme Being, and alludes to at least one sacred person in a way which seems offensive to most men. The arguments, such as they are, when they do not destroy each other, are simply arguments from hysteria. It seems to us that if such a man can write such an essay as this, the attempt to raise women must have some tendency to lower man; and that it were better to leave women to their puddings and croquêt than to infect men with the worst failings of the feminine understanding.

THE REPORT OF THE CIVIL COMMISSION ON NAVAL HOSPITALS.

The Report of the Commission of Civilian Medical Men employed by the Admiralty to inquire into the condition and organisation of naval Hospitals seems a straightforward common-sense document written in a moderate tone, and with an evident desire not to fall into the error of unfairly applying the standard of London or charitable Hospital management and expenditure to the widely different conditions of the great national establishments for the reception of sick naval officers and seamen. It will be remembered that, on the accession to power of the present Ministry, a show at least of retrenchment being expected from them, Mr. Childers deputed Dr. Murchison, of the Middlesex Hospital, Mr. Timothy Holmes, of St. George's, and Mr. Robert Ellis, senior Surgeon to the Chelsea Dispensary, to visit the naval Hospitals at Portsmouth, Plymouth, and Chatham, and to report their opinion as to the organisation and economic management of those institutions. The Admiralty "minute" empowering the Commission to act states that "the great increase in salaries, wages, etc., at these institutions during some years past calls for inquiry." The Commissioners on this point assert what people are likely to think that the Admiralty ought to have known full well—viz., that the salaries of Medical officers increase in proportion to their seniority, and that at present the Medical officers of these Hospitals are mostly Surgeons of many years' standing. Again, that the pay of Medical officers has been twice raised since January, 1859, and that previous to 1861 provisions were issued to the nurses and servants in kind, but that, since that time, these inferior officers have received a sum of money—1s. and subsequently 1s. 2d. a day in lieu of rations. These causes of increase of expenditure are on the surface, and, as we have said, no one ought to know them better than "my lords." The Commissioners then go on to lay down the necessary differences between naval and charitable Hospitals. In general terms, they say that "the management of the large naval Hospitals is in all respects admirably adapted to secure the comfort and well-being of the patients. The institutions are kept up on a scale which is no doubt costly if compared to that of a civil Hospital of an equal size," but the difference in expenditure is accounted for by the following reasons:—1. The naval Hospitals are a great deal larger than is ordinarily required in

times of peace—but then a war or an epidemic on a station might at any moment flood them. Thus, in 1853, 700 cases of scarlatina were sent to Haslar from a single station, and seven years ago 214 patients were admitted in one day on the Medical side of the same Hospital from one ship. 2. All the Medical officers of a naval Hospital are paid. 3. The patients are of different ranks, and must be treated in separate wards—officer-patients run up the charges. 4. These Hospitals are governed by "rules of the service"—*e.g.*, large Hospitals are under a post-captain and lieutenants; only Medical officers of certain rank can perform capital operations; Assistant-Surgeons must dress the patients; one nurse is allowed to seven patients. 5. The Medical officers have a number of duties imposed on them besides the mere attendance on the sick. 6. "The naval Hospitals are founded and endowed on a scale more ample than any civil institution, and are consequently able to aspire to greater perfection in Hospital management." Take, for instance, Haslar, with its "zymotic department" for the treatment of exanthematous fevers, its perfect bath establishment, and its fifty acres of airing-ground round it, and many other arrangements which, as the Commissioners say, are not waste, but, on the contrary, represent the perfection of intelligent Hospital construction and administration. These are, in short, the main reasons why naval Hospitals will and must be more expensive than civil ones. But still the Commissioners think that something might and ought to be done to reduce expenditure, although not in any degree by impairing efficiency. The first reform they propose is one which would carry with it the assent of their Medical readers, but whether the Admiralty will as willingly assent is another matter. They would abolish the useless post-captain and lieutenants, and put the Hospital directly under the Deputy-Inspector in charge, who, they say, requires no assistance in maintaining discipline. Then they would reduce the nurses—for venereal and chronic cases one nurse to seven patients seems too much. The Marine Infirmary at Plymouth might, they think, be incorporated with the naval Hospital. They recommend a tentative reduction for the present of the Medical staffs of the Hospitals, because they believe that the Board of Admiralty have always the means of supplementing a deficiency which any sudden emergency might cause, and an analogous reduction might, they think, be made in the departments of labour and management; and, lastly, they call attention to a want of uniformity in the annual expenditure per occupied bed in the several Hospitals which, under the head of salaries and wages, varies from £53 12s. at Plymouth to £31 16s. 8d. at Chatham—a sufficiently striking difference. We shall not follow the Commissioners into their detailed recommendations for each Hospital they visited, but we think that the Report is a very creditable one, and is cheaply purchased by the nation at the £353 13s. 6d. which Mr. Childers lately informed the House of Commons it had cost. Naturally enough, the Naval Medical Department felt somewhat nettled at the appointment of such a commission without any representative of their own body. We confess that we felt sympathy with them in their feeling of annoyance. But this does not interfere with an acknowledgment of the meritorious manner in which the gentlemen who formed the Commission appear to have performed their difficult and delicate task.

REPORT OF THE SELECT COMMITTEE ON THE CONTAGIOUS DISEASES ACT, 1866.

This report is short and to the point, saying in a few words what the committee considered necessary to say, but at the same time putting forward some propositions on which we consider that the decision has been formed on insufficient grounds. We shall first, however, notice those recommendations which we can accept as judicious improvements on the Act of 1866.

The committee have not at this late period of the session entered into the consideration as to whether it would or would not be advisable to extend the operation of the Contagious Diseases Act, 1866, to the whole population, as the question involves considerations of such magnitude, both social and economic, as would necessitate an inquiry more lengthened and elaborate than could be carried on during the time at their disposal. They have therefore confined their investigation, for the present—

1st. To the operation of the Act in those districts to which it has been already applied.

2nd. To the alterations which may be necessary to secure more satisfactory results.

3rd. To its further extension for military and naval purposes to districts now not included within its schedules.

On the first point strong testimony is borne to the benefits of both moral and sanitary nature which have already resulted from it. Prostitution appears to have diminished, its worst features to have been softened, and its physical evils abated.

On the second point, the committee are of opinion that the limit of five miles imposed by the present law is insufficient, and that it might with safety and advantage be extended in military districts to a distance of not more than fifteen miles, which is the limit of the powers of the metropolitan police in other respects.

The 17th section provides for the voluntary submission by women to Medical examination, but does not give sufficient power to secure their continued obedience to the requirements contemplated by the 19th section. To remedy this the committee recommend that the notices of visiting Surgeons shall have the effect of a warrant, which shall be an authority to the police to apprehend a woman refusing to appear on the day appointed.

Power should also be given to the visiting Surgeon to order the detention of women who are not in a condition to be examined when they present themselves, but with regard to whom there is suspicion that they are diseased.

It appears in the evidence that in the first four months of this year, out of 700 women of ill fame in Devonport, 41 were undoubtedly restored to a virtuous life by the direct and indirect influence of the Act, and 29 more left the district.

With respect to such women, the committee, having ascertained that many of them would object to apply to a justice in open court for a discharge from attendance, but would feel no such objection to be discharged by the Medical officer under whose care they had been, recommend that the visiting Surgeon, having satisfied himself, through the inspector of police, that a woman applying for relief from detention and examination had abandoned a life of prostitution, may, if he see good reason, order her release from further attendance; such order to be equivalent to one issued by a justice. Notice of such release to be sent to the justices under whose order or notice she was examined.

The committee further recommend that suitable accommodation shall be provided in the Lock Hospitals for the lying-in of pregnant women who may be suffering from disease—hitherto women under such circumstances, from lack of the necessary accommodation, were permitted to ply their trade until they were compelled by the approach of labour to seek admission into the Union Hospital. Also, in the case of children who may have become prostitutes at the instigation or with the connivance of their parents, that legislative provision be made for sending such children to an industrial school, or some other suitable institution, at the charge in part or wholly of their parents. The limitation of detention of women for treatment, under section 24 of the Act of 1866, was for six months; the committee advise its extension to nine months, also that the certificates on discharge shall in future remain in the hands of the police, instead of being given to the women, who have been known to transfer them to other women, or themselves to improperly use them as clean bills of health. The following places are to be added to those scheduled in the Acts:—Gravesend, Maidstone, Winchester, Dover, Walmer,

and Deal, the operation of the Act to be extended to fifteen miles. In conclusion, it is suggested that further inquiry, by a committee appointed early in the next session, should be instituted with a view of ascertaining whether it would be practicable to extend to the civil population the benefits of an Act which has already done so much to diminish prostitution, decrease disease, and reclaim the abandoned. Mr. Simon, the Medical Officer of the Privy Council, has been examined as to the nature of the evidence which should be prepared before this question is referred to a Parliamentary Committee, and the committee recommend that his suggestions on this head should be adopted by her Majesty's Government.

The above recommendations can hardly fail to meet with the approval of all who advocate legislation on such matters at all. It now remains for us to notice the points on which we do not agree with the conclusions and recommendations of the committee, and to assign our reasons for the difference of our opinion. The committee, influenced by the evidence of Dr. Barr, Surgeon-Major Wyatt, and Mr. J. Smith, Inspector of Police at Aldershot, have recommended the reintroduction of the system of periodical inspections of soldiers for venereal diseases. Although Surgeon-Major Wyatt, from his "limited contact with the line," may not "recognise" any feeling among Medical officers and men against the system of weekly inspections, we know it to be very distasteful to both, and Dr. Balfour, head of the statistical branch of the Army Medical Department, has given strong evidence as to its inutility. We have also shown, in our notice of the Army Medical Department Report for 1866, in pp. 617 and 677 of our 2nd vol. for 1868, that since the abolition of the system of personal inspections, and before the introduction of the Contagious Diseases Act, in the seven years from 1860 till 1866, the proportion constantly sick in military Hospitals in the United Kingdom from venereal diseases decreased from 23·69 to 16·19 per 1000, and the loss of service of the whole army from 8·6 to 5·9 days; also that the proportion of recruits rejected for venereal diseases during the same years very closely approximated to the proportion of soldiers constantly sick from the same, showing thereby what an immense amount of undetected and untreated disease there must be at large among the classes from which recruits come. We therefore conclude that the health of the army has not suffered from the abolition of personal inspections, and that the reintroduction of the system among the comparatively small class comprised in the army would be utterly ineffectual as a preventive means while so much disease exists among the civil population. We would also remark that the evidence of Dr. Barr and Police Inspector Smith shows that in the beershops and dancing saloons frequented at Aldershot by soldiers and women, the latter are in the habit of consorting freely with civilians after the return of the former to barracks at 9.30 p.m. If these civilians are not also liable to examination, we do not perceive any benefit likely to accrue from the examination of the soldiers.

The idea also of Surgeon-Major Wyatt that secondary disease is likely to be prevented or even rendered milder in its nature by early detection and treatment of the primary "hard sore," is directly at variance with the views of the best informed syphilographers of the day. We also maintain that, from Surgeon-Major Wyatt's description of the mode of examination of the men of his regiment, and from the time he assigns as necessary for the inspection—namely, about three-quarters of or half an hour for a battalion 800 strong—the inspection must be most superficial and ineffectual; even taking the longer period mentioned by Mr. Wyatt, during every minute 17·77 men must pass before the examining officer, who, with his attention directed solely to one part, must necessarily have a much more limited means of judging of the general health and appearance of the men than if he were to inspect them in the manner described to us as being in force in most regiments, by having them paraded in line in merely shirts and trousers, the former thrown open with sleeves tucked up, the latter drawn up over the knees, the feet being bare. By such an inspection secondary disease could scarcely escape detection, and if the regulation of reporting and punishing men for concealing disease were strictly enforced, we hold other inspection to be not only unnecessary, but useless. We trust that the War Office authorities may not reintrodnce or hastily adopt the recommendation of the committee on this matter.

THE WEEK.

TOPICS OF THE DAY.

One of the last acts of the expiring Parliament was to pass the Pharmacy Act Amendment Bill, which has now received the Royal assent. The Medical Profession are indebted to Dr. Brewer for the neutralisation of one of the most objectionable clauses, as far as the Profession is concerned, of the Act of last year. It will be remembered that the 17th clause of the original Act, forbidding the sale of poisons, seriously interfered with the power of Medical Practitioners to prescribe medicines containing poisonous drugs. It is true that the right of the legally qualified apothecary to supply medicines to his patient was preserved; but the rights of other Medical Practitioners were undoubtedly infringed, and their qualifications as authorised guardians of the public health were entirely overlooked and made subordinate to those of the registered chemist and druggist. Early in the present session Dr. Brewer took great pains to exclude legally qualified Medical Practitioners from the operation of this objectionable clause, and obtained the introduction of a special clause in the new Bill which excepted medicine dispensed under the prescription in writing of any legally qualified Medical Practitioner, provided such medicine be dispensed by a person qualified according to the provisions of the Pharmacy Act, and be labelled with the name and address of the seller, and the ingredients thereof and the name of the person to whom sold be entered in a book kept by the seller for the purpose. This clause was rejected by the House of Lords. Active opposition had been got up to it, but Dr. Brewer was not easily beaten. An alternative proposition was offered to merge Medical men in a general exemption clause with registered chemists; but this he very properly rejected, and we know that he was prepared to oppose the further passage of the Bill sooner than allow such a *mélange* to be foisted into the statute book. In the end, by his firmness and by the assistance he obtained from the Government in the House of Commons, he has gained a complete victory. On Tuesday the clause (No. 3) was reintroduced and passed the Lords, and on Wednesday Dr. Brewer had the satisfaction of hearing it read as having received the Royal sanction. The Profession are to be congratulated on this success, not merely on the point gained, although that is not a small one, but because the attention of members of both Houses of Parliament has been called to the fact that Medical men, and they only, are the true and legally appointed guardians of the public health, and that special relations exist between them and the public which ought not to be interfered with. Dr. Brewer deserves, and will receive, the thanks of the whole Profession for the part he has taken in this matter.

Amongst the recipients of the badges of Companionship of the New Order of the Star of India, is Surgeon Major J. Arthur, formerly of the Madras Fusileers. This officer rendered efficient services during the mutiny, and was recommended for the Companionship of the Bath, but at that time he had left the service and was therefore not qualified to receive that decoration. The signal distinction of being the first Medical officer who has been selected to receive the honour of the Indian order, may be well and more highly prized than even the Companionship of the Bath itself. We heartily congratulate Surgeon-Major Arthur on his well-earned decoration. The insignia of the order were distributed at the India Office on

Friday last, by the Duke of Argyll, Secretary of State for India, as representative of the Queen.

We have before remarked that poisonings have not diminished in consequence of the Act which granted a monopoly in the sale of drugs to the Pharmaceutical Society. The newspapers this week bear ample evidence of the justice of the observation. A blacksmith named Charles Smith has been sentenced to twenty years' penal servitude for an attempt to poison his wife with arsenic. A boy named Charles Gritt has confessed to having killed his master's daughter, Miss Emily Collier, with poisoned grain. He said that he did it "to see the effect on a human being." He had previously experimented with it on fowls. And Mrs. Langford, the chemist's wife, of Lynn, has been on her trial for the murder of her husband and child by strychnia. Although the evidence seems to have been overwhelming, the jury returned a verdict of "not guilty." Mrs. Langford had confessed her guilt, strychnia was found in her pocket, and traces of strychnia were discovered in the contents of the child's alimentary canal and in the liver; besides, the symptoms from which the child suffered seem clearly to have been those of poisoning by strychnia. But the question of whether it were possible that strychnia might have been conveyed into the child's system through the mother's milk was raised, and as there was no apparent motive for the crime, the jury seem to have thought themselves justified in taking the merciful view. The case against her of poisoning the husband was not pressed.

During the past week there have been several other trials of Medical interest. In the case of Lees *v.* Mawson, an action was brought against a dentist for negligently extracting a child's tooth and fracturing the jaw, which afterwards became necrosed. The judge, however, said that there was no evidence of want of skill and care on the part of the dentist, and a verdict was entered accordingly. Surgical evidence was ready to prove that the jaw was not fractured, but that it was destroyed by disease. The case of Jelly *v.* the London and North-Western Railway Company was curious, inasmuch as the plaintiff had been unfortunate enough to be in a railway accident before, and had obtained large damages for injuries from which, it seems, he had rapidly recovered. This time, however, Professor Erichsen had attended him throughout, and gave it as his decided opinion that he would never recover, although he might improve. Mr. Beever, a Medical man who had attended the plaintiff and had given evidence on his behalf at the trial for the previous accident, took a different view of his case. He was aware of his rapid recovery then, and predicted a similar result now, as he said his symptoms were precisely the same. This, however, was in contradiction to Professor Erichsen's evidence, and the usual edifying difference of opinion as to whether the symptoms depended on chronic inflammation of the spine or on hysteria was displayed by the Medical witnesses, of whom there were several on each side. In the end the plaintiff obtained for the second time damages to the amount of £1500.

A case of infringement of the Lunacy Act is reported from Leicestershire. A farmer named Black, residing near Loughborough, has kept a demented old man, now 74 years old, for the last thirty years in a small apartment, chained to the wall of the room, with his hands fastened in front of him with handcuffs, and his feet manacled. The prisoner's name is Wild, and he is said to be well connected. His relatives have paid Black £1 a week for keeping him. He has been kept chained night and day, being fastened down on his bed at night. The report adds that it is only fair to state that he was found well nourished, healthy, and clean.

A chemist and druggist named Miller, residing at Bow, has been committed for trial for forging a Medical man's signature to a certificate of unfitness of vaccination. The chemist, however, had been the assistant of Mr. Powles, whose name he had forged, and his defence was that he had signed the certificate by Mr. Powles's direction. Mr. Powles said that he had no recollection of authorising the defendant to sign his name, although he could not positively state he did not. The child was ill, and unfit to be vaccinated. Mr. Paget said that he must send the case before a jury, but that he would accept bail.

MR. GLADSTONE'S HEALTH.

The Premier's late illness arose, it appears, from an attack of mucous diarrhœa, which was severe, and at one time, through the pressure of anxious and unavoidable work, threatened to be obstinate. On the 2nd inst. the disease was subdued, and Dr. Andrew Clark, under whose Professional care Mr. Gladstone has been, gave a reluctant assent to his resumption of official duties. On the 6th there was a slight relapse, which was completely overcome by the 8th. On Tuesday, suffering only from the weakness incident to such an illness, Mr. Gladstone proceeded on a short visit to Walmer Castle, where we trust he will speedily recover his accustomed health and strength.

A FOREIGN REWARD OF ENGLISH MERIT.

The works of our Continental brethren are almost always received at their full value in this country; but it is only lately that the merits of British Surgeons have been acknowledged abroad. Every fresh instance of this change in our international relations is, therefore, worthy of record; and we have great pleasure in making known the fact that Mr. Spencer Wells was last month unanimously elected as an Honorary Fellow of the Obstetrical Society of Leipzig. The terms in which he was requested to accept the diploma are very flattering to an English Surgeon. The Secretary was directed to send it "as a feeble expression of the high esteem which pervades all the members of the Society, and which you have earned by manifold meritorious services to science, to the Medical Profession, and to the whole civilised world."

RUMOURED CHANGES IN ARMY MEDICAL APPOINTMENTS.

We have reason to believe that the statement recently made by a military contemporary that an interchange of stations is about to be effected between Inspectors-General of Hospitals Drs. Muir, C.B., and Beatson, C.B., the former at present Principal Medical Officer of British troops in India, and the latter Principal Medical Officer at Netley, is without any foundation in fact. If such an arrangement were to be made, it would give just cause of complaint to other Medical officers of the same rank both on full and half-pay. We are happy to hear that Dr. Muir's health, about which some uneasiness had been felt, has been quite restored by his residence in the hills during the present hot season.

PROMOTION EXAMINATION OF ASSISTANT-SURGEONS AT NETLEY.

The examination of the Assistant-Surgeons who have recently gone through the educational course at Netley has just been concluded. We are happy to hear that all have succeeded in satisfying the examiners as to their eligibility for promotion to the rank of Surgeon. The first place was attained by Assistant-Surgeon J. J. Pope, Royal Artillery, who has consequently become the owner of a full-sized regulation case of capital instruments placed at the disposal of the Director-General for this purpose by Surgeon-Major Fleming, 4th Dragoon Guards, on his retirement on half-pay.

THE WAY NOT TO DO IT.

A correspondent informs us that the Army Sanitary Committee recently made an official inspection at Portsmouth, but without having in any way put themselves in communication

with the principal Medical officer of the district, who had made frequent reports on the very defects about which they had gone down to inquire. It would appear to us that the interests of the public service, to say nothing of the courtesy due to a Medical officer of the high standing and long experience of Dr. C. A. Gordon, C.B., should have induced the inspecting committee to have made him acquainted with their intentions, even although they may not have considered his attendance necessary.

DR. LANKESTER'S ANNUAL REPORT.

The first section of the Report of the Coroner for Central Middlesex refers to "the number, nature, and districts of inquests," and this is illustrated by copious tables. The second treats of "inquests in public institutions;" the third relates to "inquests on deaths from natural causes," the fourth to "deaths from accidental causes," the fifth to "deaths from suicide," and the sixth and last refers to "inquests on cases of murder, manslaughter, and infanticide." Dr. Lankester is in favour of holding inquests on all persons who die in workhouses, and thinks, under proper regulations, this might be effected without involving much trouble to jurymen or officials. He thinks that these inquiries would exert a wholesome influence in respect to the treatment of the poor. He would carry out the same rule in respect to lunatic asylums, both public and private. He thinks, also, that inquests should be held on all persons found dead, whether Medical certificates are produced or not, and remarks—"The death of persons found dead is open to all kinds of animadversion, and it is always safer for private character and public justice that an inquest should be held." Inquests, too, should be held on persons dying after illness without Medical attendance. He would make the registration of births compulsory, particularly as it might strengthen the hands of public vaccinators in carrying out the Vaccination Act. It is known that "a sect of fanatics" recommended that parents should not have the births of their children registered, so that the Inspectors of Vaccination should not be enabled to discover the residence of unvaccinated children. With respect to the causes of death, he complains of the imperfection of post-mortem examination as occasionally conducted by Medical Practitioners, and suggests that the coroner should be enabled in all cases to command the services of a competent expert to make post-mortem examinations, as it would contribute greatly to the interests of justice and the advancement of the science of Medical jurisprudence. We admit the force of this observation, but there are so many objections to it that we question whether it is likely ever to be carried out. Dr. Lankester makes some judicious remarks on "still-born children," and insists upon the necessity, for the public welfare, that these children should be registered. Deaths from accident have decreased considerably during the past year, perhaps owing to the notice taken of them by the Registrar-General and to the precautions which have been taken by the police authorities and vestries, such as the erection of refuges at crossings, etc.

CRIMINAL LUNACY.

A statement has been just issued by an Association instituted under the patronage of the late Lord Brougham for the promotion of the best mode of penal treatment and crime prevention, on the necessity for a Royal Commission of Inquiry to facilitate an alteration of the present state of the law as regards criminal lunacy. This statement, after entering somewhat elaborately into the merits of the question, says:—

"Such a Commission may be expected to involve, eventually, the following important results:—

"1. A recognition, by the law, of the abundantly proved fact that uncontrollable dangerous insanity often exists collaterally with a knowledge of 'the difference between right and wrong.' This would modify the criminal responsibility of the insane. They would be held responsible to the extent of secure detention in asylums (even for life, where necessary), but not to the extent of a disgraceful death on the gallows, or a degrading transfer to a convict gang.

"2. The proof of insanity in criminal cases would be no longer committed to advocates (legal or Medical) of private interests, but would devolve upon an impartial jury or commission of scientific experts appointed by the Government. The investigation would then be conducted with a dignity alike befitting the majesty of the law and the scientific experience of the Medical Profession. (A similar mode of investigation has long been in successful operation in France and certain American States.)

"3. Theory being then reconciled with fact, and law with science, the national conscience in regard to true justice would be satisfied, and legal administration would secure increased influence and support. Private interference would be superseded by systematic and impartial investigation. The punishment of the sane criminal would be more certain, and the restraint of the insane rendered at once more humane and sure."

The following eminent Physicians cordially concur in the objects of the Association:—Drs. Thomas Laycock, Henry Maudsley, B. W. Richardson, H. W. Rumsey, John A. Symonds, Daniel Hack Tuke, and T. Harrington Tuke.

BARRACKS IN INDIA.

It will be satisfactory to those who are interested in vital statistics among our soldiery in India to find that the Government are working *pari passu* with the most advanced idea of the day. The Indian budget, discussed in the House of Commons on Tuesday, August 3, turned in great measure on the extraordinary expenditure for barracks, which, since the mutiny, according to one member—Sir C. Wingfield—had reached the amount of fifteen millions sterling, or thereabouts. There are now some fifty places, he said, where barracks are recently built or being built, some of these only twenty miles distant from the other. The great want in that country, said this speaker, is cubical space and current of air; mud walls and a thatched roof were far better than erections of brick or stone. There is no doubt, as the Under-Secretary for India (Mr. Grant Duff) expressed it, these new barracks are a considerable improvement on the preceding state of affairs, and that it was right to provide the best accommodation the science of the day could give; but, although these huge buildings were being constructed *in deference to the combined influence of benevolence and science*, the Government felt it had not yet arrived at final results, good for all time, in the manner of housing troops, and that these buildings might be yet very far from fulfilling the conditions that sanitary science might prescribe to the Indian Government for the future. They could scarce be regarded as the last expression of sanitary science in stone and lime. It may be answered very confidently that they are not so; that opinion upon the Continent has been for some time expressed in favour of one-storied buildings for troops, especially in hot climates—constructions of comparatively slight permanency and rapid removal, of spacious dimensions, and somewhat fragile material. Old buildings, castles, convents, Hospitals, old streets, old barracks and camping grounds are altogether discredited as residences for troops in favour of everything fresh and new and slight and scattered.

THE ONTARIO MEDICAL ACT.

The Ontario (Canada) Medical Act passed last session is causing great excitement and discontent amongst the legitimate Practitioners of Medicine in Canada. A more stupid and dangerous piece of legislation was never carried out; and so, we believe, a vast majority of the population of Canada now regard it. The *Toronto Evening Tribune*, in a very able leading article of the 17th ult., discusses at great length the entire question. It shows forcibly the injustice of the composition of the Council, the folly of admitting men to practise without having passed a proper examination, and the absurdity of supposing Medical education can be improved when the examinations in some

cases amount to the infinitesimal test of Medical knowledge. In the province it appears there are 2000 Practitioners of legitimate Medicine, and 200 homœopathic, eclectic, and other irregulars, and yet the Act virtually, in some respects, sets a tyrant minority over a majority all but powerless. The Act must be repealed. Surely the 2000 Practitioners alluded to can influence their representatives in Parliament sufficiently for effecting their object. The *Tribune* concludes as follows:—

"The present Act, then, seems to us altogether unnecessary, unjust, and practically inefficient in securing a higher standard of Professional education in those quarters where it has been hitherto considered most necessary. Let each school, we say, have equal and separate privileges, and then appeal to the public on its own merits and respectability without borrowing from those of others. If homœopaths and eclectics do not themselves insist upon a high educational and Professional standard among their own students, they will most certainly reap the reward of public indifference and contempt, and the effect to themselves will simply be extinction; but, on the other hand, if they possess any real merit, they will then most assuredly be in a position to make it more abundantly manifest. This, it seems to us, would be a far more rational and politic mode of procedure than forming any such hybrid council as the present."

HUMAN REMAINS IN GLACIERS.

We have recently examined a specimen, lately deposited by Dr. John W. Ogle in the Museum of St. George's Hospital, of considerable interest. It consists of the thumb of a man, supposed to be one of the guides lost in the year 1820 in making an ascent of Mont Blanc, which was brought to light more than forty years afterwards. The preparation is the gift of J. Snowden, Esq., a barrister of the Temple, who writes the following description of its discovery. He says: "In the year 1862 I was crossing the Glacier des Bossons, near Chamounix, and found protruding from the ice a man's arm; the flesh was quite firm and white, the thumb in question was lying severed just outside the hole, and just beneath the surface of the ice I found several finger-nails, hair, part of a leathern knapsack, a cork, etc. The arm was pretty confidently identified as having belonged to Fairraz, one of the guides who was swept away forty years before at the top of the glacier whilst making the ascent of Mont Blanc with Dr. Hamel. The appearance of fragments of their bodies was not unexpected, as Dr. Forbes, from his calculations as to the movement of the glacier, had predicted that portions of the remains would probably be found in that very year." Dr. Ogle also placed in the museum a copy of the Mont Blanc journal, *L'Abeille de Chamounix*, for September 21, 1862, in which reference is made to the discovery of the remains of which the thumb presented by Mr. Snowden is a part.

(*Translation.*)

"Friday, September 12.—Mr. J. Snowden, Miss Snowden, and Mr. H. Saunders, accompanied by the guide, Alfred Couttet, perceived, in traversing the Glacier des Bossons, some shreds of clothing, tufts of light-coloured hair, and, at a little distance, the right arm of a man mutilated near the wrist and fractured a little below the humerus. This limb . . . . was entirely covered with supple and scarcely livid flesh. It had been cast up the same morning by the crevasse at the side of which it had been picked up. Among the fragments of clothing were morsels of a leathern sack still covered with brown hair, remains of glass, and a red-stained cork . . .

"On one of the portions of clothing was an iron button . . . exactly similar to one of those which were attached to the clothes found in the previous year. This arm evidently belonged to one of the bodies whose skull had been cast up the year before. The various official minutes containing statements as to the nature of the parts which have been cast up show that three right arms have been thrown up by the glaciers in succession—a sufficient proof that the three victims of the accident of 1820 have not been separated by the changes in their icy cradle, and that the opening of a neighbouring fissure will in time very probably restore the other parts of these bodies so remarkably preserved for forty-two years."

FROM ABROAD.—THE SEASIDE HÔPITAL NAPOLÉON—JOHN BULL'S BIGOTRY—INTERSTITIAL CAUTERISATION.

A recent number of the *Moniteur* contains an interesting account of the enlarged seaside Hospital for Children which has just been opened by the Empress. It is situated a few miles south of Boulogne, at Berck-sur-Mer, a fishing village, which, having no port, is not liable to the muddy deposits on the recession of the tide which so often render such localities unhealthy. As far back as 1861, that enlightened body, the Paris Administration de l'Assistance Publique, pitched upon this sandy shore as a favourable place for making a great experiment it had resolved upon, of the application of marine hydrotherapeutics to the treatment of scrofula. We suppose our own establishment at Margate gave the first idea of this; but it will be seen it has been followed out on a much vaster scale. As a tentative precedure a provisional Hospital was established for the purpose of receiving 100 of the young of both sexes during both winter and summer. This was erected at an expense of 85,679 francs, to which 16,439 had to be added for the purchase of the land and furniture, or a total of 102,118 francs. This experiment has been carried on during eight years, under the direction of M. Pérochaud and the incessant inspection of MM. Marjolin and Bergeron, and the results were so satisfactory that the extension originally contemplated was determined on. It now was determined by the Administration not merely to enable a greater number of children to be treated at the establishment, but to transport to the seaside all the scrofulous children who came under their care. In this way they not only facilitated the cure of the disease in these children, but they gained much wanted space in the two Children's Hospitals at Paris, which would enable the proper separation or isolation of those of the remaining patients who became the subjects of contagious disease. The project was most carefully elaborated beforehand in order that no delays might arise during its execution, and in twenty months after its commencement the Hôpital Napoléon was ready for the reception of near 700 children. The cost, exclusive of that of the provisional Hospital, was estimated at 2,400,630 fr., and it is expected that this sum will scarcely be exceeded. The beds for patients and officials number 800, the expense amounting to a little more than 3000 fr. per bed. Sufficient land has been secured to provide for all future contingencies and to prevent any buildings or occupations detrimental to health being established in the vicinity. The disposition of the edifice, which is in the shape of a squared horseshoe, is described at length in the article we quote from, and an account given of all the appurtenances, such as the chapel, which is open to the neighbourhood, kitchen, washing establishment, bakery, and other provisioning establishments, refectories, school and workrooms, sea-water swimming ponds, capable of being heated in winter, hydraulic apparatus, etc., etc. There are separate pavilions containing several wards for children who become the subjects of acute or contagious diseases, or whose cases call for any exceptional treatment. The ordinary sleeping-rooms, which are fitted up more like those of a boarding-school than a Hospital, are 14 in number, each containing 36 beds, 40 cubic metres of air being allowed for each. In each of the wards of the Infirmary there are only 16 beds. The whole of the building is surrounded by covered galleries, which allows of all the duties of the establishment being carried on in all weathers, and supplies the children with a long promenade. They have also two large gymnasia. Besides the swimming ponds and the bathing allowed in the open sea in fine weather, there are numerous baths distributed over the building, and one ward is especially employed for hydropathic treatment.

The exaggerations and misapprehensions which prevail on the Continent with regard to most of our procedures are so inveterate that even the corrective power of a greatly multiplied intercourse does not seem as yet to have produced much effect. An article in a recent number of the *Revue des Cours*,

a journal usually well informed on matters going on here, and in intimate relations with several of our men of science, presents us with rather a rich specimen in illustration :—

"In France," it says, "we are naturally disposed to believe in the solidarity of all kinds of liberty, and we can scarcely understand how it is that in free England the excess of religious feeling is enabled to obstruct by so many impediments the development of natural science. Of all the sciences, physiology is that which must suffer most from such a state of things. It is not very long ago that a certain number of the professors of the English Medical schools publicly condemned the employment of physiological experiments in courses of lectures, and reprehended the practice of the French Faculties where they generally have the pretension of proving experimentally what is advanced. Woe to those who venture to perform vivisections! If they are not protected by a high and independent social position, they will not endure sufficient punishment by reason of the kind of repulsion which they find themselves the objects of, but they run the risk of being denounced before the tribunals. In fact, England is covered with animal protection societies, who set on foot agents charged among other things with denouncing and prosecuting vivisectors. We could cite unfortunate physiologists who have on several occasions been condemned to fines of 120 francs for having dared to scalp a frog. . . . . In England, as in Scotland, the Established Church is almost everywhere dominant in superior instruction, and it is in general difficult to attain a chair without belonging to it, or at least having its patronage. It is the same with the Hospitals, which are generally supported by private contributions. . . . . When the physiologist Doctors who rebel against the Anglican yoke do obtain a chair or an Hospital service, they have little more chance on this account of acquiring a lucrative practice amongst the higher classes. Thus many English *savants* are obliged to stifle their opinions, and to almost hide themselves in order to work. Several of the great *savants* have only been able to retain their independence of thought by reason of their personal position enabling them to disdain public functions and the advantages of popular favour."

Need we point out the exaggerations and ridiculous errors contained in these passages? Had we met with them in one of the ordinary journals, we should have passed them by without notice; but it is very discouraging to find them thus gravely recorded in one of real scientific pretensions, and having a large circulation among a class of readers who, we had hoped, were too well acquainted with the true position of men of science in this country to allow of such observations being addressed to them.

However, there is still, the writer thinks, a ray of hope beaming for us in the distance, and the source of this is the drollest part of the business, being no other than the projected amalgamation of the Medical Societies of London! "If the Academy of Medicine of London thus becomes established," says our critic, "the liberal element will, in the end, most surely predominate, and the authority which cannot but attach to such a body will perhaps serve as a basis for independent ideas. Here, indeed, it may be truly said, 'union is strength.'" Whatever we may do in the matter of so prosaic a thing as liberty, we must evidently go to France for an idea. Little did the economists of the Medico-Chirurgical Society, in putting forth their amalgamation scheme, dream that they were laying the corner-stone to the emancipation of science from the thraldom of the Established Church.

The *Gazette des Hôpitaux* of July 24 contains an account of the trials which M. Richet has been making during this last year of what he calls "interstitial injection of caustic substances." The caustic employed is the chloride of zinc, but, instead of using it in the solid form, M. Richet employs it after it has become liquefied by exposure to the air. Being very hygrometric, it is soon converted into a liquid of a syrupy consistence. The form of tumour which has been most frequently experimented upon is the sebaceous cyst of the scalp, which the French call *loupe*. It is possessed of little vitality and power of reaction, and it suffices to inject into its substance, by means of a Pravaz syringe, from one to four or five drops of the liquefied chloride. When the *loupe* is a true lipoma, consisting of nothing but fatty tissue, a few days after the injection its contents may be pressed out by the small aperture in the skin which is left by the little superficial eschar produced at the point of puncture. It has frequently happened that a single drop of the caustic thus injected has sufficed for the removal in this way of tumours of considerable size. In a case in which the *loupe* was formed by the transformation of some blood which had been effused as a consequence of a fall, enucleation could not be practised after the injection, and the knife had to be employed. The tumour, however, consisted of several firm, semi-transparent, fibrous-looking layers, in nowise resembling a lipoma; and this is the only instance of failure in twelve months, during which M. Richet has so treated a considerable number of *loupes*.

A week or two since M. Richet tried this injection on an enormous goitre, making several punctures along the median line. There resulted mortification of the skin over an extent of about 3 centimetres, as also sharp inflammation with induration, and perhaps more or less gangrene of the median lobe of the thyroid gland. It is remarkable that the two lateral lobes diminished rapidly, and became more supple during this inflammation of the median lobe. The injections have been too recently made to allow of the eventual result yet being determined; but it will be a great boon if this mode of cauterising proves efficacious, so that it may be substituted in the treatment of bronchocele for the *cautérisation par flèches* which is employed in Paris, and has in several cases been followed by fatal hæmorrhage.

In our number for May 22 we noticed the practice of Dr. Krafft-Ebing, which he states as being highly successful, in producing the rapid and painless enucleation of steatomatous tumours of the scalp, and which consists in the injection into their substance of a few drops of a solution of tartar emetic.

PARLIAMENTARY. — NITRO-GLYCERINE — PURE LIME-JUICE—THE TRANSIT OF VENUS—PHARMACY ACT AMENDMENT BILL—SANITARY AMENDMENT ACTS—ACCIDENTS IN COAL-MINES.

On Thursday, August 5, in the House of Lords,

The Nitro-Glycerine Bill passed through committee.

In the House of Commons, in answer to a question by Mr. Candlish as to the lime-juice used in the navy,

Mr. Baxter said the principal officer of the Victualling Department of Deptford had reported favourably on the use of lime-juice without the addition of 15 per cent. of spirits. Pure lime-juice had also been sent to the Island of Ascension, and returned in excellent condition. He held in his hand the report of the Controller of the Victualling Department, and there was no objection to its production.

On Friday, in the House of Lords,

The Nitro-Glycerine Bill was reported, and the Sanitary Act (1866) Amendment Bill was read a second time.

In committee of the House of Commons, on the motion of Mr. Childers, the House agreed to petition the Queen that arrangements might be made for observing the transit of Venus which is to take place in 1874 in various parts of the world and to assure her Majesty that the House would meet the expenses of the same—calculated at £10,500.

In the House of Lords on Monday, August 9,

The Commons' Amendments to the Pharmacy Act (1868) Amendment Bill and to the Contagious Diseases Bill were agreed to.

The Sanitary Act (1866) Amendment (Ireland) Bill was read a second time.

The Sanitary Act (1866) Amendment Bill was read a third time and passed.

Lord Elcho called attention to a memorial recently presented to the Government, signed on behalf of 30,000 miners, praying for a special inquiry into the causes of recent accidents in coal mines, and in reply,

Mr. Bruce did not agree in the necessity of a special inquiry, as the causes of all these accidents in a general way were perfectly well known. He regretted that, owing to the pressure of business, it had been found impossible to legislate this year but he hoped to take the subject up next session.

ARMY MEDICAL DEPARTMENT. — PROMOTION OR PUNISHMENT?

(*From a Correspondent.*)

The object of Lord Bury's queries in the House of Commons will be best explained by stating that soon after the Crimean War, in consequence of the unfair manner in which foreign service had been distributed, a roster was established, by which it was supposed *every officer* would have his fair share of home service. The precise rules by which the roster has been governed have been kept secret — at all events, are not published. The consequence has been that some few officers, possessing sufficient interest either to effect exchanges into regiments at home or obtaining some employment in the Army Medical Board or Netley, have been able to evade or escape their turn of foreign service, while others, less fortunate, have been obliged to proceed on foreign service, out of their *fair* turn, or submit to a forced retirement on an inferior scale of pension. Any impartial or unprejudiced person will admit this is a very serious injustice, and one that loudly calls for redress.

Mr. Cardwell has been understood to say these appointments were made and continued at the will or pleasure of the Secretary of State for War. The recipients know sufficiently well how to ingratiate themselves with the authorities in Pall-mall to be *continued* in their posts until they have virtually become appointments for life. Thus the ten seniors on the board have passed upwards of thirty years at home; others have not been abroad since the Crimean campaign, although five wars have taken place in that period, and all have exceeded the allotted period of staff employment in the army—viz., five years.

This is not the only bad feature in the abuse of patronage for which the Secretary of War, by his own showing, is responsible; for, while these fortunate gentlemen have thus been able successfully to escape their turn of foreign duty, their promotion has gone on *uninterruptedly*, or, as in the case of two of them, the rate of pay of a higher grade has been bestowed, while some of them have reaped the highest honours and rewards due to service in the field. At the same time appointments have been reduced (notably an Inspector-Generalship in London previously held by Dr. Lyon), and old officers promoted for distinguished service placed on half-pay as a reward for merit.

THE ANNUAL MEETING OF THE MEDICO-PSYCHOLOGICAL ASSOCIATION.

HELD AT YORK ON MONDAY, AUGUST 2.

(*From a Correspondent.*)

The meeting at Leeds over, the members of the Psychological Association met at York to hold their twenty-fourth annual session, and again festivities, debates on associational topics, and learned papers on science were so intimately blended that it is somewhat a difficulty, at this early stage, to distinguish one from the other, or to say which was the best. Of course the York meeting was, by comparison with the meeting at Leeds, small; and, indeed, it reminded me much of the earlier meetings of the British Medical when it gloried, as it had a perfect right to glory, in the modest name of "provincial." But although the meeting was small compared with that of the larger Society, it was a large meeting of psychologists, and as successful as any meeting could be. Indeed, there was a pleasant relief in attending it, a freedom from excitement and haste, a feeling that the business of the meeting could all be comprehended, which, to me, was peculiarly refreshing and wholesome, so that I almost sighed for the good old days of the old "Provincial."

Many of us who attended the "Psychological" reached York on Saturday, and proceeded at once to the North Riding Asylum, where Dr. Christie met us in right brotherly spirit, led us over the farm, grounds, and gardens, and entertained us at a banquet which, in point of taste, to say nothing of the more substantial part, was simply perfect. After luncheon we inspected the house and, the inspection over, were shown some ophthalmoscopic demonstrations by Dr. Clifford Allbutt. In the eventide the new President of the Association, Professor Laycock, gathered us round him to dinner at York, and performed the host liberally, heartily, and eloquently. Sunday could hardly be said to bring us rest, for there was a grand service in the Minster, and as my Lords Judges Cleasby and Brett were holding assizein the week days, there was a civic state procession to the Minster, and the Archbishop was on his throne, and the announcement of my Lords was by blast of trumpets and appearances of awful javelin men carrying in a fearfully imbecile manner their shining and terrible weapons for defence or death. If you were to ask one of these desperadoes what he could do with his weapon, he would probably tell you he could cut boughs off trees, and if this were not one of the original uses of the instrument, it were certainly one of the best—*i.e.*, when boughs of trees want cutting, or some modern Druid or Druidess (I suppose there were Druidesses once of a time) is dying for mistletoe. To proceed, on Monday morning we all got to work in the lecture room of the Philosophical Museum. The museum is itself worth coming to see, from London or anywhere. It is rich and rare, and if I had anything to compare it with, and could make even a Tupperian strain, I should be inclined to travestie Tom Moore, and say, "But oh! its beauty is far beyond." Here, however, I must stop, and simply invite those who have not seen the museum to go to it. There is a picture there which alone is a study. It is done by Etty—a York man, by the way—and the subject of it is Mr. Atkinson, the author of that A to B bibliography of Medicine which most unhappily stopped at B, because, I suppose, the plan of the book was on too large a base for any one man to complete it. Atkinson was a genius in earnest; he was, I am told, a man of overflowing humour, a great collector of specimens of natural history, a scholar, and—why are the gods so liberal to one man and not to all?—a splendid violin player. Well, there he is, stamped on canvas by Etty, a study even now, though he is in his grave corporeally, or what may remain of him, but living there on that piece of cloth and dab of oil. Slovenly old wit; there he is, with a face not unlike that which Sir Joshua gave to John Hunter, but with such a humorous sense about it, and such expression, that I declare, as I looked at it, I expected every moment one of the eyes would wink, and if it did not the fault was not in eye. Ah! I felt if I could be with you, you fine old sloven, when Master Etty was touching you up to that touch of you he has left! What pleasure I should have with you; what experiments we should make together; what stories we should tell each other; what rotten old books we should peruse; what music and poetry we should revel in; what laughs and jokes we should have till our sides ached; what numbers of pipes we should —— but stay; grave Mr. Editor of the *M. T. and G.* (the printer is especially requested not to alter this mode of spelling your valuable periodical), where have I got to, and what is the business? I must try back; I was at York, and the business was that of the (it is an awful title to write, and one I never could spell correctly), the Medico-Psychological Association.

To business, Sir, then, in a bran-new paragraph. The meeting was opened by an address from the retiring President, Dr. Sankey—a good, sound, common-sense address, giving just the impression that ought to be left by one who is quitting office with true dignity. Thereupon the chair went over to the new President—or rather, as not many of us believe in manifestations, the new President went over to the chair, which, in a more natural way, is the same thing. Prof. Laycock's first action on taking up the cares and duties and honours of office was to read a moderately sharp and decisive lecture on the reforms required in the government of the Society. In this effort he certainly laid on everything except the usual thing that is usually laid on upon these occasions. He flattered nobody; he did not so much as say that the Association was great or wonderful; but he stuck by it nevertheless, and opposed, tooth and nail, its submersion in and into the Royal Society of Medicine. He further proposed several measures which, when carried out, will be thought conducive to the stability of the institution. The address was written in fine English, and was delivered forcibly and eloquently. It was entitled "The Objects and Organisation of the Medico-Psychological Association."

After the address twenty-three new members were elected as ordinary members, and Egerton Vernon Harcourt, Esq., Sir James Clarke, Dr. Lockhart Clarke, Dr. Richardson, T. B. Woodd, Esq., and Dr. Guy were elected honorary members.

As office-bearers Dr. Tuke was re-elected honorary secretary, Dr. Paul honorary treasurer, and Drs. Maudsley and Robertson editors of the *Journal*.

Dr. Boyd was elected for the next future presidency. Some new members were added to the Council.

The treasurer, Dr. Paul, read his report, and showed a balance in hand of £41 15s. The receipts during the past year were £261 18s. 5d. The report was adopted.

A cordial vote of thanks was passed to Drs. Robertson and Maudsley for their able services as editors of the *Journal*, and for the economy with which they conducted their labours on behalf of the Association.

A motion was moved by Dr. Tuke and seconded by Dr. Robertson for the appointment of a committee to consider the proposed union of the Association with the Royal Medico-Chirurgical Society, with instructions to carry out the amalgamation in the way they shall find best. A discussion followed, in which most of the speakers held that a committee should consider the question of amalgamation, but should not decide on the question as at first proposed. Dr. Christie moved, as an amendment, "That a committee be appointed for the following purposes:—To consider any proposals for union, and to report thereon at the annual or a special meeting; to consider and report what changes, if any, are desirable in the organisation of the Society and in the mode of conducting the *Journal* of the Society; that the committee consist of the President and the former Presidents of the Association, and that they be empowered to vote by proxy and to carry on business by correspondence."

A committee was ultimately formed, consisting of the President, the past Presidents, and Drs. Arlidge, Christie, and Crichton Browne, to inquire into the constitution of the Association, and suggest what was necessary for its advancement. These matters occupied the whole of the first meeting.

After a short rest, during the interval of which many members inspected the crypts of the Minster, under the direction of the Rev. Canon Hey, grandson of Hey *primus*, a second sitting was held for scientific work. The Honorary Secretary, Dr. Tuke, read a report of a committee "On the State of the Criminal Law in relation to Insanity." The report was received and adopted, but the time was too short for discussion upon it. The Profession generally will await with interest the opinions of the Psychological Association on this, at present, all-important subject. A second report, having reference to the quarterly meetings of the Society, was also read and adopted. Dr. Laycock again led the way, and delivered a powerful extempore address on the progress of Psychological Medicine. In this address the author put the question—How far does the corporeal condition of a man or a woman influence the moral will, and how far are men and women responsible to society on account of morbid corporeal conditions? He held that science was now advancing with such rapid strides that this question would soon be answered in a true and scientific manner, and he proceeded to trace the influence of certain physical agencies, such as galvanism, electricity, and some drugs—opium for an example—on the condition of the brain. The astronomer could now, by means of spectrum analysis, determine the composition of the sun, the fixed stars, the nebulæ, and it was not difficult to foresee or to hope that if these wonders could be achieved, and the distant space explored, the physiologist might in time, by his labours, explore the inner regions of the mental activity of the animal organism. A vote of thanks to Professor Laycock was moved by Dr. C. Browne, seconded by Dr. Down, and carried with acclamation.

Dr. Laycock, having returned thanks, was followed by Dr. Richardson, who read a paper "On Physical Disease from Severe Mental Strain," a paper which caused a vigorous debate, and Dr. Richardson was in turn followed by Dr. Lockhart Clarke, who related a case of "General Paresis," and showed a curious diseased condition in a brain removed from a patient who had been under the care of Dr. Gairdner, of Glasgow.

Dr. Sabben came next in order with an essay "On Ritualism with reference to its Influence on Insanity." He held that Ritualism at the present time is one of the most prominent causes of insanity in the middle ranks of life. Dr. Tuke was also on the agenda for a communication entitled "An Apology for Lord Brougham on Psychological Grounds."

As a matter of course the meeting was followed by a dinner, which was held at the Station Hotel, and at which were present the Lord Mayor of York, the Rev. Canon Hey, Mr. Husband, President of the Council of the British Medical Association, and several of the Practitioners of the city of York.

And again a holiday, this time at the Assembly Rooms, where Dr. Christie brought the meeting to a close with a conversazione. Many specimens of great interest were exhibited; the gaps of the evening were filled up with excellent glee singing, and short lectures were given by Dr. Proctor on experiments with the induction coil, Dr. Lockhart Clarke on microscopical demonstrations of the brain, and Dr. Richardson on his mode of cutting with the rapidly revolving knife, incisions being painlessly made with the knife on the arm of the lecturer and on one of the visitors, who volunteered to be subjected to the experiment.

On the morning after the meeting Dr. Richardson met a considerable number of members of the Association and most of the Medical men of York, and gave a lecture, in the Museum, on "Artificial Respiration," exhibiting in action, with success, his new apparatus for restoring respiration and life after apparent death from narcotic vapours.

REVIEWS.

RECENT WORKS ON OPHTHALMIC SURGERY.

A Treatise on the Diseases of the Eye. By J. Soelberg Wells, Professor of Ophthalmology in King's College, London, Ophthalmic Surgeon to King's College Hospital, and Assistant-Surgeon to the Royal London Ophthalmic Hospital, Moorfields. London: John Churchill and Sons. 1869. Pp. 717.

On Long, Short, and Weak Sight, and their Treatment by the Scientific Use of Spectacles. By J. Soelberg Wells. London: John Churchill and Sons. Third edition. 1869. Pp. 243.

The Theory of Ocular Defects and of Spectacles. Translated from the German of Dr. Hermann Scheffler by Robert Brudenell Carter, F.R.C.S. Exam. London: Longmans, Green, and Co. 1869. Pp. 240.

Diseases and Injuries of the Eye; their Medical and Surgical Treatment. By George Lawson, F.R.C.S., Surgeon to the Royal London Ophthalmic Hospital, Moorfields, and Assistant-Surgeon to the Middlesex Hospital. London: Henry Renshaw. 1869. Pp. 339.

Du Diagnostic des Maladies des Yeux. Par X. Galezowski.

On the Diagnosis of Eye Diseases by the Chromatoscopy of the Retina. Preceded by an Essay on the Physical and Physiological Laws of Colour. By X. Galezowski, M.D., etc., Professor of Ophthalmology. With Thirty-one Woodcuts, etc., etc. Paris: J. B. Baillière and Sons. Pp. 267. 1868.

Second Notice.

Since the introduction of the ophthalmoscope in unravelling causes of sudden and obscure amaurosis, a number of cases has been recorded by Von Graefe, Liebreich, Knapp, Quagliano, and others, in which blindness rapidly taking place in one eye was attributed to embolism of the bloodvessels of the retina. This view has been pretty generally accepted, and most Ophthalmic Surgeons attribute to blocking of the retinal vessels that form of amaurosis which comes on rapidly in one eye of a person suffering from cardiac disease or aneurism, and reveals, on ophthalmoscopic examination of the affected organ, an anæmic disc, contracted arteries, oscillating circulation in the veins, and a bright red spot in the region of the macula lutea. Professor Stellwag, however, does not seem to regard with much favour this theory of embolia, and, in discussing amaurosis from sudden interruption in the arterial blood supply, writes as follows:—"If we take a comprehensive view of all that has been reported on this subject, we cannot escape the conclusion that it is an inflammation, and usually a retro-ocular neuritis, which, by abundant secretion of morbid product, and consequently a contraction of the space, has caused the lessening of the calibre of the vessels." The following are given as the chief arguments against embolic amaurosis:—Firstly, the presence of an embolus within the retinal vessels has never been clearly demonstrated in any reported case. Secondly, considering the close connexion between the arterial branches of the retina and the nutrient vessels of the papilla, it is inconceivable how an obstruction in the principal twig could permanently reduce the conduction of retinal blood to a minimum. Thirdly, symptoms have never been indicated of temporary want of blood in the choroid and other parts of the eyeball. Professor Stellwag admits the fact of an actual closure of a single branch of the arteria centralis so often presented in cases of sudden amaurosis from supposed embolism, but states that it can be explained in the simplest manner by inflammatory thrombosis, which is by no means a rare occurrence in neuro-retinitis.

"The subject of chromatic aberrations, whether congenital or acquired, has long been one of great interest from its bear-

ing on the physiology of vision and the determination of the structures which communicate colour sensations. The forms that have hitherto been principally recognised and studied are the inherited colour blindness known in this country as Daltonism, the yellow vision described by Rose and Schultze as a result of the internal administration of santonine in large doses, and the total or partial colour-blindness sometimes associated with injury or disease of the brain. M. Galezowski, the author of many papers on the application of the ophthalmoscope to the diagnosis of cerebral disease, has long been struck with the influence exerted by the various morbid changes of the optic disc and retina upon the chromatic sense, and has submitted all amaurotic patients coming under his notice to an examination into the condition of this faculty of vision. The results of these investigations have been published in connexion with a very elaborate study of the physiology of coloured vision and the causes of chromatic aberration. The theory proposed by Dr. Young, and accepted by Helmholtz, that the eye is furnished with three kinds of special nerve fibres for receiving and conducting to the brain three different colours—red, green, and violet—is opposed by M. Galezowski, who considers the cones as the true chromatic organs of the eye. The following is a brief statement of these views:—

"The summit of each cone looks, as we know, towards the centre of the eye, and the cone from its base to its summit is traversed by a central thread which passes into and is lost in the granular layer. Now, a luminous bundle striking the surface of the cone near the summit would necessarily be diverted whilst traversing the cone, and become decomposed according to the laws of refraction, so as to produce at the base concentric circles of the solar spectrum. Thus the base of the cone would be marked in order from within outwards by circles of red, orange, yellow, green, blue, indigo, and violet. The seven concentric circles at the base will always have this disposition, and be constantly sensitive of the impressions of these seven colours, so that if one kind of light—blue light, for example—should fall upon the cone, it would impress only the blue portion of the base, the other circles remaining unexcited. Supposing now that white light arrives at the cone, it will be decomposed at the base, but, as all the seven circles will at once be excited, white light is produced. Thus every simple and primitive colour of the solar spectrum will traverse the cones without being decomposed, and then exert an impression upon a part of the base which corresponds to the nature of the colour. The distinction of this deviation is defined by the amount of refraction which each colour possesses, the red rays passing to the base almost directly, and the violet rays undergoing a very considerable deviation. A compound colour will be decomposed in the cone so as to produce simultaneously two or three impressions, which will then be transformed by the brain into mixed impressions."

The rods (*bâtonnets*), according to M. Galezowski, allow the passage of those rays only which are directed parallel to their axes, and they thus receive only the impressions of simple white or black rays, which can be transmitted to the base of each rod without being refracted.

Upon these views, which to us are very fanciful and rest upon no truly scientific data, M. Galezowski bases his explanations of congenital colour-blindness, anomalies in the perception of colours, and coloured vision. The section on pathological or acquired colour-blindness is one of some interest, and gives the results of chromatoscopic investigations in cases of albuminuric and glycosuric retinitis, of intra-ocular syphilitic disease, of progressive atrophy of the papilla, and of amblyopia in various cerebral affections and as a symptom of alcoholism. Rules and directions for practising retinal chromatoscopy, the title given by M. Galezowski to the investigation of the chromatic faculty of the eye, are given in this work at great length, and a chromatic scale is to be found at the end of the volume. In this useful addendum eleven colours, corresponding to those recognised by M. Chevreul, are arranged in columns, the first colour being red and the last violet. Each column is subdivided into four tints, of which the uppermost is the darkest. "This arrangement," asserts M. Galezowski, "enables one to distinguish each colour separately, and at the same time renders it possible to appreciate in patients the phenomena of the simultaneous or successive contrast of intact or altered colours."

Dr. Hermann Scheffler's work on "Ocular Defects," which is presented in an English form by Mr. Brudenell Carter, deals with the affections of accommodation, refraction, and convergence, and describes an improved form of lens for spectacles. It also gives views concerning two peculiar functions styled "application" and "opponency of the fields of vision." The "orthoscopic" spectacles commended by Dr. Scheffler have been devised for the purpose of preventing the injurious effects produced by ordinary spherical lenses on the muscular apparatus of the eye, and constitute a great improvement on the "decentred lenses" of M. Giraud-Teulon. The author gives a mathematical formula which supplies for every lens a determinate prism. The prism and the concave or convex lens are not formed of separate pieces, but are ground from a single glass and from the peripheral portions of a larger lens, and are therefore called eccentric glasses. The fabrication of eccentric lenses from larger glasses is stated to be "on more than one account important. The cost is thus very considerably reduced. The large lens furnishes the eccentric ones in perfect pairs of identical material, with equal curvatures and with similar prismatic forms always corresponding to the curvature."

Although this volume has been introduced to the Profession at home by the accomplished translator of Zander's work on the ophthalmoscope, it is difficult to say with whom it is likely to find any favour. Dr. Scheffler's remarks on the "orthoscopic" spectacles, and on the anomalies of accommodation and refraction are, without doubt, important and valuable; but surely the author's reputation in this country would have gained more by the publication of a concise and readable abstract of his views on these matters than by the translation, however excellent, of a diffuse work bristling with mathematical formulæ and abundantly stocked with strange words. The theories of "application" and "opponency" are ingenious, but are based more upon geometrical exercises than upon physiological and clinical investigation.

The modern views of Donders and Von Graefe on the anomalies and affections of refraction and accommodation are treated very ably in the twelfth chapter of Professor Wells's "Treatise," and, discussed at greater length, constitute the subjects of his work on "Impaired Vision," a third and improved edition of which we hail with much satisfaction.

We have been fully supplied in the last two or three years with systematic treatises on diseases of the eye by Messrs. H. Power, C. Bader, and C. Macnamara, and Professor Soelberg Wells in the exhaustive work above noticed; and Mr. Lawson has given us an excellent book on "Injuries of the Eye, Orbit, and Eyelids." But there seemed still to be room for a clear, brief, and concise, yet practically full, manual on modern Ophthalmic Medicine and Surgery, such as might serve as a text-book for students and a companion for the busy Practitioner. This Mr. Lawson has supplied, and supplied admirably well. Of his qualifications for the task of producing such a work it would be superfluous to speak. He is a "Past Master" on the subject, and while any work of his is sure of a favourable reception, he has taught the Profession to judge him by a high standard of excellency; and so judged, the little book we now notice will certainly not disappoint its readers. Necessarily concise and brief as to details, it is admirably clear and eminently practical. The reader feels that he is in the hands of a teacher who has a right to speak with authority, and who, if he may be said to be positive, is so from the fulness of knowledge and experience, and who, while well acquainted with the writings and labours of all other authorities on the matters he treats of, has himself practically worked out what he teaches.

The book is divided into eleven chapters, devoted successively to the consideration of diseases of the conjunctiva; of the cornea and sclerotic; of the iris; of the crystalline lens; of the retina, choroid, and optic nerve; to anomalies of refraction and diseases of accommodation; strabismus; special injuries of the eye; diseases of the lachrymal apparatus; diseases of the eyelids; and to diseases of the orbit; and we do not hesitate to assert that in all these subjects the student will find himself safely and clearly guided through all the difficulties of diagnosis, prognosis, and treatment, Surgical and Medical; while the well-earned reputation of the author relieves us from entering on any detailed notice of his opinions and practice. We may observe, however, that, like Professor Wells, he has a high opinion of the value of Graefe's modified linear extraction, "as the operation which now gives the most general satisfaction for the removal of senile cataracts." He remarks, "From my own experience I can speak most highly of this operation (Von Graefe's), and prefer it to all others when the patient is both able and willing to take chloroform. But," he adds, "if from any cause chloroform is inadmissible, I think that the ordinary flap extraction is safer. The details of Graefe's operation require to be so delicately executed, and the time of their performance is comparatively so long, that the patient will often lose self-control, and by his unrestrained movements greatly jeopardise the eye."

Lovers of the fragrant weed will be glad to find that Mr.

Lawson does not consider that tobacco can be fairly judged guilty of causing white atrophy of the optic nerve. He says—"I do not remember ever having seen a case in which the loss of sight could be fairly attributed to tobacco *alone*. There was always, in addition to the immoderate smoking, some other excess, such as intemperance, dissipation, or an undue mental strain, with loss of rest."

We must confess to some surprise at finding that, when speaking of the treatment of that common annoyance, *hordeolum*, Mr. Lawson makes no mention of cod-liver oil. We have found it of much greater value, both for the cure and the prevention of stye of the eyelid, than bark or iron, separately or in combination.

Anomalies of refraction and diseases of accommodation are very difficult subjects to treat of clearly and simply, but Mr. Lawson has handled them very successfully, and made them as plain as it is possible to make them. He has given a page of test-types for astigmatism by Dr. Orestes Pray, of New York.

At the end of the book he also gives a useful formulary of prescriptions.

The book is charmingly got up, and will on every account be highly acceptable.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

FRANCE.

(*From our Surgical Correspondent.*)

Paris, July 22.

A very ingenious sound for the discovery of metallic bodies in wounds was lately presented to the Academy of Medicine by M. Gavarret for M. Trouvé, the inventor.

This instrument will render great service in cases where a projectile, like a musket-ball, is deeply seated in the tissues of the body; for every one knows that it is not always easy to determine whether the stylet introduced into a tortuous wound touches a portion of bone deprived of its periosteum or a foreign body. It is to the army Surgeon consequently that the instrument is particularly interesting and of incalculable value. The Baron Larrey is at this moment preparing a report on the instrument for the Secretary of War, while M. Nélaton, on the other hand, has brought the matter before the Emperor, who, as your readers are well aware, is ever ready to listen to, and adopt, new improvements, especially when they concern the army.

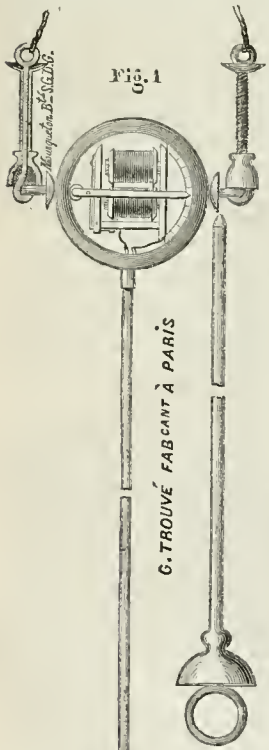


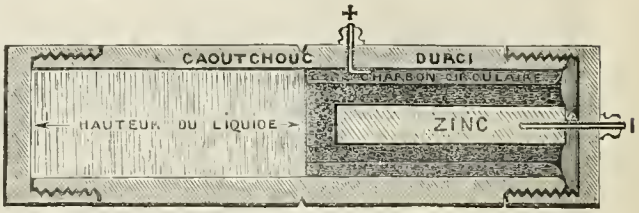
Fig. 1

Fig. 2

Fig. 1 represents the natural size of the instrument, with the exploring needle attached. Fig. 2 represents one of the needles with the canula. These exploring needles can be made of any length. The canula is of metal or of gum elastic, open at both ends so as to admit a flexible probe in case the passage of the ball is not straight.

The current is established the moment the needle touches a metallic body; the vibrations are seen, felt, and heard. The experiments which I have seen made upon the dead subject were most satisfactory. I can therefore recommend the instrument as being of real practical value.

The pile of which a cut (normal dimensions) is given below is the same as the one used in M. Trouvé's electro-medical pocket case. It is made of hardened wood, perfectly air-tight, and composed of two halves. The upper half or cover contains the charcoal and zinc; the lower half a saturated solution of bisulphate of mercury. There is no discharge of electricity, consequently no waste of material, as long as this little case stands upright; but if placed horizontally or upside down a current is instantly created. It is thus that, while operating, we can put the pile in our waistcoat pocket (its weight is only 40 grammes), leaving both hands of the Surgeon free to act.



I may add that this little *pile de poche* first found its application in giving movements to toys. Some of our Paris females manage to hide one in their chignons or about their corsage, whence it gives motion to birds or other trinkets worn in the hair.

LIVERPOOL.

July 26.

A meeting of the students of the Liverpool Royal Infirmary School of Medicine was held on Wednesday, July 21, for the purpose of presenting Dr. F. L. Roberts, Demonstrator of Anatomy and Lecturer on Botany to the School, with a testimonial and address on the occasion of his leaving Liverpool for London, where he has been appointed Demonstrator of Anatomy to University College. The testimonial consisted of one of Beck and Beck's binocular microscopes, and the address with which it was accompanied was very handsomely illuminated and numerously signed by the students, with whom the recipient has been most highly, and not less highly than deservedly, esteemed. The presentation was intended to be private, but several of the lecturers, obtaining an intimation of what was to be done, presented themselves, and thus manifested their sympathy with the proceedings. The chair was filled by Mr. Johnstone, and Mr. Leigh presented the testimonial and read the address.

In acknowledging the honour done to him, Dr. Robertson expressed his deep gratitude to the students for their past and present kindness, and the great regret that he felt at parting from them. In wishing prosperity to the School, he alluded to the great advantages which it afforded, more especially for the study of practical anatomy, and impressed upon the students that its success depended on the manner in which they availed themselves of those advantages. He trusted that they would so use them as to raise themselves into positions of honour and dignity in their Profession.

Testimonials, nowadays, are often of doubtful significance. The present one, however, we believe to be the spontaneous expression of esteem, and even of affection, from a number of young men towards a high-minded and very able teacher, who has laboured most earnestly for their Professional advancement. It is only doing justice to Dr. Roberts to say that the esteem in which he is held extends far beyond the scene of his more active labours. He will carry with him, we are sure, the regrets and good wishes of the entire Profession here, every member of which will most heartily re-echo the spirit and sentiment of the address, of which we append a copy:—

"This address and the accompanying microscope were presented to Frederick Thomas Roberts, M.B., B.Sc., by the undersigned students of the Liverpool School of Medicine, as a mark of the high esteem in which he is held; and they take this opportunity of conveying to him their appreciation of his disinterestedly kind attention and valuable services while in connexion with the school. Whilst sincerely regretting his departure they all unite in warmly congratulating him upon his appointment to University College, and wish him every success in his future career."

(*Letter from a Birmingham Correspondent.*)

July 26.

The Training Institution for Nurses which has lately been established in this town is succeeding admirably, as was shown at a quarterly meeting held recently. Donations and subscriptions are rolling in, and are likely to amount to a considerable

sum, so that there is every reason to believe that ere long it will become one of the standard institutions of the place. Its success is chiefly owing to the exertions of the ladies, who have taken a warm interest in its welfare and management. The nurses who have been trained are very efficient, and have given great satisfaction to those who have employed them. In order to make this mode of occupation for females more widely known, it was determined to appeal to the clergy and ministers of different denominations, and to the Profession, to use their influence in obtaining probationers. It is to be hoped and expected that such an appeal will be heartily responded to, inasmuch as the cultivation of the means whereby afflicted humanity is sustained is not the least noble calling to which the mind of women can be devoted, for into "ministering angels," indeed, it transforms them.

A movement has been set on foot by several members of the Profession to vaccinate direct from the cow. This step is taken for the purpose of removing the prejudices which exist in the minds of some with regard to vaccination as it is now performed with human lymph. Such a step seems to me quite unnecessary, if the matter used be properly and judiciously selected, which is now the case in Birmingham under the immediate superintendence of the public vaccinator, who has ample opportunities of choosing only the purest lymph. This new project is also likely to interfere with the interests of the public vaccinator, unless he also is permitted to operate with lymph from the heifer—a subject under the consideration of the authorities by whom he was appointed. It is a moot-point whether it is policy to repeat the experiments by which Jenner immortalised himself, and who has left the following sentence on record:—"My own repeated applications to the cow (for lymph) have been chiefly for the purpose of experiments for the satisfaction of patients or for the accommodation of friends, not from any belief in its superior efficiency over active *humanised* lymph." In the face of such testimony, I ask, is it wise to unsettle the mind of the public as to the efficacy and safety of pure human lymph? But noveltics appear to be the order of the day, and this is the latest out in this town.

The Poor-law Board has not yet thought fit to interfere with the new Medical arrangements, which, so far as I hear, give complete satisfaction to the guardians, and are not distasteful to the Medical officers themselves.

I transmit for the edification of Professional readers at a distance the following extract from a local paper relative to the present position of Queen's College:—

"Last year an amalgamation took place between the Medical departments of the Queen's and Sydenham Colleges; and the College, as it now stands, bids fair to realise the best wishes of its supporters. It has been steadily working with results which have placed it, as a school of Medicine, in the front rank of such institutions. The thanks of the whole body of students now receiving instruction are due to their teachers for their admirable methods of communicating the knowledge required, and for making their lectures more immediately interesting to the Medical student than in former times it was the wont of Professors to do. At the last examinations held at the Royal College of Surgeons, London, for anatomy and physiology, the Queen's College sent up no less than 31 students, out of which number only 5 failed to satisfy the examiners, leaving a result of 26 passed, and several of that number with honours. Three others have since been examined to the satisfaction of the examiners, making a total of 29, an unusual proportion of successes. The office of Medical tutor has been exceedingly well filled, and much of the credit which the school has received is to be traced to the unwearying efforts, energetic perseverance, and unselfishness of the present tutor, Dr. James Hinds. The renewed life and vigour which has thus been so manifest in the affairs of the College has been the means of producing great improvements in the course and mode of instruction at the two Hospitals. Clinical teaching has been more extended; practical information (so necessary to a student) elevated from an optional course to a compulsory one; regular lectures at regular hours, and regular attendance upon the practice of the Hospitals insisted upon. It is only just to add that, by their gentlemanly demeanour and steady application, the students have shown how much they value the privileges extended to them. Altogether, the prospects of Queen's College are full of hope, but it is no use disguising that the Council have a delicate task in hand. In the old days of Queen's College, the rival action of the Professors and the Council was a source of frequent and serious difficulty, and a matter is now pending which may give rise to unpleasantness, unless settled, once for all, with firmness, good temper, and impartiality. As an advising body the Professors may render great service to the Council, but they must not encroach on the executive. The business matters of the institution must be transacted by its own officers, warden, sub-warden, or secretary, as the case may require, while the energies of the Professors cannot be too closely confined to their proper duty, which is clearly that of teaching."

The laudation here is much enhanced by the striking contrast which is attempted to be drawn between the present and past condition of the College. But, unfortunately for the self-satisfied author of this report, all persons do not acquiesce in the truth of the statements. No better men as Professors, for ability, character, scientific reputation, and punctuality, in both Colleges, could be found than some who have been excluded from office by the so-called amalgamation. It will be observed that, while this writer goes at first ahead with a great flourish of trumpets, he at last ends by saying that there is no disguising the fact that fresh sources of unpleasantness are arising from the rival action of governors and professors, concluding with the cool intimation that the Professors are to stand back—"hide their diminished heads"—and confine themselves solely and closely to "teaching." Decidedly, that is their chief duty; but why remind them of it in such a snubbing spirit, except from some bitter grudge?

The town, on the whole, is healthy. Diarrhœa and scarlatina are somewhat rife, but not to so great an extent as to constitute an epidemic. But should the excessive heat which has prevailed for the last fortnight continue, I fear the former complaint will become prevalent.

GENERAL CORRESPONDENCE.

POISONED SHIRTS.

LETTER FROM DR. LEWIS P. MADDEN.

[To the Editor of the Medical Times and Gazette.]

SIR,—Having read your remarks in the *Medical Times and Gazette* of last Saturday on the poisonous effects of coloured socks, shirts, &c., I have been induced to forward you the accompanying case as a very clear proof of the injury that may be received from their use. A short time ago a blacksmith of my parish applied for relief from an affection of the skin which he said he had had some little while. On his taking off his shirt I found a very large patch of pustules in the centre of his back, and also a great number of small vesicles on his shoulders, accompanied with great irritation. I noticed that his shirt was one of a cheap kind of rather dark red flannel. It immediately struck me that this was the cause, knowing the man to have been always very healthy. I advised him to discard the shirt and wear a white flannel one instead, and take no kind of medicine whatever. This he strictly adhered to, and in less than a fortnight he was perfectly well. But, to try the experiment still further, he put on the red shirt again, when, after a few days had elapsed, the same irritation and commencement of small vesicles appeared. He has, as you may imagine, not worn the shirt since, but kept to white flannel, and remains perfectly healthy.

I am, &c. LEWIS P. MADDEN, M.D.

Jacobstowe, Devon, August 9.

DR. RICHARDSON'S PAINLESS KNIFE AND HIS RABBIT.

[To the Editor of the Medical Times and Gazette.]

SIR,—There lately appeared in the *Times* paper a letter purporting to be from Dr. Richardson, and impugning the accuracy of my account of the exhibition of his knife for painless cutting before the British Medical Association. I did not think the question raised by this letter was one suitable for discussion in the columns of a general newspaper, and I therefore resigned myself in silence to the imputation cast upon me.

When, however, this imputation is made the subject of comment in a Medical journal, and when you speak of Dr. Richardson as having "ruthlessly expunged the prettiest little bit of scientific sensational writing which the meeting inspired," I feel that neither my honour nor my modesty will permit me to keep silence any longer. I am bound to say that the credit of the pretty writing is not mine, and that my authority for the statement was Dr. Richardson himself. He told me, in so many words, that he "had cut the ears of a rabbit into ribbons, without interrupting its feeding;" and I fully understood him to mean that he had done this in the presence of the section, and not on some other occasion. Not having myself attended

the sectional meeting, I simply adopted his narrative; and I substituted the word "strips" for "ribbons," as being less likely to produce an unpleasant impression upon non-Medical readers. I have, of course, pondered upon the question whether my ears could have deceived me, and whether Dr. Richardson only said "I might cut," or "I could cut;" but, firstly, because my senses are reasonably acute, and secondly, because the word "ribbons" and the illustration about feeding are both so graphic that I cannot believe them to have been based upon mere conjecture, I am compelled to adhere to my original version of the matter. At first, indeed, I fully expected that the letter in the *Times* would be repudiated by Dr. Richardson as a fabrication. I am, &c.

THE CORRESPONDENT OF THE "TIMES" AT THE LEEDS MEETING.

*** It is clear that there was a mistake, natural under the circumstances, and all imputation of sensationalism must be abandoned.

ERYSIPELAS AFTER VACCINATION.

LETTER FROM DR. EDWARD BALLARD.

[To the Editor of the Medical Times and Gazette.]

SIR,—I see by your report of the inquest held on the child Emery, who died from erysipelas after vaccination, that Mr. Harding mentioned that I "had informed him that a series of cases occurred in Islington where all the children vaccinated from one vaccinifer had suffered from erysipelas, and one died," erysipelas commencing also in the vaccinifer two days after the lymph was taken. Had I thought that Mr. Harding would have mentioned this hurried communication at the inquest, I should have corrected my memory from the notes I took at the time. I hasten, therefore, to do so now, lest an incorrect inference should be drawn from the statement as it appears in your journal. Mr. Harding very politely invited my attendance at the post-mortem of Emery, but I was unfortunately unable to attend at the specified time, having an engagement to make some animal vaccinations at that hour. The facts as they appear in my note-book are these:—

1. A healthy female infant, aged six months, who had been vaccinated at one of the public stations, was used on the eighth day as a vaccinifer for the vaccination of eleven children at one sitting, by an experienced vaccinator, who assured me that the lancet used was scrupulously clean, and that he himself at the time had no case of either erysipelas or puerperal fever in his practice. The lancet employed was never used for any other purpose than for vaccination. This child had on her right arm four good vesicles, with a good areola round each, such as are commonly to be met with on the eighth day when the current vaccine is used. All four vesicles were opened and used for vaccination. *Two days later*—that is to say, on the tenth day—an erysipelatous patch appeared upon the right shoulder. The mother, whom I questioned closely, maintained that this patch was not an extension of the redness around the vesicles, but, as she said, was separated from it by white skin. I saw the child on the twelfth day, and then the erysipelas had extended all round the shoulder and the arm nearly to the elbow. By the nineteenth day it had extended all over the back, and forward as low as the umbilicus. Ultimately this child recovered. There was no discoverable source of miasma on the premises.

2. From this vaccinifer, when no erysipelas was apparent, a female infant, aged 3 months, was vaccinated, the lymph being quite clear, as the Surgeon informed me. Two punctures were made—an upper and a lower one. The child was healthy at the time. The day after vaccination a red spot appeared *above* the seat of the upper puncture. *The disease therefore commenced the day before it commenced in the vaccinifer.* The mother said that the child was poorly and very fretful a few hours after having been vaccinated. When I saw the child on the fifth day of vaccination, the erysipelas had extended to the shoulder and down the arm as far as the wrist. On the twelfth day, when I saw her again, the arm first affected was better, but an erysipelatous patch had appeared that day over the deltoid on the opposite side, but not by way of extension from the surface originally affected. This child recovered, but no vaccine vesicle rose. The vaccination was a failure. This child was the seventh in the series of eleven vaccinated. There was no discoverable source of miasma on the premises.

3. From the same vaccinifer, at the same time and under the same circumstances, a male infant, aged 3 months, was vaccinated. He was a fine healthy child, fed wholly from the mother's breast. Two punctures were made—an upper and a lower one—on the left arm. In *the evening of the day of vaccination* the mother told me she observed that the lower puncture was inflamed, the upper one not being so. On the day after vaccination the redness had extended to the shoulder, and when I saw the child on the fifth day of vaccination it had extended over the whole front of the chest and down the arm nearly to the wrist, as well as round the back to the right shoulder. There was much swelling, and vesications had commenced on the left forearm. The erysipelas was phlegmonous, and the prognosis correspondingly unfavourable. Subsequently it extended to the whole trunk and thighs, and the child died on the eleventh day of vaccination. No vaccine vesicle rose. Again the vaccination was a failure. This child was the fourth in the series of eleven vaccinated. There was no bad smell of defective drainage complained of on the premises, but I could not affirm that all chance of miasma was absent.

The first, second, third, fifth, sixth, eighth, and following children vaccinated had no erysipelas; the vaccine took well, and the vesicles were normal.

How are these occurrences to be explained? I confess that I cannot see my way to attribute the erysipelas to the irritation set up by the vaccine lymph, nor yet to the mere irritation of the punctures. If it had been due to the irritation of the vaccine lymph introduced into the skin, how was it that the vaccinifer was affected, and how was it that so many children escaped? If to the irritation of the punctures, how was it that these cases all happened together as an exceptional occurrence?

That some contagium capable of producing erysipelas was present probably at the punctured spots in the two vaccinated children affected, and in or upon one or more of the vesicles of the vaccinifer, which was not present at the punctured spots of the nine vaccinated children who escaped, seems to me tolerably clear. What was this contagium? and where did it come from?

I think, after what I have stated, the Surgeon, his lancet, his vaccinating-room, must all be absolved; otherwise, why were the vaccinifer and the fourth and seventh vaccinated children alone attacked while all the other nine children escaped? The source of the contagium must, I believe, be sought in or upon one of the three children attacked—I say one of the *three*, for the lancet passed backwards and forwards between the vaccinifer's vesicles and the two vaccinated children, all of whom were equally healthy, to all appearance, at the time.

Further, I am disposed also to *absolve the vaccinifer*. It is a very easy thing, and a popular sort of thing to do just now, whenever any mischief follows vaccination, to lay the blame upon the lymph and the vaccinifer. Had only one vesicle been opened in the present instance, had all the children, or the majority of them, been attacked after being vaccinated from that one pock, and had the first vaccinated from it been attacked as well as the later ones, I should not have been inclined to doubt the probability of the vaccinifer having been in fault. Again, still assuming only one pock to have been opened, had the fourth vaccinated (as was the case) and all succeeding children, or the majority of them, together with the vaccinifer, been attacked, I should not have hesitated to say that it was probable that the fourth vaccinated child was the source of the contagium, and that the lancet which had punctured and perhaps wiped the surface of the skin of this child had carried a contagium to the opened vesicle, and from it had infected all the remainder, and the vaccinifer also.

The Surgeon, his lancet, the surroundings at the time of vaccination, and the vaccinifer, being thus excluded as sources of the contagium, we have only left the two vaccinated children in whom erysipelas was subsequently developed. Which of these was it? It could not have been the seventh vaccinated child, who could not have infected the fourth, and must therefore, if my argument is valid, have been the fourth child himself—the child in whom erysipelas was developed first of the three—the child who had it worst of the three—the child who alone died of it.

I believe that in any difficult etiological or diagnostic problem, the "method by exclusion," as it has been termed, is best of all adapted for its solution. But having thus brought the evil home apparently to its correct origin, we have yet to see that the assumption of its truth will be in accord, or at all events not out of accord, with the circumstances of the case. There are two circumstances which it must suffice to explain or must be compatible with. One of these is the escape of the majority of the children, and the other is the order in which the three children were attacked with erysipelas.

As to the escape of the majority of the eleven vaccinated, it may be said that, as all four vesicles were opened, and as it is not common under such circumstances to charge the lancet for any child from more than one, it is quite conceivable that the children who escaped might have been, and probably were, vaccinated from one or more of the vesicles which had not been contaminated from the apparent source of contagium—the fourth child. It is quite conceivable that out of eleven children vaccinated from four vesicles, only two should have been vaccinated from one and the same vesicle. On the view I take, only the one vesicle to which the lancet from the source of the contagium was carried in the vaccination of the fourth child, and by which the vaccinifer herself was infected, would be capable of imparting infection to another child.

Next, as to the order in which the children were attacked. The parents of the fourth child were fishmongers, and the weather at the time was excessively hot, so that it is not unlikely that in caressing the infant some animal matters of a readily decomposable character might have become attached to the surface of the skin, and have been inoculated with the vaccine, as well as being taken off by the lancet and carried to the vesicle of the vaccinifer, and from that to the arm of the seventh child vaccinated. The fishmonger's child would thus probably have got the strongest dose of the poison, and so not only have been the first attacked, but the one most severely attacked. The other vaccinated child would be expected to suffer sooner than the vaccinifer on account of the poison on this hypothesis having been directly introduced into the blood, while in the vaccinifer's case it had to find its way in by absorption from the vesicle.

These may all seem very trifling details, but my experience as a health officer has taught me that no observation is so minute as to be valueless in tracing the origin of diseases. Indeed, it is to the neglect of such minutiæ as these that we must attribute many of those misconceptions and false inferences which distort and confuse our etiological notions. And after all, whether the precise mode in which the fourth child became the source of infection to itself and to the other two children be such as I have surmised or not, I think that the fact of its having infected the others in this or some other way can scarcely be disputed.

I am, &c.

Islington, July 24. EDWARD BALLARD, M.D.

OBITUARY.

DR. T. H. BABINGTON.

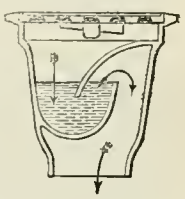
THE city was plunged into deep gloom yesterday by the intelligence of the death of the Mayor. It was known that he had been complaining of illness before and since the late civic banquet, and that the Cathedral bell was not rung on Sunday in consequence, but it was not known that typhus fever had developed itself, and that, despite the utmost efforts of Medical skill, it claimed its victim in a few days. On Monday evening, the 26th ult., the late Mayor presided at the dinner, in Corporation Hall, with dignity and efficiency; before the next Monday evening arrived he was no more.

The late Thomas Henderson Babington, Esq., M.D., Mayor of Derry, was a native of this city, and received his school education at Foyle College, under the Rev. James Knox. Thence he proceeded, as a Foyle College Exhibitioner, to Trinity College, Dublin, where he took the degree of A.B. in 1833, the degree of M.B. in 1834, and subsequently the degree of M.D. He was also a licentiate of the Royal College of Surgeons, Ireland. Leaving College he held for a short time a Dispensary appointment, and subsequently became Medical officer to the Coleraine Workhouse, and held extensive private practice in that neighbourhood. During the famine years Dr. Babington's exertions, in connexion with relief committees, were very great, and his services highly valuable. Having remained several years in Coleraine, he succeeded the late Dr. Rogan as Surgeon to the Derry County Infirmary and Derry Gaol, and Physician to the Fever Hospital. In these capacities his Medical skill and uniform attention to his patients secured him the confidence of the Governors and Board of Superintendence. His private practice in Derry and its neighbourhood was also extensive. Apart from his distinguished Professional career, Dr. Babington was one of our most active and useful citizens. He brought his clear and vigorous intellect and energetic habits to bear upon various civic duties, and in connexion with the local literary institutions. For several years he was an alderman of the Corporation, before he reached the mayoralty, and exerted himself in various ways to promote the cause of local public usefulness. As borough magistrate, and lately as chief magistrate, he discharged his duties energetically and impartially. The Mayor was Vice-President of the Literary Association, sometimes delivered lectures for its benefit, and laboured to promote its interests. In addition to his other literary honours he was a member of the Royal Irish Academy. Among the papers he wrote in that capacity was a useful practical essay, giving suggestions for the prevention of accidents in flax mills. Dr. Babington was Secretary to the Derry branch of the Medical Benevolent Society, and exerted himself in a most praiseworthy manner to procure subscriptions to that valuable philanthropic agency. In private life he was a kind, warm-hearted, generous character, steady in his attachments, and highly esteemed by a wide circle of friends. A Churchman in religion, and a Constitutionalist in politics, he was practically liberal to those who differed from him. The great respect in which he was held was attested by the shops yesterday in the principal streets having been partially closed by persons of all denominations. The city flag and the Irish Society's flag were raised half-mast high on Corporation Hall, and the virgin flag on the Cathedral. The Corporation adjourned the usual quarterly meeting yesterday, and the Recorder adjourned his Court, after making some feeling observations. The funeral, we understand, which is to take place on Thursday morning, at half-past ten o'clock, will be attended by the members of the Corporation, and by the Masonic body, of which the late Mayor was a distinguished member. Altogether the comparatively early death of Dr. Babington is deeply regretted by the public generally and many a private friend, as it is felt that an eminent Professional gentleman, a distinguished and useful citizen, and a warm-hearted friend has passed away too soon from amongst us, and, take him for all in all, that his place will not be easily filled up.—*Londonderry Sentinel*, August 3.

NEW INVENTIONS.

ANTILL'S PATENT STENCH TRAP.

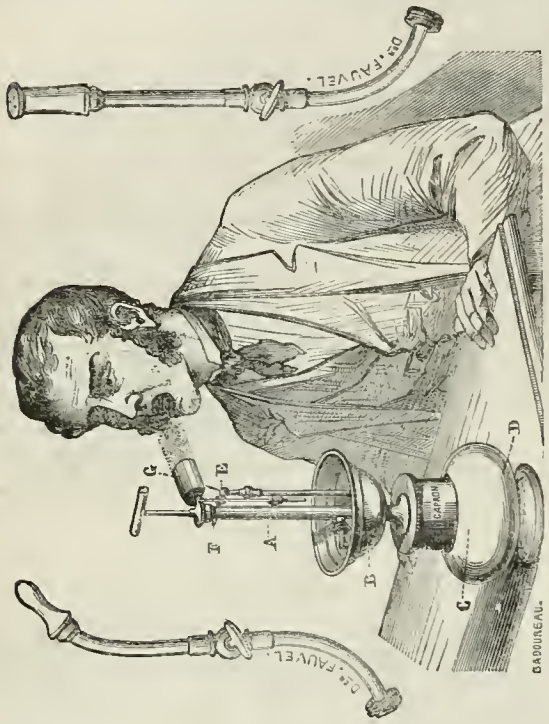
OUR attention has been requested to an article under the above name which appears to us likely to fulfil all the requirements of an efficient drain-trap in a manner superior to any other with which we are acquainted. The annexed sectional drawing explains the plan at a glance. The mouth of the trap is covered by a perforated brass plate, which, being secured underneath by a bayonet catch, cannot be removed for the purpose of disposing of tea-leaves, egg-shells, and the like, by the most sloveuly servant, unless entrusted with the key intended for the purpose. The patentee observes that the fixture "is complete in itself, and is a trap whether the lock grating be on or off; it is made from pure pig lead, and is perfectly smooth inside; can be easily cleaned out, and is an effectual preventive to articles passing into the drain; can be soldered to a lead pipe or fixed where glazed pipes are used. It is recommended for the top of waste pipes in cisterns, etc. The waste water can overflow, and, at the same time, is a perfect preventive against all smells, gases, etc., floating on the surface of water in cistern or tank; therefore, keeps the water perfectly clean, clear, and sweet." We are informed that this trap has been adapted, with very great benefit, to the pans of urinals in some of our public institutions. Being applied directly beneath the pan, all return of effluvia from the column of air in the discharge-pipe has been prevented. The trap and its fittings can be seen at the Museum of Building Appliances, 9, Conduit-street, Regent-street, W., and are manufactured and supplied by B. Finch, Holborn Sanitary Works, sanitary, hydraulic, and builders' engineers, 181, High Holborn, London.



NEW PULVERISER OR INHALER WITH CONTINUED CURRENT.

THE above instrument was presented by M. Béclard to the Academy of Medicine for M. de Capron et fils, the inventors. The advantages of this over other similar instruments are such as will doubtless bring it into general use. Its management is simple and easy. Pour the liquid into the cup B, close the clapper E, and give a few strokes with the piston until some resistance is met with. This fills the bowl of caoutchouc under

the pump, and which is hermetically imprisoned in the porcelain vase. The liquid thus compressed is under fifteen atmospheric pressures (measured by Bourdon's manomètre), and is projected with considerable force unmixed with air. The stream lasts two full minutes, and pulverisation can be kept up by giving a few strokes with the piston as soon as the apparatus loses its force. No danger of the instrument getting clogged up, or if it does we need but open the clapper E, which instantly gives a large stream, and forces the foreign body out. The two tubes seen on each side of the figure are M. Fauvel's



pattern for douches for the nasal fossæ and the pharynx; they are made so as to screw on to the apparatus in place of the clapper.

NEW BOOKS, WITH SHORT CRITIQUES.

Orthopraxy: the Mechanical Treatment of Deformities, Debilities, and Deficiencies of the Human Frame. A Manual, by Henry Heather Bigg, Assoc. Inst. C.E. Second edition, with 308 illustrations. London: Churchill and Sons. 1869. Pp. 639.

*** The most valuable part of this work is that which treats of apparatus for deformities, and the construction of artificial limbs and apparatus for remedying deficiencies, whether congenital or caused by wound or disease, and including hernia, prolapse, and varix of the various organs. It may be consulted with advantage by the Surgeon who desires to know what kinds of apparatus are available. *Cuique in arte sua credendum.* Mr. Bigg treats of a "very striking and peculiar variety of double lateral curvature which results from the habit of playing croquet." We only wish that the devotees of this tiresome game would read the description of the instrument which Mr. Bigg has devised for the treatment of croquet curvature. The worst of it is that it cures it too soon.

Cyclopædic Science Simplified. By J. H. Pepper, Professor of Chemistry at the Royal Polytechnic Institution. Embracing Light, Heat, Electricity, Magnetism, Pneumatics, Acoustics, Chemistry: with 600 illustrations. London: Fred. Warne and Co., Bedford-street, Covent-garden. 1869. Pp. 685.

*** This book may be said to consist of a series of practical lessons, abundantly illustrated by wood engravings of apparatus and experiments especially bearing on subjects of the day, such as spectrum analysis, the electric telegraph, photography, guncotton, and the like. It is a book well calculated for the library table for reference, and it may be read advantageously by any one who has previously learned the mere elements, and who wishes to understand some of the more common and useful of the modern applications of science to practice.

Entozoa; being a Supplement to the Introduction to the Study of Helminthology. By T. Spencer Cobbold, M.D., F.R.S., etc. London: Groombridge and Sons. Pp. 124.

*** Dr. Cobbold has taken the somewhat unusual course of publishing a supplementary volume rather than bringing out a new edition of his fine work on entozoa. He, in this volume, includes an index and bibliographical record, as well as a synopsis of what has been done in helminthology since his work was published. A considerable portion of the contents refer to researches on the trichina and trichinosis.

MEDICAL NEWS.

UNIVERSITY OF LONDON.—The following is a list of the candidates who have passed the recent First M.B. examination:—

FIRST M.B. EXAMINATION.—(ENTIRE.)

First Division.

Ball, James Barry, University College.
Burn, William Barnett, St. Bartholomew's Hospital.
Carr, William Ward, University College.
Carter, Alfred Henry, University College.
Edger, Ebenezer Rust, B.A., University College.
Elkington, Ernest Alfred, Queen's College, Birmingham.
Harding, Alfred William, B.A., University College.
Harris, Michael, Guy's Hospital.
Hayes, Thomas Crawford, B.A. Dub., King's College.
Ingoldby, Joseph Theodore, Guy's Hospital.
Jones, Thomas, Guy's Hospital.
Southee, Henry Edward, Guy's Hospital.
Warner, Francis, King's College.

Second Division.

Buckley, Samuel, Royal Manchester School of Medicine.
Humphreys, John Henry, Sydenham College, Birmingham, and University.
Hunt, Thomas Henry, Royal Manchester School of Medicine.
Perkins, Charles Edward Steele, Guy's Hospital.
Petch, Richard, King's College.
Pope, Harry Campbell, Liverpool Royal Infirmary.
Scott, Peter Thomas, Guy's Hospital.
Skrimshire, Frederic William, King's College.
Stanger, William, Guy's Hospital.
Westcott, William Wyna, University College.
Wood, Robert Arthur Henry, Liverpool School of Medicine.
Yate, Edward, St. Bartholomew's Hospital.

PHYSIOLOGY ONLY

First Division.

Beach, Fletcher, King's College.
Burgess, William Frederick Richardson, Guy's Hospital.
Gibbings, Alfred Thomas, King's College.
Smith, Arthur William, Guy's Hospital.

Second Division.

Joubert, Charles Henry, St. Mary's Hospital.

EXCLUDING PHYSIOLOGY.

First Division.

Owen, Edmund Blackett, St. Mary's Hospital.

Second Division.

Betts, Arthur Raymond, Guy's Hospital.
Branfoot, Arthur Mudge, Guy's Hospital.
Davison, William John, College of Medicine, Newcastle-on-Tyne.
Eardley-Wilmot, Robert, King's College.
Moss, Herbert Campbell, King's College.

UNIVERSITY OF ABERDEEN.—During the past year, the following candidates, after the usual examinations, have received degrees in Medicine and Surgery:—

THE DEGREE OF M.D.

Lyle, William Vacy, M.R.C.S., London.

At the same time, the following gentlemen received promotion to the Degree of M.D.:—

Carter, Richard, M.B., Bath.
Drury, Charles Dennis Hill, M.B., Sunderland.
Forbes, Alexander, M.B., C.M., Peterhead.
Souter, John Clement, M.B., Nottingham.
Taylor, Henry Shinglewood, M.B., C.M., Alton, Hants.
Young, David, M.B., C.M., Malabar, Bombay.

THE DEGREE OF M.B.

Alexander, Robert Reid, Aberdeen.
Arbuckle, Hugh Wight, L.F.P.S.G., L.R.C.P.E., Kilmarnock.
Bernard, Francis Ralph, Clifton.
Brown, Richard G., New Deer.
Catto, Robert, Peterhead.
Cruickshank, Brodie, M.A., Mortlach.
Dickson, Matthew, Rhynie.
Flint, Frederic, M.R.C.S.E., Canterbury.
Gillies, John, Skye.
Grant, Charles Duncan, Inverness-shire.
Grant, James, Strathspey.
Hilder, Ridley Thomas, M.R.C.S. Eng., Woking, Surrey.
Hutchison, George Wright, Banchory-Ternan.
Jefferson, Thomas Jewison, M.R.C.S.E. and L.S.A., Market-Weighton, Yorkshire.
Jones, Thomas, M.R.C.S. Eng., L.S.A., London.
Lawrence, Alexander, M.A., Cullen.
Matthew, Charles Mordaunt, London.
Mackintosh, William, Moy.
M'Connell, Jas. Fred. Parry, M.R.C.S. Eng., Allahabad.
M'Calman, Robert G., Caithness.
Mitchell, Patrick, M.A., Old Rain.
Nicol, Patrick, M.A., Aberdeen.
Norton, John Alexander, M.R.C.S. Eng., Bristol.
Rosser, Walter, London.
Ruxton, John, Foveran.
Shives, John, L.R.R.C.S. Ed., Auchterellon.
Sinclair, David, Peterculter.
Thomson, John Wm., Aberdeen.
Waterworth, Edward Allan, Newport, Isle of Wight.
Wintle, Henry, M.R.C.S. Eng., Clifton.

THE DEGREE OF C.M.

Alexander, Robert Reid.	Mackintosh, William.
Bernard, Francis R.	Matthew, Charles M.
Brown, Richard G.	M'Calman, Robert G.
Catto, Robert.	M'Connell, James F. P.
Cruickshank, Brodie.	Mitchell, Patrick.
Dickson, Matthew.	Nicol, Patrick.
Flint, Frederic.	Norton, John A.
Grant, Charles D.	Ruxton, John.
Grant, James.	Shives, John.
Hilder, Ridley, T.	Sinclair, David.
Hutchison, George W.	Thomson, John W.
Lawrence, Alex.	

Of the above-mentioned candidates, Brodie Cruickshank, Jas. F. Parry M'Connell, Patrick Nicol, and John Alexander Norton received their degrees in Medicine and Surgery with highest academical honours, Thomas Jewison Jefferson his degree in Medicine with academical honours, and George Wright Hutchison his degree in Surgery with academical honours. At the same time, George Skene Duff, Patrick Letters, and Patrick Blaikie Smith were certified as having passed all the examinations, and are entitled to receive degrees on their attaining the necessary age; that in the case of Patrick Blaikie Smith the degrees should be conferred with highest academical honours. And at the late graduation term, the following were declared to have passed part of their examinations :—

Allan, Hector.	Mickle, George.
Anderson, Alex. Thos.	Milne, Thomas.
Beattie, Geo. W.	Morison, George.
Bodman, Francis H.	Orchard, Jas. S.
Carmichael, Archibald.	Pringle, John.
Davis, Christopher J.	Russell, James.
Duncan, James.	Shepherd, James.
Fasken, Wm. A. D.	Simpson, James.
Gibb, Robert Shirra.	Simpson, William.
Gray, John R.	Sutherland, James.
Hay, Peter G.	Wattie, Charles.
Maclean, John C. B.	Whitelaw, William.
M'Calman, Hugh.	Wilson, Alex

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—At a meeting, held on July 29, the following gentleman, being an Extra Licentiate, was admitted a Member :—

Baller, Joseph Hogg, M.D. St. And., Gilston-road, West Brompton.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, August 5, 1869 :—

Allchin, William Henry, Bayswater.
Hobley, Simon Halford, Carnarvon.
Keefer, William Napier, Galt, Canada.
Mason, Hugh Herbert, Burton-on-Trent.
Murdoch, David Beatson, Rotherhithe.
Renshaw, Edwin, Lee, Kent.
Tobin, George, Rainford, St. Helen's.

The following gentlemen also, on the same day, passed their First Examination :—

Barrow, Arthur Haynes, St. Thomas's Hospital.
Day, Gordon C., St. Mary's Hospital.
Law, William T., Guy's Hospital.
Leake, George D. N., St. George's Hospital.
Westcott, William W., University College Hospital.
Wilson, John H. P., St. George's Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

COOMBS, ROWLAND H., L.R.C.P. (Lond.)—Medical Officer to the Bedfordshire Middle Class Public School.

HARTREE, J. P., M.A., M.B. Cantab.—Physician to the Royal Infirmary for Children and Women, Waterloo-road, *vice* J. B. Hicks, M.D., F.R.S., resigned.

MOON, H., M.R.C.S., L.D.S.—Assistant Dental Surgeon to the Dental Hospital of London, *vice* C. J. Fox, M.R.C.S., L.D.S., promoted to Dental Surgeon.

WRIGHT, HENRY R., M.B. and C.M. Univ. Edin.—Resident Medical Officer to the Darlington Hospital and Dispensary, *vice* A. O. Haslewood, M.R.C.S. and L.S.A., resigned.

NAVAL APPOINTMENT.

ADMIRALTY.—The following appointment has been made :—George E. Farr, Assistant-Surgeon to the *Agincourt*.

BIRTHS.

CARDEW.—On August 2, at Hertford, the wife of Dr. Cardew, Inspector-General of Hospitals, of a daughter.

CORNER.—On August 7, at Manor-house, East India-road, Poplar, the wife of F. M. Corner, Surgeon, of a son.

HASSALL.—On August 1, at Dynevor House, Richmond, Surrey, the wife of Dr. Hassall, of a daughter.

PRANCE.—On August 6, at Heath-street, Hampstead, the wife of Robert R. Prance, M.D., of a daughter.

MARRIAGES.

CHEESMAN—HALLAM.—On August 4, at St. George's Church, Newcastle-under-Lyme, John Cheesman, M.D., of Buckingham, to Lucie Sarah Mayer, only child of the late William Hallam, M.D., of Newcastle-under-Lyme.

CLENDON—HOOPER.—On August 5, at Teddington Church, Hughes Clendon, Esq., of Hatcham, S.E., to Eliza Letitia Corydon, youngest daughter of the T. W. Hooper, M.D., of the Old Kent-road.

CORBIN—HARDY.—On June 16, at St. Michael's, Mitcham, South Australia, Thomas Wilson Corbin, M.R.C.S. Eng., of Riverton, son of the Rev. John Corbin, of Hornsey, London, to Laura Mary Louisa, daughter of Alfred Hardy, Esq., of Adelaide.

HAZELDINE—RAY.—On August 5, at St. Giles's, Camberwell, George John Hazeldine, of Oaklands, Godstone, Esq., to Katherine Vane, youngest surviving daughter of the late Edward Ray, M.D., F.R.C.S. Eng., of Dulwich.

LOVEGROVE—ELIOT.—On May 13, at St. Paul's, Bunbury, Western Australia, Thomas H. Lovegrove, Surgeon, fourth son of Joseph Lovegrove, Esq., late of Colby House, Kensington, to Elinor Maude Catherine, eldest daughter of George Eliot, Esq., resident magistrate.

PACKER—GILL.—On August 5, at St. Mark's Church, Notting-hill, J. Macnamara Packer, M.D., of Huyton, near Liverpool, second son of John Packer, Esq., of Barbadoes, to Lucretia Elizabeth, second daughter of Howard Gill, Esq., of No. 1, Colville-terrace East.

SNAPE—NASH.—On August 3, at St. Mary's, Beaumaris, George Henry Snape, M.R.C.S., Liverpool, to Julia Caroline, eldest daughter of J. G. Nash, F.R.C.S., of Cheltenham, late J.P. and Colonial Surgeon, South Australia. No cards.

STOKES—MOORE.—On August 3, at Clontarf Church, William Stokes, M.D., jun., son of William Stokes, M.D., D.C.L., Physician in Ordinary to the Queen in Ireland, to Elizabeth, eldest surviving daughter of the Rev. John Lewis Moore, D.D., Vice-Provost of Trinity College, Dublin.

THORPE—SPENCER.—On August 4, at the parish church, Eccles, Charles W. Thorpe, Esq., of Todmorden, Physician, eldest son of Gabriel Thorpe, Esq., M.B., of Listowel, County Kerry, to Edith, second daughter of Francis Spencer, Esq., Leaf-square, Pendleton, Manchester.

DEATHS.

CARR, LIONEL KING, the infant son of Dr. L. K. Carr, Surgeon-Major, Royal Artillery, at Vicarage-park, Plumstead, on August 4, aged 4½ months.

FERGUSHILL-CRAWFORD, EMMA, relict of the late Andrew Fergushill-Crawford, Esq., M.D., and youngest daughter of the late A. F. Nunez, Esq., at Winchester, very suddenly, on August 5, aged 63.

HACKNEY, ELIZABETH, the beloved wife of John Hackney, Esq., M.R.C.S., at 31, Myddelton-square, on August 9.

LEETE, EDWARD STOKES, Surgeon, son of the late Henry Leete, Esq., of Thrapstone, Northamptonshire, at Newton-le-Willows, Lancashire, on August 4, aged 55.

O'GRADY, E. H., Esq., M.D., late Physician to the British Embassy, at Paris, at Caratival, Batticaloa, Ceylon, the residence of his third son, on June 15, aged 80.

WRIGHT, CONSTANTINE, Esq., Surgeon, at his residence, Malvern-road, Dalston, on August 4, aged 59.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

BRIGHTON AND HOVE LYING-IN INSTITUTION.—Resident House-Surgeon; must be a Member of one of the Royal Colleges of Surgeons of Great Britain or Ireland, or L.R.C.P.L. or L.S.A. Applications and testimonials to the Chairman of the Committee of Management on or before September 2, election on September 9.

BOURNEMOUTH GENERAL DISPENSARY.—Resident Surgeon. Candidates must be registered, and must possess a qualification in Medicine as well as Surgery. Testimonials, diplomas, etc., to be sent, under seal, to the President of the Bournemouth Dispensary on or before September 9.

GUILDFORD UNION.—Medical Officer for the Albury District. Candidates must have the qualifications required by Poor-law Board. Applications and testimonials to W. H. Smallpeice, Esq., Clerk, Guildford, on or before September 3, election the next day at twelve o'clock, when candidates are requested to attend.

KENT AND CANTERBURY HOSPITAL.—Assistant House-Surgeon and Dispenser; must be legally qualified to practise under the Medical Act of 1858, and be unmarried and not more than 40 years of age. Applications and testimonials to Thomas Southee, Esq., Secretary, on or before August 27, election the same day.

KINGSBRIDGE UNION.—Medical Officer and Public Vaccinator for the Stokenham District. Candidates must be legally qualified. Applications and testimonials to W. Jarvis, Esq., Clerk, Kingsbridge, on or before September 3, election on September 11.

ROYAL HOSPITAL FOR DISEASES OF THE CHEST, CITY-ROAD.—Physician; must be F. or M.R.C.P. Eng. Applications and testimonials to Charles L. Kemp, Esq., Sec., on or before August 23, election on September 7.

ST. GEORGE'S AND ST. JAMES'S DISPENSARY.—Physician; must be F. or M.R.C.P. Lond. Candidates to attend at the Institution, 60, King-street, Regent-street, at 4 o'clock p.m., on August 19.

ST. GEORGE'S AND ST. JAMES'S DISPENSARY.—Surgeon; must be F. or M.R.C.S. Eng. Candidates to attend at the Institution, 60, King-street, Regent-street, at 4 o'clock p.m., on August 19.

TAUNTON UNION.—Medical Officer for the Bishop's Lydeard District. Candidates must possess the qualifications prescribed by the orders of the Poor-law Board, and will be required to reside in the district. Applications and testimonials to H. C. Trenchard, Esq., clerk, on or before August 14, election on August 19.

WORKSOP DISPENSARY, NOTTINGHAMSHIRE.—House-Surgeon; must be legally qualified, and be unmarried. Applications and testimonials to G. Fisher, Esq., on or before August 31. The duties will commence on November 1.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Atherstone Union.—Mr. Thos. Handford has resigned the Poleswort District; area 14,410; population 4649; salary £60 per annum.

Guildford Union.—Mr. Edward Capron has resigned the Albury District; area 8190; population 2544; salary £60 per annum.

Pocklington Union.—The Sutton-on-Derwent District is vacant; area 14,718; population 2399; salary £26 per annum.

APPOINTMENTS.

Auckland Union.—Samuel Fielden, L.R.C.P. Edin., M.R.C.S. Eng., to the Shildon District.

Battle Union.—Roger Duke, M.R.C.S. Eng., L.S.A., to the Sixth District.

Guildford Union.—Frederick Yate, M.R.C.S. Eng., L.S.A., to the Parish of Puttenham.

Hartley Wintney Union.—Charles Wm. Hult, L.F.P. and S. Glas., L.S.A. Lond., L.M., to the Farnborough District.

Shepton Mallet Union.—Daniel Anderson, L.R.C.P. Edin., L.F.S. Glas., L.M. Edin., to the Third District.

Uxbridge Union.—John S. Ferris, B.M. Lond. Univ., L.R.C.P., M.R.C.S. Eng., L.S.A., to the Hillingdon District.

West Ham Union.—Franz W. E. R. Goedicke, L.F.P. and S. Glas., L.S.A., to the West Ham and Little Ilford District.

Wigton Union.—Andrew Scott, M.D. Univ. Glas., to the Bowness District.

The Mayoralty of Derry.—Another Medical man, Dr. Miller, has been unanimously chosen to succeed the late lamented Dr. Babington in the above office.

Royal Medical and Chirurgical Society.—The Library will be closed from Monday, August 16, to Saturday, September 11, both days inclusive.

Académie de Médecine.—M. Germain Sée was at the last meeting elected into the Section of Internal Pathology, in the place of the late M. Grisolle.

Death of Professor Purkinje.—Professor Purkinje, of Prague, one of the most celebrated physiologists of modern times, and especially known for his researches on vibratile cilia and the development of the ovum, died July 28, in the eighty-second year of his age.

Death of Professor Heyfelder.—Originally Professor of Clinical Surgery in the University of Erlangen, this distinguished Surgeon was invited to St. Petersburg, where he has filled some highly important posts in the St. Petersburg Military Hospitals, and also as sanitary adviser to the Government. He was the author of numerous reports and works, the most remarkable of which is his "Traité des Résections et Amputations," 1859.

Death of Dr. Meigs.—The venerable Dr. Charles D. Meigs, one of the most distinguished Medical Practitioners in the United States, and well known in this country as a writer on obstetrics, died suddenly June 22. He was a native of Georgia, but since 1820 resided in Pennsylvania. In 1840 he was appointed to a Professorship in Jefferson Medical College, and laboured there with much success during 20 years. He was also connected with the obstetrical department of Pennsylvania Hospital for about ten years.

University College, London.—At a session of Council held on the 7th inst., Mr. George Grote, President of the College, in the chair, Mr. G. V. Poore, M.B., M.S. Lond., was appointed resident Medical Officer of University College Hospital. A free Medical scholarship was awarded to Mr. T. G. Vawdrey, of St. Austell, on the nomination of the Council of the Medical College, Epsom, of which he has been a pupil.

Herpes Circinatus.—Professor Hardy employs the following sulpho-alkaline ointment, continuing it for some time after apparent cure, in order to prevent the reproduction of the parasite:—Sublimated and washed sulphur, 1 to 1½ part; subcarbonate of potash, ¼ to ½ part; lard, 30 parts.

Health of Scotland.—The July report of the Registrar-General states that the deaths of 2424 persons were registered in the eight principal towns during the month, of whom 1266 were males and 1158 females. This number, after allowing for increase of population, is 253 above the average number recorded for July during the last ten years. Of the 2424 deaths registered, 1132, or 47 per cent., were those of children under 5 years of age. In Aberdeen, 30 per cent. of the persons who died were under 5 years of age; in Perth, 34; in Dundee, 42; in Paisley, 43; in Edinburgh, 44; in Glasgow, 49; in Greenock, 54; and in Leith, 56 per cent.

Mr. Richardson, one of the Medical Officers for Middlesbrough, Stockton-on-Tees Union, having been charged with neglect of duty, the allegations were inquired into by the Middlesbrough Relief Committee, who exonerated Mr. Richardson from all blame, and expressed an opinion that the charge had been made from personal motives alone.

Bristol Royal Infirmary.—Messrs. Husbands and Clarke, opticians, Bristol, have this week presented to the Bristol Royal Infirmary a barometer for the use of that institution. The Faculty of the Infirmary have frequently expressed a desire for such an instrument, and, their wishes being made known to Messrs. Husbands and Clarke, those gentlemen immediately sent one as a gift. The barometer is a very neat and useful one, provided with a maximum and minimum thermometer and a hygrometer. It has been placed in the entrance-hall of the Infirmary, and is much admired.

The Esmonde Will Case.—This *cause célèbre*, the particulars of which we detailed in our number for June 20, 1868 (p. 664), when, on the occasion of its trial in the Dublin Court of Probate, the jury disagreed, has just been decided at the Carlow Assizes in favour of the plaintiffs, the will being thus established. It will be recollected that the late Lady Esmonde, after specifying various bequests, left the residue of her property, a very large sum, to found a college in the County of Wexford under the direction of the Provost and Fellows of Trinity College, Dublin, to be called "Grogan College," with the stipulation that in it preference should be given to the sons of Protestant clergymen. Reference to the facts of the case, as briefly recapitulated in our former article, will leave little doubt in the minds of our readers that the second jury has come to a just conclusion in the matter.

Amenities of Pauper Practice.—On Saturday last, at the Guildhall, Margaret Gray, a vellum stitcher, was charged before Sir Sydney H. Waterlow with being disorderly and annoying Dr. Elliott in his house, and also with assaulting him with her umbrella. Dr. Elliott said he was Medical Officer to the City of London Union, and that morning, about 10 o'clock, the prisoner came to him for some medicine, she being a parish patient. She wanted to know when he could cure her, but he told her he could make no calculation as to when he could cure a woman who took gin as early as 6 o'clock in the morning. At that remark she became very much enraged, and poked him in the chest with her umbrella. He went into his Surgery to avoid her, but she followed him, striking him on the back with the umbrella, and he was obliged to give her into custody. The prisoner admitted the assault, but said that Dr. Elliott could cure her if he liked, but he would not. She asked him when he would cure her, and he aggravated her with his tongue. She begged to be forgiven, and she would never act as she had done again. Dr. Elliott said she had often annoyed him before, but that, if he could be assured she would not repeat the offence, he did not wish to press the charge. Sir Sydney H. Waterlow bound over the prisoner in her own recognisances in £10 to keep the peace for six months.

The yellow fever is said to have broken out on board her Majesty's ship *Eclipse*, which has arrived at Halifax, Nova Scotia, from the Rio Grande. Eighteen deaths had occurred.

Phthisis in Workhouses.—In the yearly report of the sanitary condition of St. Giles's, by Dr. George Ross, is the following:—"Some interesting facts are brought out in the last table which serve to illustrate the vital and economic peculiarities of the inmates of workhouses. The largest number of deaths was from phthisis (61), the next in fatality was bronchitis (49), but whilst the average age of those dying from phthisis in the workhouse (38) is very nearly the same as of those dying from phthisis in the district at large, the average age of those dying from bronchitis in the workhouse (57) is half as high again as of those dying from the same disease in the district. These anomalies are explained by the circumstance that the inmates of the workhouse are chiefly adults and aged people. Phthisis, being a disease, in the main, of adult life, brings down its victims at about the same age, whether in the workhouse or out of it; and most of those who died in the workhouse no doubt came in with the malady already formed; whilst the deaths from bronchitis in the district fell largely among children under two years of age, of whom there are few in the workhouse. There is a singular discrepancy as to sexes also. The deaths from phthisis in the workhouse were—males 41, females 20, or more than double the number of males; whilst in the district at large they were at the rate of—males 118, females 100. It would seem, therefore, that when a wife or daughter fell ill, the husband, being strong and in work, preferred, if possible, to keep the sick one at home; but when the husband or son fell ill, and was unable to labour, there was no resource left but the workhouse. In bronchitis the conditions are, in a certain degree, changed; but this is explained by the fact that bronchitis attacks older people, and is most severe beyond the working age. More women live to the age when

(among adults) bronchitis is fatal than men—a fact that is brought out also in the general mortality of the district, where the deaths from bronchitis are—for males 88, females 119."

A DRUGGIST was committed for trial at the Thames Police-office, on Saturday last, for signing a certificate to the effect that a child brought to his shop was not in a fit state to be vaccinated. He signed the name of a qualified Practitioner, who, it appears, was in the druggist's house at the time. The druggist said, in defence, that he had the authority of the Medical gentleman to attach his name to the document. The Surgeon had no recollection of having given such authority, and the magistrate committed the defendant for trial, taking bail for his appearance.

THE NEW SYDENHAM SOCIETY.—The report presented to the eleventh annual meeting held at Leeds, July, 1869, states:—"The conclusion of the Society's eleventh year finds it in its usual condition of prosperity. The income for 1868 was nearly equal to that for 1867, and exceeded that for 1866, amounting in total to £2951. During the year, including the 'Catalogue of Portraits of Skin Diseases,' five volumes were issued, thus making a total of forty volumes in ten years. The financial state of the Society is such that the Council feels no anxiety as to its being able, in the future, to continue the annual average of four volumes. The balance now in hand amounts to nearly £1000, and, in addition to the usual income from annual subscriptions, the Society possesses a valuable property in stock in hand. The demand for back volumes is still steady. Ten complete sets were required during the year. The Council has recently adopted for translation several important works, which will, it believes, be acceptable to the Profession. Amongst these are — Professor Niemeyer's 'Lectures on Phthisis.' Wunderlich's 'Treatise on Temperature in Disease' (being a complete guide to the use of the thermometer in Medical practice). Stricker's 'Manual of Human and Comparative Histology.' This work will be a complete treatise on the microscopic anatomy of the tissues, and will be produced (under the editorship of Dr. Stricker) by a staff of authors which includes most of the distinguished histologists of Germany. Only the first part is as yet published. Its translation has been entrusted by the Council to Mr. Henry Power, the editor of the last edition of Carpenter's 'Physiology.' The first volume will probably be ready early next year, and the issue of the English edition will be almost simultaneous with that of the original." As a compliment to the local secretaries, it is proposed to request the President and the several ex-Presidents (Dr. Williams, Sir Thomas Watson, Mr. Paget, Dr. Stokes, and Mr. Hilton) to allow their photographs to be taken in a handsome manner for presentation in a suitable form to the Society's honorary officers. This suggestion was warmly approved, and was recommended to the consideration of the Council by a unanimous vote. The following is the list of officers for 1869-70: —*President:* *John Hilton, Esq., F.R.S. *Vice-Presidents:* Henry W. Acland, M.D., F.R.S. (Oxford); Thomas E. Beatty, M.D. (Dublin); James R. Bennett, M.D.; Charles Chadwick, M.D. (Leeds); *Edward Charlton, M.D. (Newcastle); *Sir Dominic Corrigan, M.D., Bart. (Dublin); Samuel Hey, Esq. (Leeds); *W. D. Husband, Esq. (York); *G. E. Paget, M.D. (Cambridge); James Paget, Esq., F.R.S.; Thomas B. Peacock, M.D.; Francis Sibson, M.D., F.R.S.; Sir J. Y. Simpson, M.D., D.C.S., Bart. (Edinburgh); Sir Thomas Watson, M.D., F.R.S., Bart.; C. J. B. Williams, M.D., F.R.S.; *Erasmus Wilson, Esq., F.R.S. *Council:* *Francis E. Anstie, M.D.; John Barclay, M.D. (Leicester); J. W. Bartleet, M.B. (Birmingham); *Warburton Begbie, M.D. (Edinburgh); Charles Brooke, Esq., F.R.S.; Thomas Cammack, M.D. (Spalding); Thomas M. Daldy, M.D.; Herbert Davies, M.D.; *J. Langdon H. Down, M.D.; Robert Druitt, M.R.C.P.; A. E. Durham, Esq.; *C. Hilton Fagge, M.D.; *R. Wilbraham Falconer, M.D. (Bath); Samuel Fenwick, M.D.; Christopher Heath, Esq.; M. H. Higginbottom, Esq. (Nottingham); *James Hinton, Esq.; *J. Hughlings-Jackson, M.D.; T. Carr Jackson, Esq.; J. C. Langmore, M.B.; Arthur Leared, B.A., M.D., M.R.I.A.; G. May, Esq. (Reading); W. D. Moore, M.D. (Dublin); *John W. Ogle, M.D.; E. S. Ormerod, M.D. (Brighton); Oliver Pemberton, Esq. (Birmingham); W. Roberts, M.D. (Manchester); *George Shann, M.D. (York); *Septimus W. Sibley, Esq.; A. P. Stewart, M.D.; *William Turner, M.B., F.R.S.E. (Edinburgh); Hermann Weber, M.D. *Treasurer:* W. Sedgwick Saunders, M.D., 13, Queen-street, Cheapside, E.C. *Auditors:* J. S. Bristowe, M.D.; *Thomas Bryant, Esq.; Andrew Clark, M.D. *Hon. Secretary:* Jonathan Hutchinson, Esq., 4, Finsbury-circus, E.C. (Those whose names are marked with an asterisk were not in office last year.)

DR. MAXWELL SIMPSON.—We (*Daily Express*) learn with sincere pleasure that Dr. Maxwell Simpson has been appointed Examiner in Chemistry to the Queen's University. This is the first substantial recognition which this chemist of European fame has met with in his own country, and it is but a small one. Some years ago Trinity College conferred on him the distinction of an honorary degree—an act by which the donor was honoured as much as the recipient. The British Association has repeatedly defrayed the expenses of important investigations in organic chemistry in which he has been engaged. But even a scientific man can scarcely live on honorary degrees or elaborate experiments.

THE Maharajah of Jeypore has himself assembled within his capital, under his especial auspices and patronage, a congress for the advancement of social science and the diffusion within his territory of the benefits which can thereby be secured to his people. The inaugural proceedings were of the most satisfactory character, and took place in the Medical Hall, one of the many new institutions established by his Highness. The meeting was largely attended by the chief members of the State and nobility, and presided over by the Maharajah in person, supported by the presence of Colonel Keatinge, A.G.G., and Major Beynon, political agent at Jeypore. Most of the European and influential native residents were present also. The *Delhi Gazette*, in commenting upon the objects of the Society, which are truly liberal, says:—"We cannot speak in terms of praise too high of the enlightenment and benevolent spirit displayed by the ruler of this state while so much ignorance and superstitious prejudice are rampant amongst almost every class of the people of Rajpootana. Nor can we but feel gratified that he has those about him who, by their wise counsel and co-operation, can help him to make head against the many formidable obstructions with which he is naturally surrounded. Among them there is none so prominent by his readiness to second every effort tending to the improvement of the people and the good of the State, by his broad views, his benevolent character, and by his enlightened counsel, as the president of this Congress, Nawab Mahomed Fyz Ali Khan Bahadoor, Prime Minister of the State, May it ever be the good fortune of the subjects of Jeypore to enjoy the privilege of having a beneficent ruler, with wisdom in his councils!"

COMPOSITION AND QUALITY OF THE METROPOLITAN WATERS IN JULY, 1869.—The following are the returns of the Metropolitan Association of Medical Officers of Health:—

Names of Water Companies.	Total Solid Matter per Gallon.	Oxygen required by Organic Matter, &c.	Nitrogen.		Hardness.	
			As Nitrates &c.	As Ammonia.	Before Boiling.	After Boiling.
Thames Water Companies.	Grains.	Grains.	Grains.	Grains.	Degs.	Degs.
Grand Junction	19·20	0·069	0·066	0·000	14·0	3·4
West Middlesex	17·81	0·069	0·030	0·002	13·6	3·4
Southwark & Vauxhall	18·07	0·061	0·060	0·000	13·8	3·3
Chelsea	18·17	0·061	0·030	0·000	13·9	3·3
Lambeth	17·97	0·057	0·030	0·000	13·5	3·3
Other Companies.						
Kent	27·60	0·016	0·128	0·000	19·6	5·5
New River	17·70	0·029	0·090	0·000	14·0	3·3
East London	16·13	0·045	0·030	0·000	13·2	3·3

The average quantity of water supplied daily to the metropolis in the month of June was, according to the returns of the Water Companies to the Medical Officers of Health, 103,670,995 gallons, and the number of houses supplied was 464,798. This is at the rate of 32·7 gallons per head of the population daily.

Note.—The amount of oxygen required to oxidise the organic matter, nitrites, etc., is determined by a standard solution of permanganate of potash acting for three hours; and in the case of the metropolitan waters the quantity of organic matter is about eight times the amount of oxygen required by it.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

Mr. Bryant's Clinical Surgery No. IV. shall be continued next week.

We are compelled to postpone our editorial notice of the Report of the Education Committee of the General Medical Council.

We shall have more to say on the subject of the proceedings of the British Medical Association, and especially on the interesting address of Dr. Beatty, but our engagements to our own contributors compel us to hold our hand for the present week.

Mr. Ellis is thanked.

Sufferer.—Dr. Wilks, Grosvenor-street, Dr. Lockhart Clarke, or Dr. Hughlings-Jackson.

We have received Inspector-General John Murray's Report on the Treatment of Epidemic Cholera in India, and a most sensible and valuable work it is. We only wish we could decant it bodily into our pages.

M.D., Brecon.—Waring on Cottage Hospitals, 1s., John Churchill and Sons.

Dr. Ward Cousins's interesting case of Hæmorrhagic Diathesis is in the printers' hands.

Dr. Hitchman proposes to publish a reply to Sir Dominic Corrigan, Bart., as to his attacks on foreign degrees in the Medical Council. It is said that the public will learn for the first time the whole art and mystery of "Doctor"-making.

Beary Defence Fund.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The Committee will be obliged by the insertion of the following list of subscriptions:—Amount already acknowledged, £30 11s. 6d.; Dr. G. F. Blandford, Clarges-street, £1 1s. The Committee will meet at Charing-cross Hospital, on Friday, August 13, at 7 p.m. I am, &c.

August 11. E. Sandwell, Hon. Sec.

Toujours Prêt.—Your paper has been received and shall appear in due course. We are very full at present, but hope to publish arrears soon.

The Redditch Indicator contains an account of the Cæsarian section having been performed on July 29 by Mr. W. A. Parsons, Surgeon, of Tanworth, Hockley-heath. A male child was removed, and on the 7th both mother and infant were doing well.

W. A. P.—Iodide of amyl was reported on to the British Association for the Advancement of Science by Dr. Richardson in 1865 at the Birmingham meeting. The report is published in the *Transactions* of the Association for 1865, pp. 277-8-9. The physiological action of the substance is there described, but no reference is made as to its therapeutical value. We have, however, ascertained that the same author has, within the present year, investigated the action of the substance further, with a view to its application to Medicine; and that his observations will probably be described in his coming report to the British Association at Exeter.

B.—The process of embalming the dead body to insure its unlimited preservation tends to defeat one of the wisest provisions of Nature. The use of antiseptics to prevent offence before burial is reasonable; to embalm the body for years is useless, and only subjects the body in after ages to the indignity of being dug up and shown as a curiosity in some museum. We know nothing practically of the *necrosozoic process* of Clark and Co., patented by the Messrs. Garstin; but by their pamphlet it appears to cost about six guineas, three and a half of which are called a "Medical fee." We regret to see that they offer a "Professional discount" of 20 per cent. Our brethren, however, will not soil their fingers with the profits of the undertaker.

Cutting up a Starch Bandage.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Those in the habit of using the starch bandage or the more modern appliance, the glue splint, have no doubt, like myself, felt the want of some aid in cutting up the splint, Scutin's pliers being nearly useless from the thickness of the material to be cut diminishing the power of any instrument with scissors movement. The most common way is to rip up the apparatus with a knife; this, to my knowledge, has led to one unfortunate accident by which a fellow-student of mine lost his eye. Messrs. Coxeter and Son have kindly made me a pair of pliers which I think will give satisfaction to any one who tries it. I am, &c.

Fishguard, August 10. J. Hancocke Wathen.

M.R.C.S., L.S.A.—There is no modern work on the laws regulating the Medical Profession. Willcock's volume on the subject has been rendered obsolete in consequence of the passage of several Acts of Parliament relating to the Profession since its publication. If our correspondent will put any specific question to us, we will endeavour to answer it.

D.—There is nothing in the Medical Act which refers specially to women. If a woman become a member of any college or institution named in the schedule of the Act, we believe she could demand to be registered, and if the General Council refused to register her, she could obtain a mandamus in the Court of Queen's Bench to compel them to do so. If a woman be qualified, she can practise *legally, quoad* her qualification. There is no specific law to prevent a woman practising Medicine or pharmacy, or as a chemist and druggist.

Dr. Macloughlin and the War Office.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—As you have been so kind as to notice my appeal for redress which came before the House of Commons on the 29th ultimo, I entertain the hope that you will not refuse me a place in your paper for the following facts:—

If the War Office had had any dereliction of duty to urge against me, and had they brought this forward, they would have sealed my lips for ever. But here I defy them.

They have the proofs at the War Office that, independently of sieges and other minor affairs, I was present with the army in the Peninsula, in seven general actions, under fire in four, and hit in one. They have the proofs that I was "an active, a zealous, and a well-educated Medical officer; and that on all occasions I discharged the duties of my station with benefit to the service and with credit to myself."

And they have the proofs that, as I had served during the Peninsular war, I was entitled to remain on half-pay, since I wished it, in accordance with the boon granted to all the officers who had served during that war, and who were placed on half-pay at the peace, to remain on half-pay if they wished it; consequently the then Horseguards had no right summarily to deprive me of my commission in terms derogatory to me as a gentleman and an officer, because I claimed my right to remain on half-pay.

The War Office brought forward the names of commanders-in-chief who, without any inquiry, had refused me redress. But they suppressed from the knowledge of the House the name of the field-marshal commanding-in-chief who, deeming it his duty to inquire into my case, and finding that I had faithfully served, reported seven times to the War Office that I am entitled to redress.

After Captain Vivian had spoken in the House, my friend Mr. Brady, M.P., placed the following letter before him, dated so far back as September 9, 1857, Horseguards:—

"Sir,—With reference to the correspondence respecting the case of Dr. Macloughlin, I am directed by the General Commanding-in-Chief to request you will lay before the Secretary of State for War the enclosed letter from that gentleman, and to state that his Royal Highness, having examined into his case, sees no reason, on military grounds, why he should not be restored, if Lord Panmure should be of opinion that it may be done.

"I have, &c.

(Signed) "C. Yorke.

"To the Under-Secretary of State for War."

Captain Vivian answered Mr. Brady that that letter and the six other letters were no official recommendation for redress. Therefore the question if these seven letters from the Horseguards to the War Office are proper official recommendations or not must be decided between the Horseguards and the War Office, and if they cannot settle it satisfactorily it must be left to the House of Commons to decide.

I am, &c. David Macloughlin, M.D.,
Member of the Legion of Honour.

36, Bruton-street, London, W., August 10.

F. W.—Sir Richard Croft was the Physician who attended the Princess Charlotte. He was a relative of the Denmans and Baillies, and consequently a connexion of the Hunters. He was a man of gentle manners and of some acquirements, but he wanted nerve and decision. One of his contemporaries as distinguished as himself said, "Croft had few resources as a Practitioner; he was very well when the road was smooth, but was deficient when the journey was rough."

B. C.—Wardrop's stories would not always bear repeating. The one alluded to is broad, but not indecent. He used to relate an anecdote of a lady of title whom in his early life he knew well. She had some beautiful daughters, and had the tact to get them all well and highly married. One nearly missed the altar. The nobleman to whom she was engaged relaxed his attentions. The anxious mother demanded an explanation. "Well," said the lover, "I'll be plain; insanity, I am told, prevails to a great extent on the side of your husband's family." "Is that positively the only objection?" asked the lady. "The only one," was the reply. "Well, then," said she, "I can ease your mind on that score. I will be as plain as you have been; there is not a drop of Lord ——'s blood in my daughter's veins."

A Cure for Influenza.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I have thought your useful journal the proper medium through which to communicate the following facts; and I confidently believe you will be the most able to solve a seeming mystery which they will suggest:—

During fourteen years of my life spent among the various tribes of Indians of North and South America, in addition to historical and pictorial gatherings which I have made, I have been closely studying the domestic economy of Indian life, in which I have found many simple and useful customs, which, as these poor and ignorant people are on the eve of extinction, I feel it my duty (in the wane of my own existence) to suggest for the consideration and perhaps benefit of the enlightened and wiser races.

The exposed life of these people, generally in rapid motion on horseback in the open plains, subjects them to frequent and sudden attacks of influenza, which would often result in fatal disease of the lungs, were it not for their prompt specific which disarms it of its pangs and injurious consequences.

The Indian attacked by the well-known symptoms of influenza, with a knowledge of the several days or weeks of distress that are to follow if he neglects it, dismounts from his horse, even if he be on a war or hunting excursion, and, wrapping his buffalo robe around him in some secret hidden spot, takes but an hour or two to avert it and resume his journey.

Having violently whipped his arms around his sides awhile, and afterwards chafed the palms of his hands together (probably to increase the circulation and open the pores), his heavy and warm buffalo robe is wrapped closely around him, covering his head and feet, when he lies straight, with his face to the ground, his nostrils and mouth covered by the palm of his left hand into which he breathes, whilst the other is closely pressed upon its back. The heated breath from the lungs gets additional heat (and perhaps electricity) from the palm of the hand, and is strongly and deeply re-inhaled; and by a few minutes of this respiration, the confined air within his shell, like a vapour bath, extracts the most profuse perspiration from his whole system, and in an hour or two he is on his horse, and free from further apprehensions of his commencing troubles.

It may seem incredible that in the palm of the hand there should be a soothing and healing balm for the respiratory organs and the lungs, which can be extracted by the breath and conveyed to those diseased localities, which no medicine can reach; but the simplicity and harmlessness of the remedy, which all can try, and without expense, I confidently assert is worth the trial by all who are thus afflicted. I say "confidently," because for the last twenty years by a similar treatment I have successfully evaded the frequent attacks of that distressing disease, by which, in the early part of my life, I suffered excessively.

My mode, which was prescribed by an Indian Doctor, has been and now is, when fully sensible from soreness of the throat and lungs, attended with coughing, that the disease is attacking, to enter my bed at the usual hour, with an extra blanket, and wrapping all closely around me, passing them over and under my head, and lying on my side with the palm of one hand closely covering the nostrils and mouth, and the other hand pressed upon its back, to commence breathing gently into it through the mouth partially open. This breathing for a few minutes seems to increase in volume and to savour of suffocation, when the mouth becomes from necessity more open, and the sensation is like that of inhaling exhilarating gas.

By the long and strong exhalations at this time, the feverish heat from the lungs is blown upon the palm of the hand, extracting from it a vital heat which is taken without loss by the succeeding inhalation directly to the lungs. My inhalations are deep drawn, and exhalations long and strongly blown upon the palm. The respiration, which for a little time is difficult, is encouraged by the relief which it gives, and in a little time becomes easy, and the sensation that of a current of air passing through the hand to the lower region of the lungs. This process unbroken in five or eight minutes covers the face and hands and throat (and in ten or fifteen minutes the whole system) with a profuse perspiration, when coughing ceases, and all pain in the throat and lungs is soothed, and fever (if there be any) disappears. I keep my position, however, and continue this mode of respiration for half an hour or more, which is not unlike in sensation to a vapour bath. I then gradually raise my hands from my mouth, and in a little time am able to supply the lungs through the nostrils, with the mouth closed. All pain in the lungs and coughing are gone; and after this inflated breathing, respiration is sufficiently easy in my confined shell, and I fall asleep, and waking I am dry and without fever. My head is then uncovered, no matter how cold the weather, and sleeping till morning with my mouth closed, the day before me is without pain and delightful, and my influenza is finished.

In a very few instances I have had a partial return of the soreness of the lungs and coughing on the following day, but in these cases, which were caused by neglecting to resort to my remedy in time, a repetition of the process in the following night has given me final relief.

Influenza, which is generally denominated "an inflammation of the tonsils," I am inclined to believe, has a much deeper seat, being strictly a temporary disease of the lungs (for the pain is seated there), an inflammation of a portion of the lungs, the excited exhalations from which, passing through the respiratory channels, irritate and inflame the tonsils and produce coughing. By the above simple and harmless process, most persons, I believe, like myself, may avert the distressing effects of influenza, if they attend to it in time, and those who are afflicted with weakness of the lungs, with coughing, with bronchitis and asthma, will find instant and temporary (if not final) relief by an habitual and moderate breathing into the palm of the hand, while going to sleep, without the exertion above described, exciting profuse perspiration. The mysterious sympathy between the palm of the hand and the lungs, long known to the Indians, I believe the whole world will yet admit, and perhaps physiologists may explain. They may tell us why the vital heat in the palm of the left hand is greater than that of the right ("Always breathe in the left hand," said my Indian Physician), why the temperature of the palm of the hand is equal to that of the lungs and the heart, when the back of the hand is colder than any other part of the human system.

I am, &c. GEORGE CATLIN.

COMMUNICATIONS have been received from—

Mr. MOON; Dr. COUSINS; Mr. COOMBS; M.R.C.S., L.S.A.; FAIRPLAY; Prof. BRAZIER; Messrs. LETTS, SON, and Co.; Dr. CORNELIUS B. FOX; Dr. NOBLE SEWARD; Mr. JOHN WOODMAN; Mr. ROBERT WATSON; Dr. MADDEN; W. A. P.; Dr. HITCHMAN; Mr. WHEATLEY; Mr. ROBERT ELLIS; F. M.; Dr. EDWARDS CRISP; Dr. MACLOUGHLIN; SUFFERER; Dr. ALEXANDER ROSS; Mr. HENRY MOODY; Dr. J. H. WATHEN; M.D.; Mr. G. R. SHERATON; Mr. J. B. HOLLOWAY; Dr. HARTREE; Dr. WILLOUGHBY AARING; Mr. J. B. YEO; A CONSTANT READER; Mr. E. SANDWELL; Dr. HENRY R. WRIGHT; Mr. G. GASKOIN; Mr. J. CHATTO; Dr. J. W. OGLE; Mr. J. HUTCHINSON; Dr. B. W. RICHARDSON.

BOOKS RECEIVED—

Medical Women. By T. Markby—Monthly Microscopical Journal, August—Pereira's Selecta è Præscriptis—Brakenridge on Theory of Diathesis—Chicago Medical Times, July—Martyn on Hooping-cough—Proceedings of the State Medical Society of Kentucky—Transactions of Odontological Society, June—The Shakspearian Diary and Almanack—Half-yearly Compendium of Medical Science, Jan.—Medical and Surgical Reporter, 15 Nos.—Despotism—Recent Discussions on the Abolition of Patents—Dr. Murray's Report on the Treatment of Epidemic Cholera—The Poor-law Chronicle—Dublin Quarterly Medical Journal, August.

NEWSPAPERS RECEIVED—

L'Union Médicale—Gazette Hebdomadaire—New York Medical Gazette—La Tribune Médicale—Gazette des Hôpitaux—The Redditch Indicator—Yorkshire and Lincolnshire Advertiser—Medical Press and Circular.

VITAL STATISTICS OF LONDON.

Week ending Saturday, August 7, 1869.

BIRTHS.

Births of Boys, 1070; Girls, 1060; Total, 2130.
Average of 10 corresponding weeks, 1859-68, 1897·4.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	824	806	1630
Average of the ten years 1858-67	756·5	729·0	1485·5
Average corrected to increased population	...	...	1634
Deaths of people above 90	...	...	...

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-cough.	Typhus.	Diarrhœa.	Cholera.
West	463388	...	3	10	...	6	2	71	...
North	618210	2	7	25	2	25	14	84	...
Central	378058	...	1	9	2	3	7	37	...
East	571158	...	7	31	2	16	4	91	...
South	773175	...	7	25	2	15	11	111	...
Total	2803989	2	25	100	8	65	38	394	...

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·867 in.
Mean temperature	59·8
Highest point of thermometer	76·5
Lowest point of thermometer	45·4
Mean dew-point temperature	52·4
General direction of wind	W.S.W.
Whole amount of rain in the week	0·47

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, August 7, 1869, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the year 1869.	Persons to an Acre. (1869.)	Births Registered during the week ending Aug. 7.	Deaths. Corrected Average Weekly Number.	Deaths. Registered during the week ending Aug. 7.	Temperature of Air (Fahr.) Highest during the Week.	Temperature of Air (Fahr.) Lowest during the Week.	Temperature of Air (Fahr.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tens per Acre.
London (Metropolis)	3170754	40·7	2130	1462	1630	76·5	45·4	59·8	0·47	47
Bristol (City)	169423	36·1	117	76	*84	71·6	45·0	59·1	0·93	94
Birmingham (Boro')	360846	46·1	271	175	152	69·8	48·0	58·1	0·53	54
Liverpool (Boro')	509052	99·7	337	295	344	68·5	50·0	57·4	0·68	69
Manchester (City)	370892	82·7	232	210	*234	72·0	45·8	56·6	1·54	156
Salford (Borough)	119350	23·1	119	60	63	70·3	45·1	55·8	1·83	185
Sheffield (Borough)	239752	10·5	164	126	126	71·0	44·0	57·2	0·81	82
Bradford (Borough)	138522	21·0	112	71	63	70·4	50·8	57·4	0·78	79
Leeds (Borough)	253110	11·7	214	129	138	72·0	50·0	58·4	0·72	73
Hull (Borough)	126682	35·6	86	59	46	..	...	...	...	...
Nwestl-on-Tyne, do.	130503	21·5	92	69	67	...	...	...	...	...
Edinburgh (City)	178092	40·2	123	86	96	66·7	44·0	54·5	0·50	51
Glasgow (City)	458937	90·6	347	268	257	67·1	45·7	54·3	0·70	71
Dublin (City, etc.+)	320762	32·9	182	158	146	70·5	43·3	57·6	0·63	64
Total of 14 large Towns	6546587	35·5	4526	3244	3446	76·5	43·3	57·2	0·84	85
Paris (City)	1889842	...	...	...	795 Week ending July 31.	...	...	...	...	...
Vienna (City)	(1863) 560000	...	...	...	372	...	...	76·3	...	...

Week ending July 31.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·867 in. The barometrical reading increased from 29·61 in. on Sunday, August 1, to 30·16 in. on Friday, August 6.

The general direction of the wind was W.S.W.

Note.—The population of Cities and Boroughs in 1869 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous.

* The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

† Inclusive of some suburbs.

APPOINTMENTS FOR THE WEEK.

August 14. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 1½ p.m.

16. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 1½ p.m.; St. Peter's Hospital for Stone, 2½ p.m.

17. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.

18. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.

19. *Thursday.*

Operations at St. George's, 1 p.m. Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

20. *Friday.*

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

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ORIGINAL LECTURES.

BY DIRECTION OF THE RADCLIFFE TRUSTEES.

LECTURES ON THE GERMINAL OR LIVING MATTER OF LIVING BEINGS.

DELIVERED IN THE MUSEUM AT OXFORD

By LIONEL S. BEALE, M.B., F.R.S.,
Fellow of the Royal College of Physicians, Physician to King's College Hospital, and Professor of Physiology and of Morbid Anatomy in King's College, London.

OF MENTAL NERVOUS ACTION.

OF MENTAL AS COMPARED WITH MECHANICAL ACTION—OF THOUGHT AS A RESULT OF CHEMICAL ACTION—IS THE BRAIN TO BE LOOKED UPON AS A VOLTAIC BATTERY?—ON EXPRESSING THOUGHTS—OF THE NERVE MATTER CONCERNED IN MENTAL ACTION—OF THE CHARACTER OF THE GERMINAL MATTER—OF THE NATURE OF WILL, AND OF THE LIFE OF GERMINAL MATTER TAKING PART IN MENTAL OPERATIONS.

(*Concluded from page* 43.)

Of the Nerve Matter concerned in Mental Action.

I WILL now refer further to the results of anatomical investigation. Near the surface of the grey matter in that extensive layer above the planes in which the caudate nerve-cells are situated, which is generally said to be composed of delicate nerve-fibres and granular matter, I have succeeded in demonstrating multitudes of very small masses of germinal matter lying amongst the finest branches of the fibres. In some places there are aggregations or collections of these bodies, which are extremely delicate, and become disintegrated very soon after death. Some sections appear to consist almost entirely of these bodies, so great is their number. Whether they are actually connected by fibres or in any other way with one another, I cannot say. But masses of germinal matter thus situated are arranged very favourably for influencing the fibres which ramify amongst them. The slightest change in their form could not fail to influence nerve currents traversing adjacent fibres, and as we are now well acquainted with the active movements of germinal matter, it is impossible to help suggesting that the movements occurring in these masses of germinal matter produce a direct effect upon the fibres, and that these movements constitute or are immediate results of mental action. If this be so, mind is associated with this the most exalted form of living or germinal matter, which is so arranged that the slightest change occurring in it may produce an effect through the influence of a most elaborate mechanism brought into very intimate relation with it. Although I am not prepared to deny that the germinal matter of the caudate nerve-cells of the grey matter of the cerebral convolutions is concerned in mental nervous actions, there are many arguments which lead me to think that this is not the material substance which is immediately influenced by the mind, but rather belongs to that wonderful mechanism which is concerned in the expression of thought, and in the conversion of ideas into symbols.

Of the Character of the Germinal Matter taking part in Mental Operations.

Some might anticipate that the matter immediately influenced by mind would exhibit some remarkable structure and arrangement, but those who have studied the characters of living matter in the lowest and highest organisms will not expect to find this, the highest form, exhibiting any structure whatever or possessing any peculiar chemical composition. They will be prepared to find in the highest forms the same colourless, structureless, moving substance which constitutes the living matter of the lowest organisms, and they will look for a difference in endowment, not for any material difference. The germinal matter of the embryo of the highest and most complex being in nature cannot be distinguished from that constituting the germ of a very simple being, nor does the germinal matter of the nerve cells of the human embryo exhibit any special characters. We should therefore anticipate that the highest form of germinal matter known, that which takes part in mental action, would agree in its characters so far as we are able to determine them, with other forms. The difference, vast as it is, is a difference in power which, however, we can only estimate by the results of its action—by the effects produced by it. In the living state it is no doubt perfectly transparent, and exhibits no characters which would enable us to form any notion of its exalted functions. Its powers, properties, or endowments are unquestionably due, not to its chemical composition or to the peculiar arrangement of its particles as compared with other forms of germinal matter, but solely to that wonderful force, property, or power to which I restrict the term *vital*.

We should anticipate that of all kinds of germinal matter known, that concerned in mental nervous action would be most evanescent and prone to rapid decay and disintegration after death. It is therefore not surprising that in many cases no trace of the delicate masses of germinal matter I have described should be discovered. We should expect that change would almost immediately follow the death of the individual, and that this form of germinal matter would be completely broken down long before other kinds existing in the same organism had ceased to manifest active vital phenomena. And I may remark that the length of time during which different forms of germinal matter survive the general death of the organism varies greatly—some forms dying very soon, while others live even for days. The capacity for living under altered conditions becomes greater as we descend from the highest towards the lowest kinds of germinal matter, the highest being killed by slight alteration in the surrounding circumstances, while the lowest resist very considerable changes, and for long periods of time. The pus corpuscle and the particle of *contagium*, both which are descendants of the germinal matter of the organism, retain their vitality under conditions which would have been certainly fatal to the germinal matter from which they sprang. (c) The power of resisting the destroying influence of external conditions seems to increase as germinal matter becomes more and more debased.

The living matter concerned in mental operations is that which is last formed, and is probably the highest condition which living matter has yet assumed. This, like other forms taking part in the formation of the various tissues and organs belonging to the organism, has come by direct descent from the original germinal matter of the embryo. From the growth and subdivision of that primitive mass have resulted, and in definite and prearranged order, numerous forms endowed with marvellously different powers. But the germinal matter which forms cuticle, that which produces fibrous tissue, muscle, nerve or bone, the germinal matter which gives rise to biliary secretion, to the saliva, and to the gastric juice, as well as that which takes part in mental nervous action, have, so to say, one common parentage; and if, as these several forms are evolving themselves, the conditions which alone render possible progress towards their highest state become modified, the attainment of perfection is prevented. Such cases are familiar to us under the term *arrested development*, in which, up to a certain period of life, everything seems to have proceeded correctly, but then in consequence of some disturbing action modifying the process of nutrition and affecting the division and subdivision of the germinal matter, the structures which would at length have resulted in due course can *never* be formed. Of all the changes originating in this way, those affecting the germinal matter taking part in the development of the higher parts of the nervous system of man lead to the most disastrous results. That gradual development of the mental powers *after* the individual has ceased to grow, which is one of the most remarkable of the characters by which man is marked off from the lower animals, is rendered impossible, and the mental powers of the child or of the infant remain associated with the organism of the adult.

The new powers which germinal matter acquires as development advances arise in some way as the new centres (nuclei, nucleoli) originate in pre-existing centres. How such new powers result it is of course as impossible to suggest as it is to explain how these new centres originate. And it may be asked what is to be understood by "centre," for it is obvious that the centre demonstrated by low powers has within it numerous centres, as may be proved by examination under glasses magnifying very highly, and there is reason to believe that if our powers were increased ten, twenty, or a hundredfold, we should approach but a little nearer to the unrealisable actual centre; and I can conceive that in the highest forms of germinal matter new centres of living matter are constantly welling up, as it were, in already existing centres, having within themselves infinite and inexhaustible sources of new centres.

The germinal matter taking part in mental action, like other forms, is liable to defective as well as irregular and monstrous growth, even during and after the adult period of life. These

(c) See my report on the cattle plague, 1865.

changes, which may be temporary or permanent, are probably more under the immediate influence of the will than is the case as regards changes in other forms of germinal matter. But there can, I imagine, be little doubt that, just as by exercise up to, and in many cases even after, the middle period of life, we are enabled to increase the power of certain muscles and the perfection of certain movements which are associated with increased formation of nerves and nerve-cells in the nerve centre governing them: so, by habitually indulging in certain trains of thought, we may perhaps effect the increase of the germinal matter concerned until at last this preponderates so much over other portions taking part in other kinds of mental action that it alone is exercised, while the rest remains hardly active at all or quite dormant. Every lunatic asylum affords what I conceive to be examples of this, and it is not impossible in certain instances to distinguish the cases in which the mental apparatus itself is deranged from those in which the mechanism concerned in the expression of ideas is the seat of disease. On the other hand, what remarkable instances do we meet with of the gradual but continuous improvement of the mental powers even in advanced life, where they have been subjected to unremitting but judicious exercise from early youth upwards!

The mental excitement and incoherence, followed by complete suspension of mental powers, which occur in inflammation and other conditions where the germinal matter takes up an abnormal proportion of nutrient material, are readily explained, as are also those cases in which impaired intellectual action follows as a consequence of the disease. Where the morbid change has proceeded to a considerable extent there may be permanent impairment, while in cases where only slight change has occurred only temporary derangement may result.

Of the Nature of Will, and of the Life of Germinal Matter taking part in Mental Operations.

Many considerations lead me to conclude that *will*, so far from being a result of certain changes induced in matter, should rather be regarded as the *power which influences the material particles and causes them to move and take up new positions*. It seems to me that this power is of the same order as that which induces the movements in germinal matter, and which I have called *vital power*. I conceive that the change in form of the germinal matter is a consequence of some influence exerted upon the particles immediately preceding their movement. This active cause, the nature of which we know nothing, and which gives rise, we know not how, to material changes which, in the case of some of the lower forms of living matter, are obvious enough to us, constitutes the *vital power* of the *germinal matter*. This is, as it were, the starting-point of all those complex phenomena which occur whenever a voluntary act is performed, and, as regards the material changes in the germinal matter concerned in mental operations is *the mind*. The germinal or living matter may be said to be the domicile of the *ego*; but so rough are our methods of investigation that when we commence to search for the *ego* we destroy its habitation, and the *ego* escapes where we cannot follow it. The particles of the matter which were directed and changed by it may be directed and changed in new ways; but it is absurd to think we can discover the directing, changing *ego* in the dead and disintegrated matter which remains after it has gone, and equally absurd to deny its existence because we cannot find it, or to affirm that it is mere force which has changed its mode or form. Certainly the dead matter we see and touch may in some sense be regarded as having once formed a part of the material framework of the living being, but it was then in a very different state, for that which gave it body and made it what it was has since gone. To assert that the material elements of the grey matter of the brain of a dead man are all that constitutes the active living organ of the mind, would, indeed, be absurd.

Before we shall be in a position to form an opinion upon the nature of a mental process we ought to be able to form a conception of the actions which immediately precede the observed *changes of form in a mass of very simple living matter that can be easily subjected to investigation, and of the antecedent phenomena which determine these actions*. But unfortunately at present we have no means of investigating this most important question. We cannot explain why one part of a living mass should move in advance of another. To say the movement must be the consequence of *some antecedent phenomenon* will only satisfy those who are content to receive arbitrary assertions in place of explanations. The supposed antecedent phenomenon is unknown, and is perhaps unknowable. It is probably altogether wrong to use the word *phenomenon* here at all, the antecedent in this case not being a phenomenon. Until we can explain the movements of the living matter of an amœba or a white blood-corpuscle it is not likely we shall be able to arrive at any positive conclusions concerning the nature of the actual changes in the living matter which determine mental nervous actions. The arguments I have advanced in favour of the view that the highest mental actions are associated with vital movements, and are, in fact, vital actions occurring in living matter, seem to me to be justified by the facts I have adduced; and although there seems to be at present no possibility of actual proof, I venture to think that the evidence upon which my view rests, indirect though it be, will not be regarded as inconclusive.

List of Microscopical Specimens illustrating the Structure of Nerve Fibres and Ganglion Cells.

No. of Specimen.		No. of diameters magnified.
84.	Ultimate nerve fibres, cornea; observe the germinal matter of the nerve distinct from that of the cornea	215
85.	Ultimate pale nerve fibres, with masses of germinal matter; frog	215
86.	Fine nerve fibres with their masses of germinal matter or nuclei; trunk of a nerve	215
87.	Bundles of nerve fibres and vessels; frog	130
88.	Nerve fibres and ganglion cells; frog	130
89.	Ganglia and nerve fibres, with small arteries; green tree frog	40
90.	Nerve fibres and arteries; green tree frog	40
91.	Nerve fibres and ganglion cells, green tree frog; a vessel crosses the specimen in the lower part	215
92.	Ganglion cell with straight and spiral nerve fibre; green tree frog	700
93.	Large caudate nerve cells in anterior cornu of grey matter; spinal cord	40
94.	Large caudate nerve cells; upper part of spinal cord; dog	130
95.	Caudate nerve cells, grey matter of brain; lamb	215
96.	" " " dog	215
97.	" " " cat	215
98.	" " " human subject	215
99.	" " " girl, aged 16	215
100.	" " " man, aged 60	215

ORIGINAL COMMUNICATIONS.

CLINICAL SURGERY.—No. IV.

ON HIP DISEASE.

By THOMAS BRYANT, F.R.C.S.,
Assistant-Surgeon to Guy's Hospital.

ON DISEASES OF THE HIP-JOINT ENDING IN ANCHYLOSIS WITHOUT SUPPURATION.

Part II.

In illustrating clinically disease of the hip-joint, I have divided my cases into different classes, having been guided in the matter as much by the results of the disease as by the pathological processes through which they were brought about.

In a former part I have given cases of articular ostitis and synovial disease, which were fortunately arrested by treatment in their first or earliest stage, the movements of the joint in every case having been preserved. In the series to which I now propose to draw attention a different result took place, for in all the cases the destruction of the joint ensued, and a cure by anchylosis followed. In none, however, did suppuration occur. The changes of the joint went on in every instance unattended by acute inflammatory symptoms or any external evidence of acute disease. Yet the cartilages gradually disappeared, and the bones became firmly fixed by inflammatory product, a sound and satisfactory cure by anchylosis taking place in every instance, leaving a useful limb.

In the succeeding section I shall give examples of suppuration of the hip-joint ending in anchylosis, and conclude by some remarks, with cases, on operations upon the joint.

Case 18.—*Anchylosis of Hip-joint without Suppuration, probably from Articular Ostitis.*

John A., aged 11, came under my care at Guy's Hospital on

April 18, 1867, for some stiffness about the right hip-joint. It had gradually come on after an injury to the joint by a fall one year previously. No swelling in the joint was ever observed, and no suppuration. The joint had been the seat of a dull aching pain since the accident, and had gradually become rigid. He had used the limb freely, although with a limp, and had never had any advice. When coming under care the right lower extremity was straight, with the foot turned outwards. The pelvis was tilted up on the left or sound side, giving the appearance of elongation of the affected limb. This appearance was, however, deceptive, for both limbs were of the same length. The head of the femur was firmly fixed by anchylosis in the acetabulum, not the slightest movement being allowed. There was no thickening about the joint, nor any pain on pressure about the articulation. It was a good case of anchylosis from disease without suppuration.

Little care had been bestowed upon this patient; he had got about with a crutch, and had had no Surgical treatment, yet a good result followed.

Case 19.—*Acute Anchylosis of Hip-joint without Suppuration, apparently from Articular Ostitis.*

John B., aged 9, the brother of a boy who had been under my care for hip disease some year or so previously (*vide* Case 30), came under my care at Guy's Hospital for disease of his hip-joint on June 16, 1861. He was a cachectic child, and had complained of pain in the right hip-joint for some months, increased on walking, but no swelling, etc., had ever existed. The disease appeared after small-pox. When I saw the boy the joint was clearly becoming fixed. In six months anchylosis appeared to be complete. He could walk or run without pain, but not the slightest movement in the joint could be obtained.

The treatment of this case consisted of rest in bed with a splint or weight to the affected limb, the parents alternately removing one and applying the other. The parts were fomented with warm water night and morning, and tonics were given with good food.

Case 20.—*Anchylosis of Hip-joint without Suppuration.*

John G., aged 6, came under my care at Guy's Hospital on July 16, 1866, for some affection of the right hip-joint. It had existed for one year, and had come on with pain in the part and limping. When seen the thigh was evidently becoming fixed to the pelvis, and the foot was everted. There was pain in the hip-joint and some little thickening about the neck of the femur. Pain also was produced on pressure being made between the thigh bone and pelvis. No suppuration had existed.

Rest, fomentation, and tonics proved rapidly beneficial. All pain in the joint rapidly subsided, and anchylosis went on speedily, a permanently stiff joint being the result. This end was secured by six months' treatment.

Case 21.—*Anchylosis of Hip-joint without Suppuration.*

Edward B., aged 33, a waterman from Gravesend, came under my care at Guy's Hospital on April 26, 1869, for some affection of his left hip. It appeared that two years previously, without any accident or known cause, he was attacked with pain in the part. He looked upon it as rheumatism, and went about his work. The pain gradually becoming worse, in about three months he was obliged to give up his occupation, and took to his bed, where he remained for four months, the pain gradually disappearing under treatment by rest and fomentations. At the end of that time he got up, and went about, the hip-joint gradually becoming stiff. There never had been any swelling about the joint, only a dull aching pain.

When coming under my care, the head of the femur was firmly anchylosed to the acetabulum, and the leg was straight. There was no thickening of the bone or enlargement of the part, and no pain.

It was an admirable stiff limb.

Case 22.—*Anchylosis of Hip-joint without Suppuration.*

George S., aged 25, came under my care at Guy's Hospital on January 25, 1866, for some affection of the left hip-joint. It had been the subject of pain for three years and a half, this pain extending downwards to the inner side of the leg. No suppuration had ever taken place, nor much swelling. The joint had been gradually becoming more stiff. When seen, the affected or left limb appeared to be three inches shorter than the right; but, on measurement, no such difference was found, the apparent elongation being due to a tilting of the pelvis. The head of the femur was anchylosed in its pelvic cup, and no external thickening could be felt. Firm pressure and free exercise could be allowed on the limb without pain.

Case 23.—*Anchylosis of Hip-joint without Suppuration.*

E. H., aged 20, came under my care at Guy's Hospital on March 4, 1866, for anchylosis of the right hip-joint. It had been the result of disease of the joint three years previously, but without abscess. When seen the right limb appeared an inch and a half shorter than the left from the tilting of the pelvis on the affected side. The anchylosis was complete. She had been in the Aylesbury Infirmary for many months.

Case 24.—*Disease of Hip-joint—Anchylosis without Suppuration.*

Jane B., a healthy-looking girl, aged 14, came under my care at Guy's Hospital in 1862, for disease of her hip. The earlier history of her case has, however, been mislaid. She was treated by me for two years, and never had any suppuration. She left cured, with a stiff joint, at Christmas, 1864. The pelvis was then drawn up on the affected side.

On March 21, 1867, this patient reappeared with a good, sound, anchylosed joint. The limb was about three-quarters of an inch shorter than its fellow, but only from the tilting of the pelvis. She had no pain in walking, and could walk three or four miles with ease. She came to me to ask if she might have a high-heeled boot, but I refused, as doing so would prevent the pelvis coming down straight—a contingency which was possible, as growth was not completed.

On November 21, 1867, she again appeared before me, but little change had taken place. A high-heeled boot was consequently ordered, and since then she has got on comfortably. On March 9, 1868, she called, and said she was quite well.

Remarks.—The series of cases which have just been briefly detailed cannot but be regarded with satisfaction by any Surgeon, for the result secured by natural processes, aided by Surgical art, next to a complete restoration of the joint is certainly the best that can be looked for after disease, and, when secured, is to be hailed with pleasure. The pathological process by which the changes in the articulation were brought about, with the natural cure, are in a measure somewhat obscure; still I think it is tolerably clear that the articular cartilages in every case must have partially or wholly disappeared, and their places been occupied by inflammatory lymph, which subsequently organised, and bound together the articular surfaces of the bones. How these cartilages disappeared is a pathological question which can only be answered by a reference to the general pathology of diseased joints. For my own part I believe these changes to be in all the cases the direct result of articular ostitis, the inflammation of the bone having so far passed beyond the stage which the former series of cases illustrated as to have interfered with the due nutrition of the articular cartilages, and thus to have allowed them to undergo the granular degeneration to which they are so prone, and subsequent absorption; inflammatory lymph at a later stage of the disease occupying their position, and, by its organisation, producing an anchylosis; the disease in the bone in these cases becoming arrested at a later period of the disease than in the former series, but yet recovering, no real disorganisation of the articulation having taken place. I am disposed to think, and pathology leads me to the conclusion, with clinical observation, that anchylosis of a joint without suppuration rarely, if ever, takes place as a consequence of synovial mischief; simple synovitis, or the pulpy disease, when not undergoing a complete recovery, going on to suppuration and the other changes which follow degenerative changes; although, when suppuration takes place, recovery with movement is more common. On looking over all my cases in which anchylosis followed upon disease without suppuration, and of which the cases I have quoted are fair examples, it is interesting to observe that in all the cases the clinical symptoms were precisely similar to those given in the former section as indicative of chronic inflammation of the articular extremities of the bones. To illustrate further these points, I propose now to quote the case of a man in which even dislocation of the head of the femur took place, followed by anchylosis, without suppuration, the changes in the cartilages and ligaments of the articulation having been so complete that the head of the bone slipped out of its position and became fixed in its new site without swelling, and without the slightest external evidence of any disorganisation of the articulation or synovial mischief. In this instance the change followed an attack of what was looked upon as acute rheumatism, which involved nearly all the patient's joints and settled in the hip. In such a case rapid degeneration of the articular cartilages must have taken place, with ulceration of the ligament. This class of cases will probably be alluded to again when we come to con-

sider the changes which take place in a joint, the result of so-called rheumatism.

Case 25.—Dislocation and Acute Anchylosis of Hip-joint following a so-called Rheumatic Attack.

Walter S., aged 7, came under my care on July 8, 1861, for an attack of what was called rheumatism which had settled in the right hip-joint. He had had a rheumatic attack, involving nearly all his joints, which had left him two months previously, the right hip-joint alone being the subsequent seat of pain. The pain had been constant and of an aching kind. When I saw the boy the head of the right femur was dislocated on to the dorsum ilii, and was quite fixed. Chloroform was given, but no movement could be detected.

I wanted to employ forcible extension in this case to bring the head of the bone into its right place, but the boy's parents refused, so the hip went on to complete anchylosis, but a very useful limb existed in August, 1862, one year subsequently.

The following interesting case is appended to this group. It is a very good one to illustrate the effect of ostitis upon the hip:—

Case 26.—Ostitis of Femur—Anchylosis of Hip-joint at a Right Angle without Suppuration—Arrest of Growth in Femur.

[Reported by Mr. W. T. Douglas.]

George E., aged 17, came under Mr. Bryant's care at Guy's Hospital on March 17, 1869, for disease of the right femur and anchylosis of the hip-joint.

Two and a half years ago he received an injury to his right thigh. Pain followed about the knee, with swelling, and an abscess formed in the popliteal space and in other parts of the thigh; from these several pieces of bone came away. He was confined to his bed twice during the two and a half years—once for a month after the accident, and about a year ago for two months, during which time his thigh was flexed upon the pelvis, and rested on its outer side.

On admission the thigh was flexed upon the pelvis at a right angle, and the hip-joint seemed anchylosed. The thigh was two inches shorter than the left, and the whole femur from its head to the condyles was much thickened.

At the lower third of the thigh on its inner side a sinus existed leading down to necrosed bone, and several cicatrices were present, indicating the sites of old abscesses.

On April 7 chloroform was given, and a careful examination of the thigh made. Complete anchylosis of the hip-joint was detected, not the slightest yielding showing itself. The knee-joint was sound, and the femur necrosed.

On April 13 the necrosed bone was removed, the new bone covering in the sequestrum being unusually dense.

April 14.—The patient's urine was found to contain a quantity of blood. Gallic acid was ordered in five-grain doses three times a day.

17th.—Blood has disappeared from the urine, but the urine is still albuminous. The wound looks well, and the patient appears comfortable.

May 5.—Urine natural; wound doing well and healing.

30th.—Wound nearly well; general health good.

June 15.—Convalescent; wound nearly well.

30th.—This boy left for the country with the wound healing kindly; indeed, it had gone on well from the first, in spite of the hæmaturia, which returned, however, before he left the Hospital.

Remarks.—The interest of this case principally lies in the occurrence of anchylosis of the hip-joint without a single indication of joint mischief. It seemed tolerably certain that ostitis of the whole femur had existed as indicated by its thickening, and it seemed probable that this ostitis had spread to the epiphysis and hip-joint, the articular cartilages subsequently disappearing and anchylosis taking place. The femur had likewise been arrested in its growth, for it was two inches shorter than the left. The drawing of this case fairly illustrates the abnormal position of the bone. The hæmaturia which followed the operation is a point worthy of observation. Was it the result of the chloroform? It seemed to follow closely upon its administration, and passed away without much distress or trouble. I have never known, however, such a symptom to follow the use of the anæsthetic. From the recurrence of the blood in the urine it is probable there was some renal disease, and with this opinion I did not feel disposed to do anything more for the patient, although it is to be noticed that the recovery from the operation went on as smoothly as if all the boy's organs had been sound.

Drawing illustrating the position of the femur at right angles to the pelvis.

NOTES OF

TEN CASES OF PUERPERAL CONVULSIONS.

By JOHN C. MURRAY, M.D., of Newcastle-upon-Tyne.

Puerperal convulsions being at once the most frightful and serious complication of parturition, I purpose adding to the statistics of the disease by a few notes on ten cases which I have seen during the last sixteen years.

Case 1.—Miss G. H., aged 19, a short, stout, bilio-lymphatic primipara, who did not seem to feel her position, was taken in labour at 2 a.m. on November 24, 1853. Epileptiform convulsions commenced at 11 a.m., while the os uteri was still at brim and but little dilated. At 5.30 p.m. a very large male child was born dead during a convulsive seizure, although I found no signs of speedy delivery when examining fifteen minutes before. Presentation was natural, urine highly albuminous. She had in all seven convulsions, and remained unconscious until the third day, but made a good recovery. No premonitory symptoms were observed. My note-book assigns the causes to have been excessive costiveness, violent uterine action, and her being an epileptic.

Case 2.—Mrs. I. J., a little weak woman, aged 28, in her third pregnancy. Labour came on at full period on February 4, 1856, and observed a regular course, with the exception of being complicated by the occurrence of two fits, attributable to hysteria, during the dilatation of the os. Mother and child (female) did well. No complication in previous or subsequent labours.

Case 3.—On May 23, 1857, Mrs. K. L., aged 24; second pregnancy. From 13 years of age she had been subject to epileptic fits. Since May 13 one or more occurred daily. A well-grown male was born during a convulsion; but mother continued to have epileptiform convulsions until the fifth day, when she died.

Case 4.—November 2, 1857. Mrs. M. N., aged 27, primipara, a large, stout, lymphatic woman. Natural presentation. Had a fit when the child's head was distending the external parts. As she resided quite near my house, I procured chloroform, and exhibited it immediately. She had no return of the convulsion, and remained comatose only for five hours. She remembered nothing of the labour afterwards. The child (a female) lived, and mother made a good recovery.

Case 5.—Miss O. P., primipara, aged 20. Labour commenced at 6 a.m. on December 1, 1857; had first convulsive seizure at 6 p.m. She was attended by another Medical man, who called me in at two in the morning of the 3rd. When I arrived she was in a strong convulsion. Os was at the brim of pelvis and dilatable. I ruptured the membranes, and delivered her by turning of a dead male child at three. Convulsions continued till 12 at night (thirty hours), when the girl died. Mental emotion was evidently the cause of the convulsions. The child was by her master. She denied her position, and, as long as she was conscious, kept her legs together, and lay in impossible positions in order to prevent our aid, being resolved to die undelivered. She was largely bled.

Case 6.—January 7, 1858. Miss Q. R., aged 22, primipara, complained of pain across her chest, and soon after went into convulsions. Chloroform was administered and applied on flannel to her chest and stomach, with the result of speedy relaxation of the os uteri, birth of a female child, and disappearance of the convulsions. Both mother and child did well. Subsequent confinements were natural.

Case 7.—February 6, 1858. Miss S. T., primipara at seven months. Tall, thin, excitable woman, with the red hair and florid complexion of the sanguine temperament. Epileptic convulsions came on during the dilatation of the os uteri, and recurred for twenty-four hours after; hysteritis and mania supervened. The latter continued forty days. Urine, which was highly albuminous, had to be drawn off for six days. This woman, after recovery, married her lover, and has since had natural labours.

Case 8.—April 23, 1866. Miss U. V., aged 21, primipara, a short, handsome, and beautiful brunette. Labour pains came on at 5 a.m. Soon afterwards her sister came into the house, and upbraided her, also was the bearer of a letter from her lover, discarding her. Mental depression followed, retarding labour. At 12 noon, my assistant, who was in attendance, sent for me to come immediately, as convulsions had come on. We bled her to forty ounces, ruptured the membranes, and delivered her by turning of a dead male child, it being too high in the pelvis to admit of the forceps being easily applied. Convulsions recurred at intervals for twenty-four hours after delivery, and were succeeded by mania for twenty-eight days. She is now happily married, and had no untoward symptoms in her second confinement. In June, 1868, her urine was examined and showed no indications of disease.

Case 9.—Mrs. W. X., aged 29, tall and anæmic, of lax muscle, fair hair, large head, and nervous temperament, seven months advanced in her fourth pregnancy, was attacked with apoplectic convulsions on November 26, 1867. Former confinements natural. She had been suffering since November 18 from rheumatic fever, which at that time was very prevalent in Newcastle. Treated upon the neutralisation theory until December 2, when, in consequence of there being high fever and severe headache, I ordered cold to the head, an enema, counter-irritation, etc.

At 3 a.m. on December 4, fifteen days from the rigors, a messenger came for me stating that she was "working in fits." Upon seeing her, I sent for a midwife to receive my instructions and stay with the patient. At 6 a.m. I was called again, and had an opportunity of observing a convulsive seizure. It commenced in the right eye, then in left and face, next in the arms, and lastly the legs. The tongue, which had been bitten at first, now occupied the roof of the mouth. The eyes were much injected, and on different planes; right pupil more dilated than the other; face and neck purple; hands livid and turned inwards. Profound coma and stertor followed the second convulsion at 3 a.m. Vagina was intensely hot; os uteri above brim small and undilatable. Her husband, who is a drunkard, and addicted to beating her, was awakened about 2 by her moving about the house. She said she felt sick, struck a light, and crept to her bed again, for Mr. X. was soon awakened from a doze by her "kicking."

Treatment.—Calomel every two hours from 3.30. At 6, in addition, an enema of turpentine and assafœtida. Head elevated, hair cut off, and ice applied to head. Mustard poultice wrapped round the legs up to the knees, and valerianate of zinc. No bleeding. At 7 p.m., a violent convulsion (the eighteenth and last) occurred in left side alone, after which the voluntary muscles seemed paralysed; evacuations passed involuntarily; the eyes were prominent and bloodshot, the right most so; pupils dilated; urine nearly solid upon boiling. Shortly after 10 p.m., I made the fourth visit that day, with the intention of delivering if possible, but found the os was still at brim, dilated to the size of a florin, and that she was so low that there was imminent risk of her dying during any attempt at delivery. Wishful to do something, I ruptured the membranes, and gave her powdered borax in infusion of ergot every quarter of an hour for four times. Shortly after its fourth exhibition, at midnight, the fœtus came. It had died about 12 noon.

5th.—Profound coma; involuntary evacuations; skin burning hot; lochia plentiful, very dark.

6th.—Paralysis continued.

7th.—No change; had a rigor, said to last for an hour and a half.

8th.—She opened her left eye, moved her left hand. When loudly called she said "What?" but relapsed immediately. Tongue dry and swollen; pulse frequent and small.

10th.—Complained of pain in wrists, elbows, and fingers, upper before the lower extremities, lochia continuing free and redder; pulse 99, small and frequent; tongue smaller, cleaner, and moist; passed urine which contained albumen. All time from November 30 until to-day blotted out from her memory.

13th.—Pains in knees and fingers; pulse 82, small and firm; tongue fiery red, but moist; discharge become thick, yellow, and copious.

16th.—Pulse 82, full and soft; skin perspirable; urine plentiful, still clouded with albumen under test.

19th.—Pulse 78; urine had ceased to scald her; large sores on calves of the legs from the mustard applied beginning to heal; tongue and skin improving; pains in limbs ceased.

January 20, 1868.—Urine gave no indication of renal disease. She complains of headache, loss of memory, and numbness of the right arm and legs.

Case 10.—May 22, 1868. Mrs. Y. Z., primipara, aged 28, of ruddy complexion, red hair, short stature, sanguine temperament. Labour commenced during a thunder-storm. Liquor amnii escaped at 4 p.m. At midnight a healthy female was born, labour having been natural, but tedious.

23rd.—Upon visiting her at 12 noon she complained of severe headache; her face was flushed, voice husky; pulse 90, full, firm, and bounding. On leaving I was immediately recalled. She was in an epileptic fit, which lasted eight minutes. The face was dark and almost hideous. Foam, bloody from her tongue, was about the mouth, and moved with her breath. Neck swollen; convulsions general; pupils dilated. I now observed her feet to be puffed. She vomited twenty minutes after the first convulsion.

30th.—Pulse 95, small and weak; tongue improving; discharge free; no milk.

June 1.—Pulse 93, full, soft; tongue clean, moist; lochia profuse; passed a little urine.

4th.—Pulse 80, full, soft; no milk; many suppurating points on body.

12th.—Right breast suppurating; milk in left. Treatment: Head raised, ice in bladder applied to it; turpentine stupe to the abdomen; enemata of warm "bran-tea" and milk thrown up vagina. Tinctura opii and vinum antimonii in camphor mixture; beef-tea and brandy. No bleeding.

Résumé and Remarks.—The last two being typical cases, I have given a more extended report of them. Case 9 is interesting as being one of apoplectic convulsions. It comes under No. 3 in Division A of Dr. Carl Braun's treatise—viz., "Convulsions from Cerebral Disease, as Meningitis, Encephalitis," etc. Cases 1 and 3 were epileptics from youth. In Case 4 the fits occurred during the strong bearing pain preceding the exit of the fœtus. In Cases 5, 7, and 8 I assign mental emotion as the cause; in Case 6 anæmia and impure blood. Case 10 supports Dr. Ramsbotham's "atmospheric influence theory." When I told the friends that the "thunder in the air" was the cause, they were at once relieved and satisfied. It is worthy of remark that Case 10 had three times had rheumatic fever, and that another attack "was due" when she was confined. The erratic way in which the cases of puerperal convulsions happened supports Blundell's statement that they occur more frequently in certain seasons and years than others. Six were in the years 1856, 1857, and 1858; none for eight years and two months, during which 1375 accouchements were attended. In 1866, 1867, and 1868 one occurred each year. With regard to the months, January produced one, February two, April one, May two, November two, December two. Hysteritis followed in two cases: one in February, 1858, and the other in May, 1868. They were all poor women except Mrs. Y. Z. The two maniacal cases were unmarried and very despondent. They both recovered, as did also the two which complained of pain in the stomach and the two with severe headache. In two cases the convulsions came on at seven months, in six during the dilatation of the os, in one during severe bearing pains,

and in one twelve hours after birth. The number of accouchements from which this report is taken is 2093, spread over sixteen years. Two mothers died and five children, three of which were males. Four female children and one male lived. The head presented in every case, and all the children were alive when the convulsions began. None were double births. The mothers were all under 29. Four were unmarried. Cases 5 and 7 only were bled; in the former mother and child died, in the latter the child, the mother making a slow recovery. Chloroform was administered in Cases 4 and 6 with happiest results. In Cases 9 and 10 the memory is considerably impaired. The kidneys received no injury in the two cases where afterwards I had an opportunity of examining the urine. Premonitory symptoms were marked in three cases. I attended four of the women upon subsequent occasions without return of eclampsia. No hereditary tendency in any of the cases.

Newcastle-on-Tyne.

CASE OF REMOVAL OF CUBOID AND FOURTH AND FIFTH METATARSAL BONES OF THE RIGHT FOOT.

By JOHN WOODMAN,
Hon. Surgeon to the Exeter Dispensary.

Catherine T., aged 34, wife of an ironmoulder, an unhealthy-looking woman admitted in June, 1867, had been suffering from severe disease of foot and ankle for nine months. On June 25 I made an incision, crossed by a transverse one, on the outer side of the foot, and removed the fourth and fifth metatarsal bones, and the cuboid, which were extensively diseased, leaving, however, the phalangeal end of the metatarsal bones and the toes intact. Finding the rest of the foot healthy, I determined to try and save it. The case did very well, and the wound filled in quickly. July, 1869, two years after the operation, the patient can walk some miles without any lameness or extra fatigue. The foot looks natural, there is slight motion in the toes, and although the mark of the incision is plain enough, there is no appearance of any bones having been removed.

I may add that the operation was performed with the assistance of my colleagues at the patient's own house.

Exeter.

ANEURISM OF THE SUPERFICIAL FEMORAL IN MIDDLE THIRD OF THIGH TREATED BY COMPRESSION—RECOVERY.

By EYTON O. WILLIAMS, M.D.

R. D., aged 62, a labourer, while working at his usual employment on May 5 last, suddenly experienced great pain in his head, with dizziness, and a sensation, as he explained it, as if a stream of cold water were running down his spine, and a great inclination to vomit. He was taken to his house, and, by the aid of others, carried to bed, when he complained of a pain and fulness in his left thigh. I was sent for, and found on examination a pulsating tumour in the middle third of thigh, of the size of a hen's egg, soft and compressible. On applying pressure on the cardiac aspect of the swelling, it was diminished in size, and the pulsation decreased. I then procured the assistance of four of his neighbours, for the purpose of applying digital pressure throughout the night, and occasionally relieved by the use of the common tourniquet to the upper part of Scarpa's triangle, where the artery emerges from beneath Poupart's ligament. On the following morning early I visited him, and found the aneurism greatly diminished in size, and the patient easier, the shiverings and pain in his head much relieved. Ordered tinct. ferri mur. mxv.

May 9.—Swelling scarcely perceptible. Continued the iron, with light, unstimulating, but nutritious diet, to dispose to the formation of plastic fibrine, and so cause an active clot, the tourniquet being used at intervals during the day, and left off at night.

12th.—The tumour had disappeared; the same treatment continued; complained of scarcely any pain, and was becoming stronger.

20th.—Was able to move about without the slightest symptom of the reappearance of the tumour, but was still very weak, and suffered only from slight pain occasioned by the pressure of the tourniquet.

June 2.—Was rapidly improving both in health and strength; could walk about without the slightest inconvenience or pain.

I again saw him on June 20, and he was then able to follow his usual occupation.

I may state that, owing to his having formerly been addicted to habits of intemperance, and a great sufferer from rheumatism, and together with his age, he may at some future period probably be subject to a recurrence of the aneurism; but the above case is, I think, another interesting instance of the beneficial effects resulting from the immediate application of compression.

Llanfyllin.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

BROMPTON HOSPITAL FOR CONSUMPTION.

CASES ILLUSTRATING THE MANNER IN WHICH THE HEART IS DISPLACED IN PNEUMOTHORAX.

(Under the care of Dr. COTTON and Dr. ALISON.)

In the *Medical Times and Gazette* for January 30, 1869, Dr. Douglas Powell called attention to the displacement of the heart in cases of pneumothorax, and showed that at first this change in position was due to the traction exercised by the healthy lung, and not caused by pressure in the diseased pleura. The mediastinum is in reality poised by the contending elasticities of the two lungs, and so, when one lung is collapsed, the other pulls over the heart to its own side. Dr. Powell has sent us the following cases in support of his views:—

Case 1.—Walter C., aged 21, admitted into the Brompton Hospital, under the care of Dr. Cotton, February 12, 1869.

Patient had a strong hereditary predisposition to phthisis, and suffered from an attack of pleurisy five years ago, but dated his present illness from a cold thirteen months before admission. Previous to admission he had been staying at the Chelsea Home, and while there on January 10 was seized with pain in the left side. He was seen on January 12 by Mr. Charles Joubert, Resident Clinical Assistant at Brompton, who found the whole left front of the chest tympanitic on percussion, with distinct amphoric respiration most plainly audible below the clavicle. The hyperresonance did not extend beyond the mid axillary vertical line; there was dulness posteriorly, with scattered humid crepitation. The heart's impulse was seen and felt at the fifth right intercostal space within the nipple; the patient had remarked at the time of his seizure that the heart beat to the right of the sternum. Decubitus right; respiration thirty in the minute; pulse 100. There were signs of excavation and softening at the right apex.

January 15.—Better; no urgent symptoms of pneumothorax.

On admission into the Hospital (February 12), the hyperresonance extended beyond the median line in front, the amphoric respiration was well marked in front and laterally to the base, and metallic echo and tinkle were audible. The deficient resonance, with moist sounds, were still present posteriorly. The disease in the opposite lung had advanced. The heart's maximum impulse was to the right of the sternum; the apex was, however, ascertained by percussion and palpation to be at the ensiform cartilage. The respirations were 30, the pulse 96. No urgent dyspnœa. The patient was weaker, and lingered on, gradually sinking from the progress of the general disease, without any material change in the physical signs. Died May 26, 1869.

Autopsy Thirty Hours after Death.—No difference noticeable in the relative size of the two sides of the chest. A trocar and canula, connected by tubing with a water-pressure gauge, was inserted at the fifth left interspace, to ascertain the air pressure within the pleura. This was found to be *nil*. A stilette was then thrust in at the fourth right interspace near the sternum, the trocar withdrawn, and the cartilages removed in the ordinary way, the heart being secured in position by the stilette. The exact position of the heart was as follows:—The apex was behind the sternum, and slightly to the left of the median line—*i.e.*, in the vertical line of the left sterno-clavicular

articulation, and at the level of the fifth rib. The left border of the heart occupied the median line, with a slight inclination to the left; the right border was touched by a line drawn vertically from the middle of the right clavicle. The left pleura contained a small quantity of purulent fluid; the lung was collapsed backwards, and a large opening capable of admitting the little finger was seen near the apex, through which air freely bubbled on blowing through the trachea. The right lung presented cavities at the apex, its tissue below was partially collapsed, and there were patches of grey tubercle and pneumonia scattered throughout.

Case 2.—Martha B., aged 19, admitted into the Brompton Hospital under the care of Dr. Alison, March 29, 1869. This patient was hereditarily predisposed to phthisis, and had suffered from cough for six months. On admission she presented signs of cavities at both apices, with softening below, the left lung being the more diseased. The symptoms of pnuemothorax came on insidiously, but on May 8 the signs were distinct on the left side, the amphoric respiration being very well marked. Patient died May 21.

Post-mortem.—There was no difference in the expansion of the two sides; the left was hyperresonant, there sonance extending over the ordinary position of the heart's dulness, and across the median line to the right margin of the sternum. The air pressure was tested as in the former case, and found to be *nil*. The heart was then transfixed by a stilette, thrust in at the fourth right interspace close to sternum, and the cartilages removed. The mediastinum was found to be curved with its convexity to the right; thus, commencing at the episternal notch, its left border arched to the right border of the sternum at the third cartilage, and thence gradually downwards to the left of the ensiform cartilage. The heart's apex was opposite the fifth rib, exactly in the middle line; its right border corresponded with a line drawn vertically downwards from the middle of the right clavicle; axis more vertical than natural. The left pleura contained about a pint of purulent fluid. There was a large opening in the lung pleura opposite the third rib, freely communicating with a cavity. Both lungs were extensively disorganised, the disease being the pneumonic variety of phthisis. On the surface of the left pleura there were many scattered yellow patches where the pleura had nearly given way from rapid softening down of subjacent consolidations.

Remarks.—These cases present many points of interest, but my special reason for publishing them is that they illustrate very clearly the great displacement of heart which may take place without any direct pressure, as the simple result of the elastic recoil of the unruptured lung acting upon the flaccid mediastinum unopposed by that of the opposite lung. This physiological fact places cardiac displacement in the first rank among the signs of pneumothorax, since it necessarily follows immediately upon the entry of air into one pleura. Though previously satisfied as to this fact by experiments on the dead subject and on a dog, and also from clinical observation,(a) I was somewhat astonished to find the displacement so considerable in these two cases. These cases show very well this important clinical fact—viz., that displacement of heart is not necessarily a sign of pressure even when very considerable, and is, therefore, of itself no sufficient reason for the performance of paracentesis. The presence of true amphoric respiration—*i. e.*, the amphoric quality accompanying both inspiration and expiration—is the sign that shows the entry and exit of air to be free, the opening non-valvular, and hence the absence of pressure. Very interesting results would be obtained if gentlemen who had opportunities of performing paracentesis thoracis, whether in cases of fluid or air effusions, would connect a pressure-gauge with the trocar and ascertain the pressure within the pleura before allowing the fluid or air to escape.

GREAT NORTHERN HOSPITAL.

DISEASE OF THE SUPRARENAL CAPSULES—DEATH.

(Under the care of Dr. CHOLMELEY.)
[Reported by Mr. BEVERLEY RINGER.]

A. S., aged 27, presented herself at the Hospital at the close of the day of July 26, 1869, having taken more than usual exercise that afternoon, complaining of great faintness and exhaustion. A stimulant was administered, and after resting a short time, instead of rallying, her condition became somewhat alarming—viz., extremities icy cold; pulse at wrist almost imperceptible; heart beating feebly, 36 per minute; some difficulty of respiration and a comatose state seemed rapidly supervening. She was therefore admitted into the Hospital under the care of Dr. Cholmeley.

She was put to bed and warmth applied; some brandy and water was with difficulty administered. After repeated inquiries, she gave her name, but not her age or address; her condition now became worse, a cold sweat covering the body; the pupils somewhat dilated, acting slightly; no flinching upon touching the cornea with the finger. About 10 p.m. some convulsive attacks came on, lasting for half an hour. The patient then returned to the state just described; the dyspnœa now increased, and she seemed unable to expectorate the mucus that apparently clogged the trachea. These symptoms continued until 2.30 p.m. the following day, at which time death closed the scene.

There was a discoloration of the skin of some parts which gave her the appearance of a mulatto. This, however, from the statement of her brother, appears not to have always been the case, and had become more marked during the last six months.

At the post-mortem examination, the right side of the heart was found to contain a firm organised clot, extending from the auricle into the ventricle; the lungs were much congested; the brain appeared healthy. Upon removing the kidneys, the suprarenal capsules were found to be much enlarged, that on the right side measuring two inches and one-eighth in length, by one inch and a quarter in the broadest part, and weighing three drachms. The left body was somewhat smaller, measuring two inches by three-quarters of an inch, and weighing two drachms. Upon section, the bodies presented the appearance described by Dr. Wilks—viz., a semi-translucent yellowish-white opaque material, one portion of the right body being partially broken down. The microscope demonstrated numerous irregularly formed cells, some nucleated, with a quantity of granular matter interspersed. The face, the flexures of the armpits, and the lower part of the abdomen, were the parts in which the bronzing was most marked.

(a) *Medical Times and Gazette*, January 30, 1869; *British Medical Journal*, July 17, 1869.

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Medical Times and Gazette.

SATURDAY, AUGUST 21, 1869.

THE GENERAL MEDICAL COUNCIL.—REPORT OF THE COMMITTEE ON MEDICAL EDUCATION.

HAD the committee been able to put aside much more thoroughly all ideas of the necessity or desirability of consulting the interests of the existing licensing bodies, and considered only those of the student, the Profession, and the public, they could, we are sure, have produced a much more useful and satisfactory report. Their own knowledge and experience, and the mass of communications they had gathered from so many and such various quarters supplied them with all the necessary information as to the shortcomings and defects of the present system of Medical education, the characteristics, good and bad, of Medical students

in general, and the set and force of the existing current of demand for reform. With such materials it could not have been very difficult for men of their power, judgment, and acuteness, if unbiassed and unfettered by any narrow and special interests, to have mapped out a scheme of education and examinations that would have satisfied the Profession and the public, and have been a real and strong guide to the Government in its attempts at legislation on the subject. As it is, the Government will probably seek for advice elsewhere than from the Medical Council; while, "not to put too fine a point on it," we do not believe that the action, or rather inaction, of that body will in the slightest degree benefit the Medical corporations. Year after year the Profession and the public have gone on hoping to receive from the Council some improved system of Medical education, some settled common code of regulations. The hope grew fainter and fainter, indeed, as the years rolled on, and it was ever only "hope deferred;" but still we all did hope, mercifully and even tenderly remembering the difficulties the Council had to contend with. But this year, when the Government, at last showing some readiness to take up the matter, sought the advice and assistance of the Council, but sought in vain—when it was seen that the Council had even yet no settled opinion on the subject, but was still only appointing committees, receiving reports, asking for other reports, and for the comments of other bodies on reports which it had not itself even discussed—when all this was seen, "hope, withering, fled, and mercy sighed farewell," and a loud and increasing cry arose for the reformation of the Council itself. The general feeling on this matter is fairly and very mildly expressed in the report by the Council of the Medical Teachers' Association, dated 1868. They say:—

"We hold it to be essential to any improved system of Medical education that the conditions of mere (minimum) admissibility to the *Medical Register*, both as regards examination itself and as regards proofs of previous study, should not, as now, be different at different examining boards, and be in a great degree variable at their separate option, but should be fixed from time to time by the General Educational Authority in one common code of regulations. To procure this simplicity of government for our Profession has been, for longer than living memory, the endeavour of all intelligent Medical reformers, both primarily in order to a better conduct of Medical education, and ulteriorly for the better fulfilment of our relations to the public; to promote its adoption was the main purpose with which the Medical Act of 1858, with its expensive consultative machinery, was advocated; and we think that our Medical schools, no less than the general public, may reasonably complain that, ten years after the passing of the Act, the old chaos of rules and qualifications is still continuing as before."

The end of the session of the Council in 1869 leaves the same state of things existing still. Let it not be imagined that any one desires frequent and meddlesome legislation; simplicity, uniformity, and definiteness of regulations are what are needed, and then rest from agitation. For years it has been known that changes must come, but no one has known what to hope or fear, and the schools have been kept in constant expectation and disquiet, so that we cannot wonder at—though we cannot without qualification agree with—Messrs. Holden and Callender when they, in their reply to the letter of the committee, declare—"If we are only left alone, and not troubled with incessant agitation, we can manage, as we now manage, to educate Medical students under the existing system as well as under any practical modification of it;" nor can we agree in their opinion that "the present system of education works exceedingly well," unless we add "considering its imperfections," and "when it is worked by such able and energetic teachers as those who form the staffs of our largest schools." Mr. Savory also says "an experience of seventeen years as a teacher at St. Bartholomew's Hospital and of five years as an examiner at the University of London, has led to the conviction that so much more depends on the teacher and the pupil than upon the nature of the subject and the order in which it is taught, that, after all, comparatively very little good can be effected by any amount of legislation. But," he adds, "examining boards, and not teachers in Hospitals or elsewhere, must ever fix the standard of education in general. The great majority of students will produce a supply equal to, but not far beyond, the demands of those upon whom depends their legal right to practise." This, however, is just one of the points on which legislation is most clearly and imperatively needed, the demands of those on whom the legal right to practise depends presenting "a chaos of rules and regulations."

The appendices attached to the report of the Committee on Medical Education contain a large mass of able and valuable opinions on the kind, degree, and extent of the changes required in the present system, and any one who has the time and inclination to study them thoroughly will be well repaid for his labour. We could easily cull from them pages of extracts, interesting and valuable from the knowledge and thought evinced by them, and also as showing the diversity of opinion that exists on some points; but we have neither time nor space for more than an outline of the alterations that seem most promising and most necessary.

Recommendation No. IV. of the Committee, granting great liberty to the schools as to the order, number of lectures, and amount and kind of practical instruction to be given, guided only by the extent and character of the examinations, is undoubtedly a great step in the right direction, and will meet with very general approval. Some few, indeed, would do away with lectures altogether, and some, on the contrary, would still lay down exact rules as to their order, number, and length. The anti-lecture opinion is expressed by Dr. Ledwich, of Dublin, with such refreshing strength and terseness, that his communication to the committee deserves quoting at full length. "In reply to your circular," he writes, "the only suggestion I would presume to offer is to abolish all lectures—in schools I mean—and to make the ultimate examination the true test of a man's capability. Lectures in the present day, where books can be had on every subject, is simply robbery of the parent through the child, and on these grounds should be abandoned altogether." Very few, however, would agree, we should think, in demanding such a sweeping alteration as this. The majority will probably go along with the Medical Teachers' Association in demanding modifications of, not a sweeping revolution in, the present system. They—the Association—think that the present regulations of licensing bodies "are in general needlessly minute, and in some respects improperly stringent; and that, while in this sense they interfere objectionably with the freedom of those whom they affect, the elaborate machinery of certificates and registers, which purports to be their security for good education, is in itself "as deceptive as it is troublesome. For the certificates do not even professedly vouch for more than the mere bodily attendance of students on various occasions of teaching, and in reality (as the licensing boards are well aware) may mean little or nothing else than that the student has paid such fees as have entitled him to receive the instruction in question." They hold that "the excess of regulation is the essential evil. For of all the regulations it has to be remembered that they relate not to ends, but only to means—not to the actual possession of knowledge (for which the appointed control is examination), but only to modes in which knowledge may be acquired; and there can hardly be a greater fault in legislation than to over-multiply and over-magnify ordinances of this secondary sort." Assuming that, at present at any rate, the principle of "free-studentship" cannot be generally adopted, they start on the basis "that every student wishing to offer himself for examination under the Medical Act in order to obtain his licence for practice must, in the first instance, show that he has gone through such a course of study as will probably have qualified him for the licence;" but they insist that "every certificate which is

accepted in aid of a system of examination ought to be a certificate either of actual attainment of the knowledge in question, or at least a certificate of genuine and presumably sufficient study."

The Association are further of opinion that all possible latitude of choice, consistent with the supposition of *bonâ fide* study, should be permitted "as to modes and places of education," and that "regulations allotting particular studies to particular periods of studentship are useless, unless they be enforced by such corresponding compulsory subdivisions of examination as shall insure that the student learns in each period the matter which he is expected to learn."

Thus guarding against excessive and teasing regulation on the one hand, and against too great freedom of studentship on the other, the Association recommend that the schools should be "as free as possible to choose the particular machinery wherewith honourably to compete for the character of giving a good education," and then lay down a system of education, and state what securities they think would best secure its proper working. And we are disposed to think that their plan would, if thoroughly carried out in all its parts, be, to say the least, a great improvement on the present system or systems. Their scheme requires—

I. That the examination shall include all the subjects of Medical and Surgical education necessary for what is now called the double qualification.

II. That the period of actual study shall be not less than four years.

III. That such study should commence after the preliminary examination, which examination should include elementary chemistry and botany, in addition to the subjects of ordinary education.

IV. Four examinations—

1. In common preliminary education.

2. An examination at the end of the first year of study in chemistry, physics, and in the anatomy of the bones, ligaments, and muscles.

3. An examination at the close of the second year of study in anatomy, physiology, and Materia Medica.

4. An examination at the close of the fourth year of study in Medical and Surgical anatomy, pathology, State Medicine, and the several departments of practice.

V. Students might be admitted to examinations 1 and 2 on the principle of "free-studentship," getting their information where and how they like.

VI. The second, third, and fourth years of study shall be spent at a recognised Medical School.

The "recognition" of schools is to be vested in the general educational authority, and a school might request to be recognised as a school of pathology and practice, or as a school of anatomy and physiology, or as both. "A school applying for recognition in either capacity, or in both, would have to show itself, to the satisfaction of the authority, possessed of all requisite means and organisation for properly teaching whatever it claimed to teach; and the authority would also have to see, in some detail, that the instructional programme of the school thoroughly covered the ground in which students would be entitled to expect instruction."

VII. "No student should be admitted to examination till the authorities of the school at which he has studied furnish him with a certificate that he has studied the subjects included in the examination under their direction, according to the method of their school and to their satisfaction."

VIII. "Examinations in scientific subjects should be such as to require a practical familiarity with scientific processes and manipulations, and actual acquaintance with the objects classified and described. The examinations in Medicine and Surgery should in part be conducted in wards and out-patient departments, and be calculated fully to test clinical acquaintance with the characters and treatment of diseases, and with necessary Medical and Surgical manipulations. This would render teaching in schools of necessity demonstrative and practical, and would tend to enforce regular attendance and systematic teaching in wards and out-patient departments."

IX. Each subject separately taught should be separately examined in, and the examiner should represent the best special knowledge of the day.

X. The range of examination in each subject should be more strictly confined than is now usual, "exactness of knowledge being held preferable to a smattering over a wide area."

XI. "The examining boards should make returns (for publication by the central authority) of the proportion of pluck and pass in the candidates sent up by the several schools."

And it is to be observed that these conditions of qualification "are exclusively those of minimum qualification for the Profession."

We believe that the two greatest Medical schools of London have never joined the Medical Teachers' Association, and of course this must lessen somewhat considerably the weight to be attached to a report from that body. Nevertheless, the report is undoubtedly a valuable one, and the scheme presented in it might very well, with some additions, be made into a very good and working system of Medical education, as far as the minimum common qualification into the Profession.

One addition we would make to it would be a regulation, in accordance with the recommendations of Dr. Christison, Dr. Gull, and Mr. Paget, that every student should be required to serve at least three months as Surgical Dresser and as Clinical Clerk; and the smaller Hospitals and chief Dispensaries might be utilised for these teaching purposes.

But the addition we should chiefly and imperatively insist on would be the establishment of one joint examining board for each division of the kingdom, before which every one desiring to practise should appear, and by which he should be examined on all subjects. It will be remembered that the late President of the Medical Council insisted on this in his able address at the commencement of this year's session. The Committee on Medical Education also report that it is absolutely necessary, and ought to be enforced without delay, and they recommend the Council to appoint a committee to consider and report how it can be managed. The Council, however, did nothing whatever in the matter, and, except for their own reputation, we do not regret it. For, judging by past experience, it would be years before they would really act. One year they would appoint a committee, the next year they would receive a report and send it the round of the licensing bodies, and the third year, perhaps, discuss it and come to some more or less feeble resolutions founded on it; and it is more than probable that long before that we shall have the joint examining boards instituted without any help or guidance from the Council at all.

Mr. Savory, in his reply to the committee, when speaking of the best modes of teaching anatomy, physiology, and chemistry, remarks, "I have, with others, often thought that the teaching of these subjects, instead of being distributed among our several Hospitals, might be much more beneficially carried on at some one or two central colleges." We agree with him, and we suspect that any thorough improvement in the system of Medical education will work in that direction by virtually extinguishing the small Medical schools, or at least leading to their confining themselves to teaching only parts of Medical science and art. At present, as soon as a Hospital attains a certain size it starts a Medical school, and every member of its staff is compelled, *bon gré mal gré*, to take a lectureship. But of the teacher, as of the poet, it may be said *nascitur non fit*, and the man who attempts to teach a subject simply because it falls to him as holding a certain position and rank on the staff of his Hospital is sure to teach it badly, or not well. More free and healthy competition will remedy this, and the strong schools will stamp out the weaker ones. Again,

the strongest schools will probably gradually enlarge and perfect their machinery, so as to make themselves into complete Medical Colleges, within the walls of which the Medical student will be able to obtain all the teaching he can require at any period of his career. The school of St. Bartholomew's Hospital has, for instance, just made an important advance in this way by appointing teachers in the subjects required for the preliminary scientific examination and for the matriculation examination at the University of London.

We do not advocate changes such as these merely from a love of change, or because the "spirit of the age," so called, demands reform, nor are we so young or so fanatic as to believe that these changes would insure that every Medical man shall be thoroughly trained and highly educated; but we think that, if fully and honestly carried out, they will go a long way towards securing that no man shall enter the Profession unless he is fairly educated and well trained. To accomplish this has been for many years the constant aim and desire of our most high-minded and active licensing boards, among whom we would mention with special honour the Society of Apothecaries of London, and we desire, in the same spirit as has actuated them, to take firm and decided steps still further in advance. By one large and well-considered measure we would put an end to a constant series of petty pedling, patchings, and mendings, and we would, so far as may be, eliminate the element of chance from the examinations, and would make sure that every student of Medicine, before gaining a diploma, has eaten the mental food provided for him, and has digested it. If he neglects to do the one, or is unable to do the other, we think that both the Profession and the public are better without him.

But, with this change, we hold that some others are also necessary, the chief of which is that the Poor-law Medical Service, on which, in poverty-stricken districts, the Medical man must largely depend, shall be more liberally paid, and shall have liberal superannuation pensions.

Finally, we must once more express our surprise and great regret that the Medical Council, as the highest placed body in the Profession, should have thrown away the opportunity offered to it this year by the Government of taking a leading part in Medical legislation. No one can suspect the present Government of any hesitation or faltering when it has once turned its attention to any subject, and it will almost certainly now proceed to deal with Medical legislation without, or in spite of, the Council. And our last Reform Bills have given us leaders who will lead, followers who will follow, and a Parliament certainly not troubled with any sentimental tenderness for vested interests or established institutions.

VACCINATION PAST AND PRESENT.

It may be worth while, now that opposition to vaccination is assuming serious proportions, to inquire into the reasons of the comparatively great success of the agitation. It is not the first time that the discovery of Jenner has had to contend with popular prejudice and popular dislike. When he first communicated the results of vaccination to the public, he was met with a storm of ridicule and "scientific" argument, which threatened at first to overwhelm the "little bark." But the people of that day were too familiar with the horrible disease that Jenner's discovery was to mitigate or altogether destroy. Every man and woman of that period had felt in their own persons, or seen in others, the disfigurement, the blindness, deafness, and other mutilations which resulted from the terrific scourge of small-pox. They were, many of them, willing to run some risk to ward off such a calamity from themselves and their kindred. Gradually the effects of the new operation became developed, and vaccination was soon generally resorted to. The "philosophical" writings of the learned, the sneers of the sceptical, the ridicule of the caricaturists, all failed to arrest the progress of the new discovery. In fact, the demonstrations of its beneficent usefulness were to be found everywhere. But at the present day the "pock-marked face" is almost unknown, and the mutilations resulting from small-pox are almost a matter of history.

The present generation have not been in a position to estimate the amount of evil which vaccination did away with. They see only that it is not a perfect prophylactic, and that occasionally evil effects follow its employment. They rush to a conclusion which has a few facts to uphold it, and ignore the opposite one, which is supported by facts innumerable. That some further inquiry into the causes of the failure of vaccination and of its alleged inoculation of other diseases into the system is required, we readily admit, but it must be a dispassionate, calm, and impartial inquiry. We do not believe the cause of vaccination is advanced by the enforcement of imprisonment and fines. "Martyrdom" has always sympathisers, and generally disciples.

COMPENSATION FOR RAILWAY INJURIES.

In a recent debate respecting railways, Mr. Bright is reported to have said that many cases of compensation for railway injuries were gross swindles upon the companies. Any one at all acquainted with the subject will admit that instances of extortion by persons injured, or apparently injured, on railways are by no means uncommon. On the other hand, it is well known, particularly to Medical Practitioners, that injuries apparently of a trivial character, and as compensation for which small sums have been received, have afterwards assumed a serious aspect, ending in paralysis, epilepsy, or mania. That the evils mentioned exist is due mainly to the unsatisfactory nature of the laws which regulate railway traffic and railway responsibility; and so long as these exist the anomalies in question must continue. Lord Campbell's Act was framed in a spirit of fairness to all parties. That in some respects it has been abused is more the fault of the railway authorities than of the public. The railways have obstinately refused to take measures for insuring the safety of their customers. Every step they have taken in that direction has been absolutely forced upon them. They have not proceeded for the safety of the public, but simply for their own interest. Undoubtedly one of the chief means by which the public have forced action upon them has been the infliction of heavy damages by juries in cases of avoidable accident. They have listened to no remonstrance, no warning, no entreaty. Juries are aware of this, and they exercise their power of enforcing proper regulations and laws by the only means the public law makes available. But in cases of railway injuries the directors act upon the principle of pooh-poohing almost all cases. They succeed in settling the vast majority of them at often nominal compensation. The cases that come into court are generally those in which the Medical gentlemen engaged by the two parties cannot agree as to the extent or duration of the injuries. The juries naturally lean to the side of the plaintiff. His case may be theirs to-morrow, and then they know how much of generosity or justice they are to expect from the companies. Moreover, the Medical testimony, as a rule, is pretty equally balanced. On one side the injury may be somewhat exaggerated, but on the other it is made too light of. Under any circumstances, where the accident is the result of negligence and could have been prevented by the establishment of proper regulations, heavy verdicts are on the right side. That they have prevented accidents without number no one can doubt. Eventually the railways will be driven into taking proper precautions and making proper regulations for the safety of their passengers, and then accidents will be rare. But so long as the law remains as it does, and in the absence of those precautions and regulations, how are we to avoid injustice to either the plaintiff or defendant? Clearly, as we have in-

sisted upon time out of mind, by the assessment of the damages by a Medical tribunal, acting for neither party, but for both. Nothing is more damaging and unseemly to us as a Profession than the conflicting Medical evidence given in cases of trial of railway injuries. It is impossible that such evidence can aid either the judge or the jury. On the contrary, it only tends to confuse them. Let us hope that in the next session of Parliament the President of the Board of Trade will introduce some measure by which "gross swindling" may be prevented, either on the part of the railways or the public.

THE WEEK.

TOPICS OF THE DAY.

TUESDAY'S *Gazette* contains the announcement that the Queen has been pleased to appoint Dr. Wilson Fox Physician-Extraordinary to her Majesty. Dr. Fox has made a good reputation as a pathologist, and, as loyal subjects, we are glad that the Queen should have called to her hygienic councils so able a Medical adviser. University College and the University of London seem at present to be pleasantly basking in the smiles of Royalty.

Professor Stokes' (of Cambridge) address as President of the meeting of the British Association for the Advancement of Science, which is now taking place at Exeter, whether as judged by its scope, by the choice of illustrative matter, or by the thoroughly scientific, and at the same time reverent, spirit that pervaded it, will undoubtedly take a high rank amongst these annual displays of scientific eloquence. In passing in review the recent progress of the sciences, Professor Stokes had no choice but to heap up marvels which but a few decades ago would have seemed to the most far-seeing of mankind impossible dreams. Starting with astronomy and its ally optics, the first subject on which he dwelt was the movement of the "fixed" stars. Observations extending over years have proved that their fixity is not absolute, and now the fact is confirmed by the discoveries of the spectroscope. Mr. Huggins has found, for instance, that the spectrum of Sirius, like the solar spectrum, shows the two hydrogen lines C and F, but in the spectrum of Sirius the F line does not exactly correspond with the bright line of the hydrogen spark; the latter, however, agrees in position with the solar F. Mr. Huggins assumes that motion is by far the most probable cause of the slight difference of refrangibility between the solar F and that of Sirius, and, without going through the steps of the process by which he arrives at his result, we may state that the conclusion at which he arrives is that Sirius and our sun are mutually receding from each other at the rate of 29·4 miles per second, and Mr. Huggins's observations have been confirmed by observations made by Father Secchi at Rome with a different instrument. Professor Stokes' account of the rapid advances in knowledge due to the spectroscope culminated with a description of Messrs. Lockyer and Janssen's observations on the solar protuberances and the discovery by which those prominences may be observed independently of a solar eclipse. From astronomy and optics Professor Stokes turned to chemistry, to notice the subject of the application of gun-cotton to warlike purposes and to blasting and mining. Then followed an account of the labours which Dr. Carpenter, with the aid of Government, has undertaken in the deep-sea fields, where he has found animal life at the depth of 2400 fathoms—nearly the height of Mont Blanc—and where the thermometer shows a stratum of polar waters overlaid by a superficial layer 700 or 800 fathoms deep from the equatorial seas. The picture of Government help rendered to science in the past year is dashed and blurred by the churlish refusal of Mr. Lowe to provide a monument to Faraday at the expense of the nation. Touching also on this unpleasant topic, the President proceeded, in summing up the chemical discoveries of the year which had not been of surpassing interest, to notice Professor Church's discovery of the copper pigment in the plumage of the Turaco or plantain-eater of the Cape of Good Hope. In the same feather of this remarkable bird, copper is found abundantly in the red-coloured part, but none, or the merest trace of it, in the black—an example which, as Professor Stokes warned us, should prevent our taking too utilitarian a view of creation. Thence he passed to tell of a new colouring matter—anthracene, one of the coal-tar series, which MM. Graebe and Liebermann believe is closely connected with alizarine, the colouring matter of madder, which can be artificially formed, and, if the discovery be perfected, will supersede the necessity for growing madder for calico dying, and thus set free hundreds of acres for the production of human food. Dr. Matthiessen's observation of the new base with emetic properties obtained by the action of hydrochloric acid on morphia did not escape notice. From chemistry the Professor turned to physics, but returned to it again to discuss the grand problem of the difference between organic and artificial compounds, and the problems of life and mind. On this subject we think Professor Stokes's words are too weighty and important to be condensed:—

"Waiving, then, the difference of activity or inactivity, which as we have seen, admits of a simple physical explanation, though the correctness of that explanation remains to be investigated, we may say that at the present time a considerable number of what used to be regarded as essentially natural organic substances have been formed in the laboratory. That being the case, it seems most reasonable to suppose that in the plant or animal from which those organic substances were obtained they were formed by the play of ordinary chemical affinity, not necessarily nor probably by the same series of reactions by which they were formed in the laboratory, where a high temperature is commonly employed, but still by chemical reactions of some kind, under the agency in many cases of light, an agency sometimes employed by the chemist in his laboratory. And since the boundary line between the natural substances which have and those which have not been formed artificially is one which, so far as we know, simply depends upon the amount of our knowledge, and is continually changing as new processes are discovered, we are led to extend the same reasoning to the various chemical substances of which organic structures are made up. But do the laws of chemical affinity, to which, as I have endeavoured to infer, living beings, whether vegetable or animal, are in absolute subjection, together with those of capillary attraction, of diffusion, and so forth, account for the formation of an organic structure as distinguished from the elaboration of the chemical substances of which it is composed? No more, it seems to me, than the laws of motion account for the union of oxygen and hydrogen to form water, though the ponderable matter so uniting is subject to the laws of motion during the act of union just as well as before and after. In the various processes of crystallisation, of precipitation, and so forth, which we witness in dead matter, I cannot see the faintest shadow of an approach to the formation of an organic structure, still less to the wonderful series of changes which are concerned in the growth and perpetuation of even the lowliest plant. Admitting to the full as highly probable, though not completely demonstrated, the applicability to living beings of the laws which have been ascertained with reference to dead matter, I feel constrained at the same time to admit the existence of a mysterious something lying beyond—a something *sui generis*, which I regard not as balancing and suspending the ordinary physical laws, but as working with them and through them to the attainment of a designed end. What this something, which we call life, may be, is a profound mystery. We know not how many links in the chain of secondary causation may yet remain behind; we know not how few. It would be presumptuous indeed to assume in any case that we had already reached the last link, and to charge with irreverence a fellow worker who attempted to push his investigations yet one step further back. On the other hand, if a thick darkness enshrouds all beyond, we have no right to assume it to be impossible that we should have reached even the last link of the chain—a stage where further progress is unattainable, and we can only refer the highest law at which we stopped to the fiat of an Almighty Power. To assume the contrary as a matter of necessity is practically to remove the First Cause of all to an infinite distance from us. The boundary, however, between what is clearly known and what is veiled in impenetrable darkness is not ordinarily thus sharply defined. Between the two there lies a misty region, in which loom the ill-discerned forms of links of the chain which are

yet beyond us. But the general principle is not affected thereby. Let us fearlessly trace the dependence of link on link as far as it may be given us to trace it, but let us take heed that in thus studying second causes we forget not the first cause, nor shut our eyes to the wonderful proofs of design which, in the study of organised beings especially, meet us at every turn. Truth, we know, must be self-consistent, nor can one truth contradict another, even though the two may have been arrived at by totally different processes—in the one case, suppose, obtained by sound scientific investigation, in the other case taken on trust from duly authenticated witnesses. Misinterpretations, of course, there may be on the one side or on the other, causing apparent contradictions. Every mathematician knows that in his private work he will occasionally, by two different trains of reasoning, arrive at discordant conclusions. He is at once aware that there must be a slip somewhere, and sets himself to detect and correct it. When conclusions rest on probable evidence, the reconciling of apparent contradictions is not so simple and certain. It requires the exercise of a calm unbiassed judgment, capable of looking at both sides of the question; and oftentimes we have long to suspend our decision and seek for further evidence. None need fear the effect of scientific inquiry carried on in an honest, truth-loving, humble spirit, which makes us no less ready frankly to avow our ignorance of what we cannot explain than to accept conclusions based on sound evidence. The slow but sure path of induction is open to us. Let us frame hypotheses if we will: most useful are they when kept in their proper place, as stimulating inquiry. Let us seek to confront them with observation and experiment, thereby confirming or upsetting them as the result may prove; but let us beware of placing them prematurely in the rank of ascertained truths, and building further conclusions on them as if they were. When from the phenomena of life we pass on to those of mind, we enter a region still more profoundly mysterious. We can readily imagine that we may here be dealing with phenomena altogether transcending those of mere life, in some such way as those of life transcend, as I endeavoured to infer those of chemistry and molecular attraction, or as the laws of chemical affinity in their turn transcend those of mere mechanics. Science can be expected to do but little to aid us here, since the instrument of research is itself the object of investigation. It can but enlighten us as to the depth of our ignorance, and lead us to look to a higher aid for that which most nearly concerns our wellbeing."

We publish in another column a letter from Dr. Brewer, the member for Colchester, which deserves the especial attention of our readers. The subject of which it treats is undoubtedly a very important one, being no less than the legalisation of the sale of one kind of diseased meat. To this we intend to return at length at some not far-distant time. But we now draw attention to his letter on account of the remarkable story it contains of the way in which measures of the highest importance are pressed through both Houses of Parliament at the fag-end of a session without any adequate discussion and inquiry, and, secondly, on account of the extraordinary defence offered by no less responsible a person than Mr. Foster for utterly ignoring the interests of the population at large in the provisions of a Government Bill. Mr. Foster, in reply to Dr. Brewer's amendments, is reported to have coolly said that the Bill was intended to legislate for the health of beasts, not of men. When this remarkable dictum is analysed, it simply resolves itself into an unabashed acknowledgment that the Bill was intended to legislate for the pockets of the graziers and not for the benefit of the community. To say that the question whether the flesh of cattle slaughtered on account of contagious pneumonia should be publicly sold for food can in any way affect the health of the same or of other cattle is absurd, but it must very considerably affect the gains and losses of the owners. Mr. Foster's reply may perhaps have been a half-humorous attempt to parry facts and arguments he could not fairly meet. But it may fairly be supposed that he caught at the idea which was uppermost, and that the House were undoubtedly legislating with other views and for other purposes than that of preserving the health of the people, which was allowed to be quite a secondary consideration. A more serious charge against the reformed House of Commons could scarcely be brought, nor could any incident prove more strongly than that to which we have called attention the necessity for the presence of Medical men in Parliament.

Several correspondents of the daily papers have called attention to the spread of "foot and mouth" disease amongst the cattle in Surrey and Kent. Mr. A. H. Smee, writing from Wallington, in Surrey, describes the epizootic there as serious. The treatment he recommends is swabbing out the mouth with a gargle of dilute sulphuric acid and chlorate of potash and the administration of mashes containing plenty of common salt. Mr. Smee notices a report that pigs fed with milk from the diseased animals have been attacked with the disease, and he urges the necessity for a prohibition of the sale of the flesh as food. We are credibly informed that infants have been made undoubtedly ill by the milk of cows affected with "foot and mouth disease."

The stringency of the Compulsory Vaccination Act with regard to time is likely to prove a serious nuisance both to the Medical Profession and the public. Persons who from accident, or from the laudable wish of having vaccine matter for their children taken from a vaccinifer of whose antecedents they know something, delay having the operation performed a few weeks beyond the prescribed three months, are annoyed with threatening letters from the registrar of the district. If anything could make vaccination distasteful to the public at large, it is this kind of worry. Nothing could be better calculated to defeat the purpose of the Act.

A curious trial for attempting to obtain money under false pretences has lately been tried at Manchester. The London and North-Western Railway Company prosecuted one Henry Ford for attempting to obtain from them £4000 as compensation for injuries received in the Abergele accident. Abundant evidence was adduced to prove that the prisoner was not only not injured in the accident at Abergele, but not in the train at all, having been at his residence at Barton at the time of the accident. The prisoner pretended to have received an injury of the spine, kept his bed, applied through a lawyer for damages; but the most awkward part of the story is, in the words of the *Times* report, "that he was seen by several Medical men, and to them he appeared to be suffering most seriously, and apprehension was entertained whether he would be able to walk again for years." He was found guilty, and imprisoned for eighteen months.

In reference to a paragraph which appeared in the *Times* of Wednesday, headed "Serious Blunder," wherein a Medical man—Mr. Hartley, of Fern House, Accrington—is said to have mistaken a serious injury, from which a man died, for drunkenness, we publish a letter received from that gentleman, giving his account of the case. It is acknowledged that the deceased man had taken whisky and beer during the day. The accident (the man was run over by a cart) happened on Thursday; on Friday he was able to go before the magistrate; he was then taken home, and died on the following Sunday. Mr. Hartley only saw him once on Thursday night.

Another case of ill-treatment of a lunatic is reported from Plympton, in Devonshire. A man named Horn received 15s. a week for taking care of a lunatic named Snawdon. He used to keep him handcuffed, and occasionally tie him to a tree and flog him. He defended himself by saying that "the lunatic was only amenable to those who showed themselves his masters." He was fined £2 and costs, with the alternative of two months' imprisonment. Mr. Sykes, the person who had obtained possession of a lunatic lady, has been found guilty; but, having undertaken to restore the lady's property, is set at liberty, entering into his own recognisances, with another person, for £500 to come up for judgment when called upon.

Mr. Lister, Professor of Surgery at Glasgow, has been appointed to succeed Mr. Syme in the Chair of Clinical

Surgery at Edinburgh. Professor Syme and Professor Henderson retire from their respective Professorships with retiring allowances.

VACCINATION OF SOLDIERS.

A VERY judicious order, No. 87, has just been issued by H.R.H. the Field Marshal Commanding-in-Chief, to the effect that commanding officers are to assign lighter duties than the usual drills and musketry practice to soldiers who have recently undergone the operation of vaccination, and that Medical officers are to furnish daily lists of men for whom they recommend such exemption. The idea of exempting a soldier from any part of his duty for such a trifling cause may not agree with the martinet instincts of some commanding officers of whom we have heard—that a soldier must be either sick or well, in Hospital or at duty; but it fully accords with Medical knowledge, that comparative rest is necessary under such circumstances, while at the same time detention in Hospital would be injudicious. This is so obvious that we are inclined to think that the order alluded to is probably the result of some instance of difference of opinion on this point between a Medical and a commanding officer having been submitted for the decision of the authorities. If so, we are glad to see that common sense and the Doctor have carried the day.

ST. BARTHOLOMEW'S HOSPITAL.

THE differences between the junior portion of the staff of St. Bartholomew's Hospital and the managers of that charity are not yet at an end. On Monday last the two House-Physicians on duty, acting within the strict letter of the rules of the Hospital, turned over 158 new patients to be seen by the Assistant-Physician, out of 490 new Medical cases that presented themselves for treatment. Young Medical men who take the laborious post of House-Physician for the sake of gaining experience find it hopeless work to use up their time and energy by pretending to see 245 casual patients in a morning. The authorities of St. Bartholomew's should have more Physicians or fewer patients.

ON THE MODE OF TRANSMISSION OF THE ACUTE EXANTHEMATA, AND ON THE PRECISE PERIOD OF INVASION OF THESE DISEASES.

AT a recent meeting of the *Société Médicale des Hôpitaux* at Paris, M. Girard, of Marseilles, read a very interesting paper upon this subject, based upon careful observations of 108 cases of measles occurring in the course of an epidemic lately reigning at Marseilles. He was able to trace contagion as the source of all these attacks, and believes contact to be essential for the propagation of the disease. He is equally convinced that the period of incubation is also that of contagion, and quoted in support of this assertion some sufficiently striking examples. As to the precise period he states that in the 108 cases noted the eruption appeared as late as the sixteenth day in only three; in all the other cases it was developed on the thirteenth or fourteenth day, but never before the thirteenth, never after the sixteenth. M. Girard feels thus able to fix the period of incubation between thirteen and sixteen days—a point of great importance. And as he is equally convinced that the period of contagion is limited to the early stage of the disease, and does not last through the decline of the rash—an opinion not shared by the numerous speakers in the discussion which followed the paper—he suggests that children may be released from quarantine with perfect safety after eleven or twelve days at most. A point of great interest in the communication referred to the early diagnosis of the disease. M. Girard has invariably discovered, when he has been called in sufficiently early, four, five, or at most six days before the appearance of the eruption, a red pimple on the velum palati. This sign has never deceived him. Although all other symptoms may have disappeared, this *pointillé rouge* has always been followed by the rash of measles. Broussais was acquainted with this sign in 1835, and it had been first pointed out to M. Girard in 1839 by Valleix, but these observers had not fixed the period of its appearance. M. Girard states that the papule is red, that it appears towards the free border of the velum palati, between the fifth and seventh day after the first symptoms, and disappears towards the third or fourth day after the eruption.

DEATH OF DR. H. B. MONTGOMERY.

WE regret to see by the last Indian mail the announcement of the death, at Madras, of Dr. Howard B. Montgomery, Surgeon in the Madras Army. Dr. Montgomery was son of the late Professor Montgomery, of Dublin, and inherited much of his father's talent. For some years past he had been editor of the *Madras Quarterly Journal of Medical Science*, and had conducted it with much ability. He had also held a valuable appointment in the Madras Mint, and latterly he had been Secretary to the Sanitary Commissioner of the Madras Presidency.

NORTH OF SCOTLAND MEDICAL ASSOCIATION.

THE annual meeting of the Association was held on Saturday last in the Medical Hall, King-street, Aberdeen. Dr. Ross, of Elgin, was in the chair, and there was a numerous attendance of members. The chief topics discussed were the position of parochial Medical officers and the amendment of the Medical Act. With respect to the first, it was stated that several important Medical bodies had expressed their approval of the steps which the Association had taken in the matter, and had promised their support. Eventually a committee was formed to carry out the objects of the Association. After considerable discussion on the amendment of the Medical Act, the following resolution was put and carried:—"That the Association address a memorial to the Lord President of the Privy Council, Earl Granville, expressing the hope that he will introduce during next session of Parliament an amendment of the Medical Act, which shall embody the views stated in the communication addressed by his Lordship's direction to the General Medical Council, of date May 14, 1869, and which shall also remodel the General Medical Council, reducing the number of its members and changing the mode of its election, so as to render it more representative of the public interest and of the Medical Profession. And that a committee of the Association be appointed to draw up the memorial." Some of the speakers complained of the very little that had been effected by the Council, considering the great expense to which the Profession had been put to sustain it. Dr. Kilgour "thought they were all getting very tired of the Medical Council—(hear)—when they found nothing there but indulging in talk and personal reflections, and spending a good deal of money. The sooner the constitution of the body was changed, the better for them all. (Hear, hear.)" Dr. Beveridge then gave, briefly and very clearly, notes on three Hospital cases—(1) fatal pregnancy, (2) embolism, (3) abdominal tumour. His object in submitting these notes of cases was to induce other members to make like communications to the Association. Dr. Keith, of Aberdeen, was unanimously chosen president for the ensuing year.

LONDON NOISE.

THE noises of London by night appear likely to occupy the attention of the newspaper press during the present recess. We only wonder that they have not done so long ago. To the ordinary traffic of cabs and carts all Londoners are so accustomed that it can hardly be considered as sleep-disturbing; but the wildly discordant rattle of excursion omnibuses returning from country trips from 10 p.m. till 1 a.m. laden with "rollicking rams," "jolly dogs," and "champagne Charlies," whose hideous howls alternate with the clangour of brass-band ex-

hortations to "act on the square" or to make aeronautic excursions, has become such a deadly nuisance that it must not any longer be suffered to exist. This is no mere sentimental grievance to inhabitants of suburban roads leading towards places of popular resort. During illness, when restoration to health may depend upon the enjoyment of a refreshing critical sleep, and prolongation of disease, or death itself, result from its interruption, we all know how the approach and passing by of these riotous cars of Juggernauth are dreaded by the anxious attendants. It is during the comparative quiet of the night that the noisy rush of these vehicles exerts its most injurious influence. Surely there could be no great difficulty in enforcing a police regulation that after a fixed hour, and within a certain distance of some metropolitan centre, the occupants of excursion vans and all other revellers should comport themselves so as not to interfere with the comfort and health of the inhabitants of the districts through which they pass. The moral and sanitary results of such a measure would fully repay the trouble necessary to put it in force, and Colonel Henderson may depend upon it that by doing so he will earn the lasting gratitude not only of the Medical Profession, but of all the peaceable inhabitants of London.

THE CORONER'S COURT IN AUSTRALIA.

Some time since we commented on the conduct of the coroner of Richmond, Australia, in consequence of his sending summonses to Medical Practitioners at a distance to make post-mortem examinations and give evidence. This was not only unjust to the Medical gentlemen of the district, but positively insulting. Moreover, after a post-mortem examination had been made in a certain case by two highly respectable Physicians of Richmond, the coroner ordered a fresh examination by a Surgeon whom he summoned from Melbourne for that purpose. We learn from the *Melbourne Age* that a Bill is now before Parliament "to amend the coroners' statute." The *Age* objects that the Bill makes it a misdemeanour for any person to dissect (*sic*) a human body elsewhere than at a school of anatomy without written authority from a coroner. This our contemporary denounces "as an innovation of the law of all other civilised countries, and will have the effect of preventing Medical Practitioners giving trustworthy certificates of the causes of death." The *Age* considers this clause to have had its origin in a not very seemly squabble between the coroner and some Medical witnesses at an inquest at Richmond not long ago. This is the case to which we lately drew attention in our columns. Certainly it does seem monstrous that no post-mortem examination can be made except by order of a coroner, if such be the real wording or meaning of the Act. It certainly would not be tolerated here. The *Age* proceeds to say, with reference to a clause which provides that any one obstructing a coroner shall be fined £20:—

"Now, as coroners are already protected in the same way as other justices of the peace, there can be no case made out for exceptional legislation in their favour. It would be much more to the purpose if the Bill contained a provision for keeping coroners within the proper exercise of their duties, for we have no hesitation in saying that there is at least one of them who habitually violates the 15th clause of the Medical Practitioners' Act. That clause imposes on a coroner the duty of calling in as a Medical witness some Practitioner who resides 'near' to the place where the inquest is held. This is seldom attended to in Melbourne. If the Bill passes in its present shape, it will frustrate the ends of justice, interfere with private rights, and enable a coroner to act vexatiously and tyrannically."

FROM ABROAD.—POPLITEAL ANEURISM—M. HUSSON ON TENT-HOSPITALS.

At two recent meetings of the Société de Chirurgie an interesting discussion has taken place on the relative merits of compression and flexed position in the treatment of aneurism. It was commenced by M. Trélat, who communicated a case of popliteal aneurism. The patient, being a robust, healthy man, seems to have been regarded by the narrator not as a *corpus vile*, but rather as a *corpus nobile*, on whom he might try various procedures. First mechanical compression of the femoral was resorted to, and was continued during fifteen days, the tumour by this time having become solidified over a third of its volume, and the pulsation and other symptoms diminished. It is probable that longer perseverance would have completed the cure, but the Doctor being desirous of trying other means, and the patient thinking those in force acted too slowly, forced flexion of the leg on the thigh was tried. Although this was only imperfectly put into force for an hour or two during another fifteen days, amelioration took place; but this not proving decided or persistent enough, digital compression was next employed during fourteen hours by relays of students. At the end of this time the cure seemed complete, but the pulsation, souffle, etc., returning, digital compression six days after was again employed during four and a half hours, and this time with complete success, which had continued to hold good when the patient was seen several months afterwards. M. Giraldès could not understand why, in this case, digital compression was not employed from the first, as, when properly performed, it is the most complete and rapid mode of treating the disease. M. Trélat's procedure can be understood as an experimental one, but cannot be justified on principle in a Surgical point of view. M. Le Fort, on the other hand, thought that he ought to have tried forced flexure for a longer time, applying it only from fifteen to thirty minutes at a time. M. Trélat, while admitting that both these modes are excellent, thought that he was justified in trying one after another, and then digital compression requires a greater number of assistants than can always be obtained. M. Giraldès again maintained that the fingers form the best of compressing agents, enabling us to arrest the circulation suddenly and completely, which is the best means of inducing the formation of coagula and the solidification of the tumour. M. Trélat could surely have found no difficulty in getting intelligent assistants in his Hospital. M. Boinet was also surprised at this source of difficulty, for, in his opinion, non-Medical persons are quite able to act as assistants in effecting digital compression; but MM. Le Fort, Giraldès, and Verneuil entirely dissented from this view, maintaining that to make effectual digital compression is a difficult matter.

M. Panas read an interesting case of popliteal aneurism cured by digital compression. It constituted a tumour the size of a large egg, and was entirely reducible on compression. Digital compression was commenced July 1 at 7 a.m.; but until 5 p.m. it was only imperfect, leaving the artery permeable owing to the want of aptitude of the students employed. From this hour they were enabled to completely arrest the circulation, and continued the now efficacious compression until 8 a.m. All pulsations had now ceased in the tumour, but on July 3 they returned, and the digital compression was resumed for forty-five minutes on that and the next day. From this time the cure was complete.

M. Liégeois also gave an account of a thesis recently published by M. Stopin on the treatment of popliteal aneurism by flexion of the leg, in which he has collected accounts of 49 cases so treated, almost all of them by English Surgeons. As most of these cases are known to our readers, we need not pursue M. Liégeois' analysis. The gross result is that 23 of the 49 cases proved failures, and in several of these the procedure was positively mischievous from the accidents it gave rise to. On the other hand, in 37 cases treated by digital compression, only 11 failures took place. In M. Liégeois' opinion, forced flexure, when it does not succeed, aggravates the aneurism and renders other methods less efficacious; and he thinks that digital compression should be tried before resorting to it. M. Giraldès greatly doubts whether the accidents which fol-

lowed flexion in the cases related by M. Stopin were really due to this procedure; and he can see no reason why, if considered desirable, flexion should not be tried in the first instance. Still, as a general rule, digital compression is the best of all procedures; but for its effectual performance the assistants must be changed every five or six minutes. M. Chassaignac observed that compression may be continued for a much longer time by the employment of a little artifice, which consists in placing small bags filled with shot on the fingers used in compressing. The weight of the shot aids the compression, and allows of its being prolonged with all desirable force and completeness for half or three-quarters of an hour.

In one of the brief intervals which are interposed during the interminable discussion on vaccination, in which the Académie de Médecine has been for some weeks past involved, M. Husson, the indefatigable Director of Public Assistance, read an interesting paper on Tent Hospitals. He observed that the idea is no new one, for patients were treated under tents by Bell and Hennen during the Peninsular war, and at New York during an epidemic of typhus in 1847. In the Crimean war, Miss Nightingale and the French Surgeon-General Lévy caused sheds to be run up with great advantage; but it was during the United States civil war, and afterwards the German war, that tent hospitals were resorted to on a large scale with great advantage. Since then, the Hospitals in all the principal German cities have erected tent hospitals in their gardens. According to the statistics of these establishments recently published by M. Chantreuil in the *Archives Générales*, the successful results after operations are far more frequent in patients treated during summer in sheds and tents than when they are inmates of the ordinary Hospitals. Stimulated by these statements, M. Husson has caused to be erected a tent Hospital in the garden of the Cochin Hospital, and another on a smaller scale at the St. Louis Hospital; and in this communication he describes the particulars of these constructions at great length. He observes that these Hospitals are of various kinds—viz., 1. The sheds or summer Hospitals at Berlin and St. Petersburg are permanent wooden constructions, or partly of wood and masonry. 2. The shed-tents are constructed partly of wood and partly of canvas. 3. The tent Hospitals are wholly of canvas supported by a framework. 4. Tents of a much smaller size of various forms, and devoted to various uses.

M. Husson promises that the experiment shall be fully and fairly carried out; but he evidently seems to think that some of the advantages supposed to attach to the new structures may be attained in the ordinary Hospitals, while they themselves are not without their inconveniences. The simple tent cannot well be so employed, for it is too stifling in hot weather, and cannot be warmed when this is cold; and even the sheds and Hospital tents, although answering their ends far better, are formed of absorbent materials and ill protect their inmates from sudden changes of temperature. They could scarcely be warmed without closing some of their apertures, which would convert them into the condition of ordinary wards. If, in these new erections, increased ventilation is what is chiefly sought for, this might easily be obtained in a Hospital. At the Lariboisière the air is renewed thirty-six times in twenty-four hours by mechanical appliances, and might be renewed much oftener if desired; or if natural ventilation, is preferred the windows might be kept always open. In summer, too, the patients who have been operated upon might be placed in tents. "Whatever may be the value of such reflections," M. Husson concludes by observing, "it suffices that the experiments already tried have furnished favourable results to induce us to resolutely enter upon a cautious but complete investigation. In view of an innovation, concerning which ideas are scarcely yet formed, it behoves us to guard against both a blind enthusiasm which excludes all criticism and leads to pure illusions, and against that excessive reserve which is equivalent to immobility."

MEETING OF THE BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

(*From our Correspondent.*)

Exeter, August 18.

The thirty-ninth meeting of the British Association for the Advancement of Science commenced here to-day. A more beautiful city for the meeting it would be difficult to imagine, and the local secretaries and local authorities have done everything that could be done to make the meeting not only a complete but a brilliant success. For some years Exeter has sought the honour of receiving the Association, and has contested with her rival, Plymouth, with a determination that has well deserved the victory.

Those who attend the Association regularly need hardly be told that Wednesday is a day merely of preparation for work. In the morning there is a meeting of the general council and meetings of the committees of the various sections, and in the evening there is a first general meeting, at which the new President delivers his address, but no papers are read, and, as the morning meetings are short, the after part of the day is usually spent in looking about, recognising old friends, indulging in gossip, or, worse task, looking for lodging and moderate accommodation. The business proper of the sections will commence to-morrow at 11 o'clock. The section which specially relates to Medicine is the Biological Section, B, and a full amount of business will be carried on there. There has long been some uneasiness respecting the position of Medical science in the Association. There was once a department specially devoted to our science, if my memory is correct, but it did not answer as was expected, and it declined. In fact, Medicine a few years back was more technical than it is now, and less palatable as a science to the mass of those who follow pure scientific work as a pursuit or as a pastime. In these days the study of Medicine has so greatly changed that it might well hold its place as a separate branch of the Association. But the course of events has produced a feeling which has made Medicine sink into the general development of knowledge, and we who represent her are fused into biology. This year the Section D is under the presidency of a member of our own body, and a worthier representative we could scarcely have. The President is Mr. G. Busk, F.R.S., whom we all know. He is truly a Surgeon, and his earlier labours in physiology, his researches on scurvy, his analyses of the blood in that disease, his practice in connexion with the *Dreadnought*, and his eminent services to the College of Surgeons, of which he is so distinguished a Fellow, have not been excelled by his equally arduous, but certainly not more important, labours in the field of natural history. There is but one expression respecting the choice of the authorities in the selection of the President of the biologists this year, and that is an expression of sincere satisfaction.

The work of the section itself is divided into two parts. One part—or, as it is called, department—is devoted to Natural History, the other to Physiology proper. The Vice-Presidents are C. Spence Bates, F.R.S., and Edward B. Tyler, Esq. The Secretaries are Edward T. Stainton, F.R.S., Professor Michael Foster, M.D., Rev. H. B. Tristram, LL.D., F.R.S., and E. Ray Lankester. Amongst other promised papers on physiology, there are two reports bearing on therapeutics—one by Dr. Crum-Brown, the other by Dr. Richardson. Dr. Crum-Brown will treat on researches connected with the modification of action of medicinal substances from change of chemical constitution, a continuation of the work which he and Dr. Fraser have recently carried on, and which has been more than once noticed at length in these columns.

Dr. Richardson's report, with which the physiological business will open to-morrow, is on the physiological action of the methyl compounds and the allied series. In this report the

action of the alcohols will be considered, and a substance known as hydride of amyl will be described as a probable useful addition to the means of busy Practitioners of the healing art.

The introductory address delivered to-night by Professor Stokes will be published in the daily papers in full before your more modest paper sees the light this week, and it is useless, therefore, for me to send you any part of it in detail. Suffice it for me to say that it was not quite Darwinian in its character, and that it partook of that spirit which the address of a mathematician and pure physicist would be expected to sustain. It was the address of a man whose whole mind is prone to whole facts and nothing but facts, and as an effort of its kind, powerful and eminently sincere, it was a good thing as a novel thing for the Association. It would not answer probably every year, but as an oration once in fifteen or twenty years it is unquestionably happy, as its reception most satisfactorily proved.

Several of our fraternity from other parts are already in Exeter—viz., Charles Brooke, F.R.S., Dr. William Farr, F.R.S., Professor Michael Foster, Dr. Hulson, M.D. (of Glenville, Fermoy), Dr. Macdonal (of St. Andrews), and several more. But enough for to-night. Next week, perchance, you may call out more than enough, and, at all events, due amends shall be made for the brevity of this communication.

DR. BEATTY'S ADDRESS IN MIDWIFERY AT THE MEETING OF THE BRITISH MEDICAL ASSOCIATION.

We must not take leave of the late meeting of the British Medical Association without giving due honour to Dr. Beatty's address in midwifery. Dr. Beatty, who combines ancestral claims to distinction in this branch of Medicine with the authority derived from long experience, began with a vindication of the due place and dignity of his art—midwifery. "What midwifery is now is best described by the definition offered by Velpeau more than forty years ago. It is 'the collection of all human knowledge relating to the reproduction of the species.' . . . Comprising everything relating to the reproduction of man, and dealing with two beings at the same time from the earliest impregnation to the hour of delivery, the amount of knowledge requisite for its perfect comprehension is of a very wide extent. The theory of generation, its phenomena, we might almost say its mysteries, not only in man, but in all animated beings; the study of ovology, so accurately demonstrated and brought within our reach by the labours of many modern physiologists; the intimate acquaintance with the anatomy and physiology of the unimpregnated uterus and its appendages; the progress of gestation, and the causes of its premature termination; the phenomena and diseases of pregnancy—such are some of the subjects demanding our fullest attention before we arrive at that stage in the process of reproduction to which some would limit the title and functions of midwifery. I will not waste time in any lengthened argument in proof of this statement; but I will content myself by simply mentioning the questions that are every day proposed for the consideration of Practitioners in midwifery, and to which they are expected to give true and satisfactory answers. Is A. B. physically incompetent for procreation? Is C. D. pregnant? Has E. F. aborted? If so, how old was that ovum? Is that ovum diseased? or could it have come to maturity? G. H. is dead. Is she pregnant? or has she recently aborted? If pregnant, how old is the fœtus? The magnitude of the issues that depend upon the answers to these questions, involving, as they do, reputation, property, liberty, and even life itself, is too manifest to require more than their mere recital." A sufficiently wide field this for any man's energies.

Dr. Beatty next demolishes the pretext that, because labour is a natural process, it does not require skilled superintendence. "That gestation and delivery are natural functions, and not diseases, no one will deny; but the proposition that, because they are so, they should be left to nature, and do not require the interference of science and art, is too absurd to require contradiction. . . In civilised life, the great majority of women go through labour without the necessity of any unusual interference. Eight times out of ten, according to Dionis, the aid of the accoucheur is required; while Courtin limits it to one in a hundred; the latter estimate being as much too wide as the former is too limited. A very large number do escape without any untoward accident, but every woman in labour is liable to such; some preventible, when their advent is foreseen, some remediable when they do occur, but all dangerous to life if not promptly and efficiently combated. That is what renders the peculiar study of midwifery, and the devotion of a life to its practice, of such importance. Who can judge of the deviations of nature from her usual safe course but he who has made himself familiar with every phase of that marvellous process? In one patient he will foresee the advent of convulsions, and, by a timely bleeding, may ward off the attack; in another, he perceives that rupture of the uterus is imminent, and by timely delivery may prevent that dreadful accident; in another, he may feel certain that severe flooding will follow delivery, and he is prepared to arrest it. Not to multiply instances, these are enough to show the value of the presence of a skilful and trained observer within reach of every parturient woman. Most fortunately, in the great majority of them, the less he interferes the better for his patient; but he never knows the time at which her life may depend upon his knowledge and promptitude of action."

Dr. Beatty then descants with the skill of a master on the various topics of greatest novelty and importance which have of late years been discussed amongst obstetricians—the use of anæsthetics, the induction of premature labour (in which due praise is given to Dr. Barnes's dilators), Dr. Braxton Hick's bimanual version, and the use of the forceps. The last part of the address was devoted to the consideration of the superstitions and immoralities which beset the act of childbirth and rearing of children, amongst which the proposals for limitation of families by artificial means come in for their share of castigation.

LETTERS FROM ST. MORITZ IN THE ENGADINE.

(*By our Special Correspondent.*)

The Journey thither—Importance of the Art of Travel—Description of St. Moritz.

It is now six years ago, while travelling in Switzerland, that I first heard of the virtues of the chalybeate spring of St. Moritz, in the valley of the Engadine in Eastern Switzerland, and of the marvellous efficacy of its mountain air. Year after year reports became more and more promising, and I was not long in determining to take the first opportunity that presented itself of investigating on the spot the truth of the rumours which reached me in England. The autumn vacation of this year presented that opportunity, and here in the month of August, 1869, is your correspondent located at an altitude of 6000 feet above the sea level, drinking the mild and sparkling chalybeate waters of St. Moritz, and bathing in the carbonic acid baths—I call them carbonic acid baths because, if there be any virtue in the bathing, it must be, as I shall hope to show hereafter, in the carbonic acid with which the water here is largely impregnated—in short, I am *doing* the cure most religiously. And this, notwithstanding the frightful consequences that some persons assure one will result from taking these waters when one is in good health. But after the fag of ten months of college and hospital work in town, it seems to me that a small quantity of iron (the water contains about three grains of carbonate of iron to a gallon) dissolved in water sparkling with carbonic acid cannot do one harm; so I am taking the present opportunity of adding slightly to my personal stock of that most important metal, fearless of the plethora with which I am threatened.

Thirteen years ago, an English clergyman staying at Schwalbach, heard of the existence of a very similar spring at St. Moritz, and wishing to exchange the somewhat sultry atmosphere of that place for the more bracing influence of mountain air, came for the first time into this now popular watering place, and found only two English people here; and indeed, so far as our own countrymen were concerned, the place at that time was practically unknown as a health resort.

Germans, Swiss, Italians, and even French, had long known the virtues of its waters or of its mountain air, or of both together, and annually came in considerable numbers to go through the regulation cure; but only within the last four

years has this place been at all well known to our own countrymen, of whom there are at this time about 200 resident in the Kurhaus and the hotels and *pensions* of the village, while many more reside in the neighbouring villages of Samaden, Pontresinas, Camfèr, and Silva-Plana, and drive or walk to the baths daily. But, even now, very little authentic information about the place is current in Professional circles in London. For example, in a book on St. Moritz and Tarasp, which was published just before I left town, and which is written by an English Physician who is thought to be an authority on the subject of Continental health resorts, many ridiculous mistakes occur. The Maloja Pass, for instance, is called the Majola; the white saxifrage, which grows abundantly in the locality, is transformed into the white sassafras! It is also said that "the English church begun last year is now nearly completed." True enough, an English church was begun last year, so far as laying the foundation-stone and making excavations are a beginning, and in much the same state it remains still. No vestige even of an external wall has yet made its appearance. Then, again, we are told by the same writer that Zermatt and Saas are in the Lower Engadine! Is it possible that these old friends of ours are made to do duty for Zerneta and Süs?

However, it is certainly necessary that some more careful, detailed, and authentic account than any that at present exists should be obtainable of a place to which nearly all the fashionable Physicians in London are yearly sending patients.

I purpose, then, in a few letters, which I shall hope to send you regularly, to give your readers as correct and authoritative an account as it is possible to obtain on the spot, with many sources of information at one's disposal, of the character of this place, the means of getting here, the nature and action of its waters, and, most important of all, the influence of the mountain air in the Upper Engadine in cases of tubercular consumption and other allied affections. There are a certain number of patients here now who have passed a whole winter in this Alpine valley, which is said to be the highest inhabited valley in Europe, and from these I hope to obtain some valuable and precise data bearing on the much-debated question as to the most suitable resorts for our phthisical patients.

I intend to devote the remainder of this letter to a description of the place, the means of getting here, and the kind of accommodation one is likely to obtain when one has at length reached St. Moritz.

First as to the way of getting here. You may either come by Paris and Bâle, or take the longer but more picturesque route by Cologne and the Rhine to Bâle, and thence by Zurich to Coire, where the railway terminates, and the remainder of the journey has to be accomplished in a diligence.

Presuming that most people will prefer the shorter and quicker route by Paris, I may mention that, in order to perform the journey in the shortest possible time, it is necessary to leave London for Paris by the 7.40 a.m. train from Ludgate-hill or Charing-cross Station. This train gets into Paris about 6 p.m. There is just time to get one's luggage and a comfortable dinner at the hotel opposite the terminus of the Chemin de Fer du Nord, and then one can take the night express to Bâle (the very slowest of express trains), which leaves Paris at 8.5 p.m., and gets into Bâle about 9 o'clock the next morning. A "wash-up" and a good breakfast can be obtained at the railway-station at Bâle, and will enable the traveller again to put himself *en voyage* by the 10.30 train from Bâle, which goes by Oelen to Zurich, and then on to Coire, the last bit of railway passing along the north shore of the beautiful lake of Wallenstadt. Following this route, it is possible to reach Coire at 7 o'clock on the evening of the day following one's departure from London. At this season of the year it is desirable to send a telegram from Bâle to secure beds at Coire for the night, or it may happen, as it did to your correspondent, that after your arrival you may have to follow your luggage from one hotel to another, the rain falling in torrents at the time, in order to get a bed. This precaution is especially requisite in the case of invalids. The Hotel Steinbock at Coire is deservedly a favourite with our countrypeople, and English is spoken there.

The next morning you are somewhat unpleasantly reminded of the fact that you are travellers in Switzerland, and that early hours are here *de rigueur*. At a quarter to four a.m. you are summoned to shake off your slumbers, and, after a hasty breakfast, at 5 o'clock you find yourself seated in a diligence, and ready to start for one or other of the mountain passes which lead from the ancient city of Coire into the Ober Engadine. In this case also it is very essential to make use of the telegraph wires and secure a comfortable place in the diligence, or you may find yourself seated in the interior of one of those primitive vehicles between a stout perspiring Dutchman and an equally plump and sudoriferous spouse, with about as much chance of seeing some of the finest scenery in Switzerland, through which both routes into the Engadine pass, as if you were reclining in your well-stuffed arm-chair at home, without experiencing any of the repose and comfort associated with that favourite lounge.

In about eleven hours, by the Julier pass, traversing most magnificent scenery, St. Moritz is reached. By the Albula pass it takes somewhat longer, though for those who intend staying at Samaden, a village about three miles from St. Moritz, with the best hotel in the neighbourhood, the latter is the shortest route.

Leaving London, therefore, let us say, on Monday morning, you can be deposited at the Kurhaus at St. Moritz about half-past 5 p.m. on the following Wednesday afternoon. But it will be of very little use being deposited at the Kurhaus unless you have taken the precaution to engage rooms a month or a fortnight beforehand. And the same remark applies to the only good hotel in the place, unless one is prepared to give a very high rent for rooms in some of the better sort of pensions here, of which there are one or two. But it constantly happens that invalids come here having made no kind of preparatory arrangement for their reception, and, being turned away from the Kurhaus and the hotels, wander about the village, and finally obtain shelter in a room that is little better than a hay loft. It is not to be wondered at that under circumstances like these, insufficiently or indifferently fed and badly lodged, some of the worst cases that are sent here obtain but little benefit from the change, and I have already witnessed more than once an earnest desire immediately on arrival to return home again as soon as possible. Many forget that this part of Switzerland is also popular with that large class of persons who travel habitually on the Continent, because of the easy accessibility of many of the higher Alpine summits and passes from this great elevation, as well as for the sake of the charming scenery of the Engadine itself. Now, these habitual tourists are well acquainted with that "art of travel" without which travelling is neither an easy nor a pleasant occupation, and they, in many instances, occupy the very best quarters that can be had, and which they have been careful to secure beforehand, while many invalids who know little of travelling—perhaps have never left their homes before—come up into this crowded fashionable watering-place having made no provision whatever for their reception, and they are compelled to accept whatever accommodation they can obtain, no matter how rough it may be; and since with the best accommodation here but indifferent food is provided, with the worst kind of accommodation the food provided is often of a very inferior description. I would therefore strongly impress upon those who are in the habit of sending patients to St. Moritz—especially in the case of persons who, from habit of life or feebleness of health, are not able to rough it—to insist on their securing comfortable accommodation here before they leave England. Thanks to the kind offices of a London clergyman who comes every year into this neighbourhood, I at once found a very fair resting-place at the chief hotel in the place; indeed, mine host has been unusually careful in looking after my comfort, so much so that I cannot resist the suspicion that he has an idea "a chiel's amang 'em taking notes," and hence his unwonted *empressement*.

Now a few words as to the place itself. I have not seen any account of St. Moritz that at all does justice to its many charms, while the ideas prevalent with some persons in town as to the severity of the climate are singularly at variance with my own experience.

Nothing can be more delightful during the hot months of summer than a residence in the Upper Engadine. While at home or in the valleys of Germany and Italy one can scarcely move during the greater part of the day from the excessive heat, here there is always a delicious freshness in the air which courts one to exertion. Not but that the sun's rays, especially in the middle of the day, are extremely powerful, and sunshades are in constant requisition, but the air is never sultry, and is always dry.

The village of St. Moritz is situated on a ridge projecting from one of the mountains situated on the north side of the upper valley of the Inn, and is about 300 feet above the pretty little sea-green lake that here stretches across the valley to the pine-clad slopes on the southern side. Above these pine-clad hills rugged and bare mountain ridges and snow-crowned summits and glaciers appear. On a clear day these mountain summits and pine-clad slopes, as well as the houses of the village of St. Moritz, are most perfectly mirrored in the calm waters of its mountain lake. The river Inn flows through this lake, and at the eastern end makes a graceful and picturesque

fall, and continues its course amidst a forest of pine-trees. At the opposite end of the lake, in an adjacent meadow, are situated the baths and the Kurhaus, near where the mineral springs rise. This situation is by some thought damp and undesirable, but I doubt if it really be so in summer weather, and most English visitors, in consequence, prefer living at the Hotel Kulm in the village, about a mile from the springs, and, as I have already said, 300 feet higher, or 6100 feet above the sea level.

To the west of St. Moritz the valley extends for eight or ten miles up to the Maloja pass, over which it is easy, in a few hours, by Casanja and Chiavenna, to reach the lake of Como. To the east it extends, for about twenty miles, to Martinsbruck and to the Tyrol. On each side of the valley mountain passes lead from the Northern side into Switzerland, and from the southern side into Italy, so that most interesting excursions can easily be made in every direction.

The weather this season has been unusually favourable, and for several days during this last week the sky has been one great expanse of perfectly unclouded blue, and such a blue! To wander on one of these days along the wooded mountain side, with rare and beautiful wild flowers at every step—rare to one accustomed to the British flower only—to gaze up into the deep blue serene sky, cut by the brilliantly white snowy summits (the snow on these mountains is of an ususual whiteness) of the giants of the Rhætian Alps, and to gaze down into the bosom of the still lake and see the whole scene reproduced, is to experience a fulness of pleasure which alone seemed to repay one for the trouble of traversing the seven or eight hundred miles which lie between hot and dusty London and this quiet and beautiful Alpine valley.

ARMY MEDICAL DEPARTMENT REPORT FOR 1867.

The longer the series of years over which these reports extend, the more sensitive do they become in their indications of variations in the health of the army. Each annual report compares the particular year to which it refers, not only with that immediately preceding, but also with the average results of the period between 1859, the year in which the reports were commenced, and that under consideration.

The difficulties in the way of instituting a similar system of registration of diseases and recoveries, as distinguished from sickness and mortality among the civil population are many and wellnigh insurmountable, and the time of its attainment is, we fear, long distant, so that meanwhile the reports published by the Army Medical Department become increasingly valuable as examples of what may yet be done in the same direction for the general public. They contain information not only concerning the health of our soldiers, but also in a collateral manner on points connected with those classes from which our army is recruited.

A fact of no small importance, to which we have on former occasions drawn attention, is apparent from the inspection of the returns, showing the causes of rejection of recruits—namely, that the proportion per 1000 of recruits rejected for venereal diseases since 1859 closely approximates to the later average daily ratio of soldiers constantly sick from the same causes, with this striking point of contrast—that whereas the latter has been steadily decreasing, the former has shown only slight variations, thereby proving that, as a result of the more systematic hygienic regulations to which soldiers have been latterly subjected, there has occurred among them a degree of improvement, as regards the prevalence of venereal diseases, to which nothing similar appears to have occurred among the civil male population. We have elsewhere remarked upon the bearing of such facts against the recent recommendation of the select committee of the House of Commons on the Contagious Diseases Act of 1866, that the system of personal inspection of all soldiers for venereal diseases should be reintroduced into the army.

From the report for the year 1867 we learn that, during the 52 weeks ending December 27, the average strength of the troops serving in the United Kingdom was 73,420, the admissions into Hospital were 63,904, the deaths from all causes were 690, of which 53 occurred while the men were absent from their corps, and the average number constantly non-effective from sickness was 3118. Calculated from the above, the following table shows the relative amount of sickness and mortality in 1867 and the preceding seven years:—

	Ratio per 1000 of mean strength.		
	Admitted.	Died.	Constantly Sick.
1867	870	9·40	42·47
1860-66	976	9·34	50·09

The decrease in admissions has been chiefly in miasmatic diseases, amounting to 46; venereal diseases, 26; affections of the respiratory system, 18; and diseases of the skin, 12 per 1000.

Compared with the results for 1866, we find that in the rate of admissions from venereal diseases there has been an increase of 33 per 1000, from miasmatic diseases there has been a decrease of 8, from affections of the respiratory organs 9 per 1000. In other classes of disease there have been trifling variations, the net result being an increase of 17 per 1000 in the admission rate. The increase in enthetic diseases was most marked at the following stations:—

	Ratio per 1000 of mean strength.		Increase.
	1867.	1866.	
Manchester	501	312	189 per 1000
Limerick	272	150	122 ,,
Dover	354	248	106 ,,
Preston	361	272	89 ,,
Isle of Wight	327	254	73 ,,
Edinburgh	244	171	73 ,,
Curragh	280	217	63 ,,
Pembroke Dock	153	100	53 ,,
Fermoy	202	149	53 ,,
Colchester	500	451	49 ,,
Woolwich	255	219	36 ,,
Cork	196	160	36 ,,
Aldershot	261	233	28 ,,
Portsmouth and Gosport ...	378	359	19 ,,
Belfast	230	215	15 ,,
London and Windsor (Foot Guards)	326	311	15 ,,
Dublin	333	323	10 ,,

Against this formidable array of increase we find the following instances of decrease:—

	Ratio per 1000 of mean strength.		Decrease.
	1867.	1866.	
Chatham and Sheerness ...	277	326	49 per 1000
London (Household Cavalry) ...	129	143	14 ,,
Devonport and Plymouth ...	312	317	5 ,,
Canterbury	375	379	4 ,,
Shorncliffe	215	219	4 ,,

At Warley the proportion for the two years was identical—namely, 328 per 1000—and at Winchester there was only an increase of 1, from 287 in 1866 to 288 per 1000 in 1867. With reference to the table from which we have extracted and rearranged the above particulars, it is remarked that "the Contagious Diseases Act of 1866 was in operation during the whole year at Devonport and Plymouth, Portsmouth and Gosport, Chatham and Sheerness, and at Woolwich, and for eight months and a half at Aldershot, but the results do not seem as yet to have realised the expectations which were entertained of its effects in reducing the amount of these diseases among the troops, except at Chatham and Sheerness."

On this point we find from the very valuable evidence lately given by Dr. Balfour before the select committee of the House of Commons, comparing the results of the years 1867 and 1868 as regards the operation of the Contagious Diseases Act, that, with the exception of Shorncliffe, at which an increase occurred during 1868, there has been a decrease during that year at all the stations at which the Act is in force, amounting, indeed, at Chatham and Sheerness, to only 2 per 1000, but at the others to considerably more; also that of eighteen stations at which the Act is not in force, and of which Dr. Balfour gives the returns, there has been an increase during both years at nine, and that at the others there was either no appreciable change, or increase and decrease alternately—the conclusion at which Dr. Balfour arrives being that "it would thus appear that there has been a marked comparative advantage enjoyed in 1867 and 1868 by the stations in which the Act was in force, except Shorncliffe." In reply to another question, however, he adds that the advantage has not been so great as was anticipated.

The following table shows the relative amount of syphilitic and gonorrhœal diseases, comprised in the general class of venereal, with the loss of service caused by each group respectively:—

1867.	Admissions into Hospital.	Average constantly Sick.	Ratio per 1000.		Loss of Service to whole Force.	Duration of Cases in Hospital.
			Admitted.	Constantly Sick.		
					Days.	Days.
Syphilitic group ...	11,293	818	153·8	11·14	4·06	26·44
Gonorrhœal group	10,106	440	137·7	5·99	2·19	15·89

On comparing this with the corresponding table for 1866, there will be found an increase of 33 per 1000 in the proportion of admissions into Hospital, of constantly sick ·94, and of loss of service by both groups ·34, but rather greater in the gonorrhœal than the syphilitic; and a decrease in the duration of the cases under treatment amounting to 1·69 days in the syphilitic and ·79 days in the gonorrhœal group.

Referring to the results of the Contagious Diseases Act at Aldershot, Inspector-General Lawson remarks that—

"The Lock Hospital has been in operation since June, 1867; no diminution of the admissions from primary venereal affections is yet apparent, but, on the other hand, many of the men have had the additional pay after re-engagement, and many received arrears for some months, which enabled them to spend more than usual, and this, no doubt, has been influential in increasing the attacks of primary venereal affections beyond the usual rate."

We have on former occasions remarked upon the connexion in military life between the issue of increased pay, prize money, or arrears, and increased sickness and mortality. We trust eventually, after the usual amount of reiteration, or some catastrophe more appalling and striking than any yet recorded, to see some steps taken towards amendment in this respect.

The only other principal Medical officer from whose reports we find any extracts made on the subject of the Contagious Diseases Act is Deputy Inspector-General Langley, in charge of the Plymouth and Devonport District, who remarks upon the arrival of a corps from New Zealand with arrears of pay at their disposal, as having "soon swelled the number of affected men." He then proceeds to observe that—

"Previous to the month of August the percentage of men diseased was actually less than the preceding year. My predecessor, Inspector-General Annesley, in former reports expressed a strong opinion that the location of troops newly arrived from foreign service in seaport towns, where they are exposed to so many temptations, is a fertile cause of a high rate of admissions into Hospital for venereal disease, and in this opinion I quite concur. The Contagious Diseases Prevention Act continues to be productive of good results, although somewhat marred by there being no place in the district where the civil male population can receive the benefit of indoor treatment, and from the serious defect in the Merchant Seamen's Health Act, which empowers the captains of merchant vessels to dismiss summarily any of their men disabled by venereal disease, thus allowing them to become fresh foci of disease. Amended legislation on this point is much needed."

(*To be continued.*)

REVIEWS.

Anatomische Beiträge zur Lehre von der Ohreneiterung. Von Dr. von Troeltsch. Separat-Abdruck aus dem *Archiv für Ohrenheilkunde*, 4ter Band. Würzburg. 1869.

Contributions to a Knowledge of the Anatomy of Suppurative Otitis. By Dr. von Troeltsch. Reprinted from the *Archiv für Ohrenheilkunde*, 1869.

Dr. von Troeltsch has long been known as one of the foremost among those whose labours have largely succeeded in placing our knowledge of diseases of the ear on a scientific foundation based on pathological investigation, and in the short work whose title we have furnished above he has published a series of cases, with commentaries of a very instructive character, which we think well deserving of the attention of English readers.

The special subject of this work is, as the title indicates, the troublesome and frequently dangerous disease of suppurative discharge from the ears. The cases are only thirteen in number, but they are well selected, and each illustrates some important point in the pathology of the ear, and the chief dangers resulting from its inflammatory disorders must also afford some valuable hints as to the effects of treatment in these cases.

Suppurative otitis has long been known to be a cause of danger through extension of the disease to the brain, the secondary consequences in which organ may be either meningitis or abscess. Dr. von Troeltsch has also been pointed out as one of the first observers who drew attention to the origin of general tuberculosis from local suppurative action, and one of these cases adds a partial further confirmation to this view. Several of his cases elucidate also the modes in which meningitis may originate from otitis. One important point which he brings forward is that meningitis may thus ensue without caries of the petrous part of the temporal bone being present, the medium of communication in such instances being through the vessels which pass from the diploë of the temporal bone to the dura mater. In other cases accumulations of secretion take place in the mastoid cells, and, the antrum mastoideum lying close to the transverse sinus and directly under the tegmen tympani, extension of the disease may ensue either to the sinus or, in other cases, to the dura mater over the tegmen, through the close proximity of the two latter structures, and also by means of the communication between them afforded by the branches of the middle cerebral artery. Pressure, and the very offensive products of retained secretions, have also a similar influence. Another mode of such extension is pointed out to be by the sinus petrosus superior, which Dr. von Troeltsch has shown to exist in the fœtal condition as a vascular prolongation of the dura mater, and on the importance of which in its pathological relations he specially dwells.

Of the cases of abscess of the brain one is, we believe, unique from the fact that the abscesses were multiple, and that one was on the side *opposite* to the diseased ear.

Some of the cases illustrate the rapidity with which fatal brain symptoms may appear after long-standing disease of the ear. It has been known that abscess of the brain may often be apparently latent. In some of Dr. von Troeltsch's cases the final course was very acute, in one of abscess ending fatally in thirty hours, and in another of meningitis in less than twenty-four after the first cerebral symptoms. Dr. von Troeltsch very properly calls attention to the fact that patients with otorrhœa must be regarded as unsafe subjects for life assurance, and should be rejected for military purposes. He has noticed that few elderly persons have had otorrhœa of long continuance, and raises the question whether this is due to the curability of the disease or to the fact that it tends to shorten life.

As regards the causes of otitis, he lays great stress on the evil effects of allowing secretions to accumulate in the tympanic cavity. His cases contain various illustrations of such final causes, for which we must refer our readers to the original, pointing out that these accumulations frequently form masses resembling the cholesteatoma or "tumeur perlé" of Cruveilhier, and which has been further described by Virchow. Dr. von Troeltsch has pointed out that the first effect of syringing the ear when these accumulations are present is to produce considerable pain, and this is sometimes the case when the patient has previously been free from suffering. He attributes this to the swelling caused in these masses by the imbibition of water, as the pain commonly ceases when they are evacuated. Pain resulting from syringing is not, therefore, always in his opinion to be regarded as a contraindication for the continuance of this process. In some cases, however, syringing is not without its dangers, and in one where the membrana tympani was absent the author is disposed to attribute a fatal termination to too much force being accidentally applied, by which means the stapes, being free, was pressed too strongly against the fenestra ovalis, and thus opened a passage into the labyrinth.

Another subject of practical importance here brought forward relates to the removal of polypi. The author points out that these are usually only a consequence and indication of inflammatory action, and that their mere removal is of comparatively little value without attention being directed to the primary diseased condition.

We think that enough has been said to induce our readers to study the work in its entirety. It is to be desired that Dr. von Troeltsch's careful and able work should be as well known in this country as it is abroad; and we would recommend to the Sydenham Society the propriety of publishing a translation of the author's contribution on Aural Surgery, contained in the third volume of Pitha and Billroth's "Handbuch der Chirurgie," and which embodies a valuable epitome of recent German and other work on this class of diseases.

The late Mr. Johnstone.—An appointment of some importance has become vacant at St. Thomas's Hospital by the death of Mr. William Johnstone, its receiver. As the Hospital possesses large landed property, the receiver has considerable responsibility. Mr. Johnstone was peculiarly fitted for the office, not simply as an accountant, but, with a general knowledge of the value of property, he was able, in a courteous and pleasant manner, to conduct the necessary correspondence, as well as the arrangements for letting the house and farm properties of the Hospital. The treasurer and governors will be fortunate if they succeed in obtaining a successor to Mr. Johnstone of equal fitness for the appointment.—*Solicitors' Journal.*

FOREIGN CORRESPONDENCE.

FRANCE.

(*From our Surgical Correspondent.*)

Paris, August 16.

The Paris Faculty of Medicine—How to make Professors Popular—Female Doctors in Paris—M. Léon Lefort and Tent Hospitals—How to avoid Pyæmia.

The Paris Medical Faculty closed on Saturday, the 14th. It is at the closure, instead of the opening of the school, that the *commencement celebrations* have been held for the last two years. This is done to avoid disturbances, which of late had become the order of the day on the part of the students. As the session draws to a close, many of them, having finished their studies, leave for their homes; others go to the country; while the real students, those who do remain, are less noisy. An additional precaution, however, is still taken by M. Wurtz, the Dean of the Faculty; this consists in a printed permission which students have to obtain for entering the amphitheatre.

Everything passed off quietly. I may say, *en passant*, that it is an exceedingly difficult matter here in Paris to keep students quiet. The police alone, whenever they interfere—as was the case some three months ago in the affair of Regnauld—seem to get the best of it. The Professors are less fortunate. They are certainly very much influenced by outside opinion, for in most of the differences which have arisen in the last few years the students have nearly always been successful. Tardieu had to resign his Deanship. Robin, when he became too severe at the examinations, was hooted at and harassed until he became not only one of the easiest of examiners, but even popular. The same thing occurred with M. Baillon, Professor of Natural History, who now never refuses a candidate, however little botany he may know; and the late troubles with Professor Regnauld have equally ended in the triumph of the students: from being one of the most severe judges, he now accepts everybody. Wurtz is probably the only one who does not yield. Is it for this that he has been promoted, five days ago, to the grade of Commander in the Legion of Honour? Thus much *par parenthese*.

The ceremonies consisted in Professor Lasègue's eulogy on Trousseau. M. Lasègue, though not an orator, composes beautifully; his discourse was received with sympathy and the warmest applause. Professor Bouchardat called over the names of the graduates whose thesis had received a recompense. The first Surgical prize, consisting of a silver medal, was gained by Dr. Good. This is, I believe, the first time that this honour has been conferred upon a foreigner.

Not half of the Professors were present at the meeting, many of them being absent from the city taking a holiday.

I am pleased, and have heard others say the same, about your opinion, in last week's *Medical Times and Gazette*, on female doctors. We too, here in Paris, have two women studying Medicine—one a Yankee lady from Massachusetts, the other a Russian, I believe.

Whenever Physicians with a foreign diploma wish to pass their examinations so as to receive the degree of Doctor of the Paris Faculty, a demand must be made to the school, whence, if accepted, it passes to the Minister of Public Instruction for approval. The first application of this kind made by one of these women to the Faculty was energetically and unanimously refused. But this did no good; the Minister overruled the Faculty, and decided otherwise. How encouraging it must be to the lovers of women's rights to witness, for instance, as I have, one of these ladies by the side of a patient in the Hospital suffering from stricture of the urethra, and the *interne* asking her to pass the catheter! This is elevating woman!

I had the pleasure of meeting Professor Pirrie, of Aberdeen University, here a few days ago. The Professor expressed great astonishment at the manner in which the French dress wounds. He had witnessed an amputation of the thigh the day previous at the Charité, and the Surgeon, instead of attempting union by first intention, had stuffed the wound, down to the bone, with lint and cotton.

This is a practice which, I believe, astonishes every one coming to Paris. Yet, in answer to the question "Why do you not try union by first intention?" we are told by all, "Impossible! Accidents (*i.e.*, pyæmia) are sure to follow."

In order, however, to show Professor Pirrie some surgery more in conformity with English views, I invited him to accompany me the following day to see the Hospital tents which M. Lefort, Surgeon to the Cochin Hospital, has had constructed. Wounds here were differently treated, and looked different. No other dressings than cold water, or this and alcohol or carbolic acid, are used—no fatty substances, no salves, no ointments, no heating bandages. There is a sponge for every patient, and the greatest cleanliness is observed. Thanks to these precautions, the Cochin Hospital—not only the tents—has had less accidents than any other in Paris, and for the last two years, since M. Lefort has had charge of the Surgical wards, not a single case of erysipelas has occurred.

The largest tent, of which at some future day I may send a description, contains eighteen beds. These tents are a great step onwards, and I think a year or two will prove why pyæmia is so prevalent in our Hospitals.

M. Lefort afterwards showed us his laboratory—a thing almost unknown in other Hospitals—for vivisections, chemical and histological researches. Every material necessary to examine or preserve pathological specimens is here found. One of the adjoining rooms serves for photographing, and we had the satisfaction of seeing the portrait of a woman who had suffered resection of the knee for white swelling, the second success out of three of M. Lefort's resections of the knee-joint.

After a hurried visit through the wards of the Hospital, where among other patients we saw a man who had been cured of a complete paralysis and atrophy of the right arm, consequent upon a luxation reduced ten months ago, by the continued current. Professor Pirrie was delighted with his morning visit, and could not thank me enough for having brought him to see "so clever and instructive a man."

GENERAL CORRESPONDENCE.

POISONING BY DEVONSHIRE JUNKET.

Letters from C. W. Whitby, M.D., and Alfred S. Taylor, M.D., F.R.S.

[To the Editor of the Medical Times and Gazette.]

Sir,—I enclose a detail for publication in your next issue of the cases of poisoning by junket which have recently occurred at Houiton, accounts of which have appeared in several of the daily papers. The symptoms were so peculiar, and their occurrence from the eating of junket alone so rare (if not altogether unprecedented), that though I concluded they were due either to some decomposition in the rennet or milk, and not to any poisonous substance which might have been added either accidentally or otherwise, yet I determined to seek the opinion of Professor Taylor on the subject; and I think I cannot do better than transcribe my letter to him, with his reply, leaving your readers to form their own conclusions, and, I hope, to help us by recounting similar instances occurring in their own experience. I am, &c.

Ottery St. Mary, August 18. Charles W. Whitby.

"Ottery St. Mary, August 15.

"Dear Sir,—Presuming upon your kindness on one or two former occasions, I venture to ask if you will give me the benefit of your valuable opinion in elucidating a curious case of apparent poisoning which has occurred in this neighbourhood.

"The facts are these. On Sunday last (this day week), the Rev. Prebendary Mackarness, rector of Honiton, and his family had, both at their early dinner and at supper, a dish of Devonshire junket, of which all of them, with the exception of Mrs., Miss Mackarness, the youngest child, aged 4, and two servants, partook on both occasions (nine persons in all). At supper, the Hon. Mr. Lyttleton, one of the rector's curates, was there, and also ate of the junket. All went to bed and slept well; but in the morning, between about 5 and 8 a.m., all those who had partaken of the junket at dinner were seized with illness. In the case of the rector himself the symptoms were faintness, shivering, and languor, followed in a few hours by diarrhœa; but with the rest pain in the stomach, vomiting, and diarrhœa were the first indications. Later in the day, by some hours, Mr. Lyttleton and Miss Mackarness, who only partook at supper were similarly attacked (though in the latter there was no vomiting for twenty-four hours), pain in the head, feverishness, and diarrhœa being the first symptoms. All those who had taken no junket remained quite well.

"I have been in attendance on the family ever since, and the

symptoms—*i.e.*, I should say, the diarrhœa and pain in the bowels—have continued with all of them (although much abated in some) up to the present time. The actions of the bowels have been very loose and offensive, quite like those of fever; the tongues coated with creamy furs, and with reddish lips; the pulses not much quickened, except in the case of the youngest girl, aged 7. Where the fever has been intermittent in character, no rash has appeared on the skin in any case. The rector himself, and two boys aged 18 and 15, are, I may say, convalescent; but in their case the motions are still very loose.

"Mr. Lyttleton, who does not live in the house, and has been under the care of Dr. Jerard, is about again. I have seen him to-day. He tells me that his bowels do not act more than once in the twenty-four hours, but that they are still loose, and his lips dryish; otherwise he seems well.

"The servants—*i.e.*, the cook who made the junket, and the housemaid—have been under the care of Dr. Mayne. They, especially the former, have been much worse than any of the family, probably from having kept about more for the first day or two. I have seen them to-day with their Medical attendant. The cook still suffers from vomiting and considerable diarrhœa. Her tongue is dry and coated, and her pulse very quick; there are no spots on the chest or abdomen.

And now as to the junket, to which I think everything points as in some way the origin of the mischief, for no one who did not partake of it has suffered in the least. It was made on Sunday morning from the whole of that morning's milk taken from a cow that had recently calved, and whose calf was still sucking, that cow and calf being at the time and since perfectly well. The milk was warmed in a tin saucepan, used for the same and other purposes both before and since. The curd was turned with a piece of rennet that was in the house, and which had been used only a week before for a similar purpose. A piece of the same rennet was taken home by me, added, after cooking, to some milk, and then given to two cats, but without any way affecting them. (The same thing was tried upon rabbits with a similar result.) The brandy used was that in general use in the house, and the sugar was given out the day before to the cook, and some of the same has been used both before and since. No other ingredient was used, with the exception of nutmeg. The milk from the cow of the evening before and after was taken by all members of the family, including the youngest boy, but none of them have suffered but the junket eaters. To crown all, the pig, who had the washings of the dishes, was so ill the next day that his life was despaired of, though after a good scouring he is now himself again.

"It seems to me that there must have been something deleterious in the rennet, although it had no ill effect upon other animals, but I cannot understand the symptoms lasting so long and presenting so close a resemblance to those of typhoid fever; therefore, if you would kindly write me on the subject, I should esteem it a great favour.

"I remain, dear Sir,
"Yours very faithfully,
"CHARLES W. WHITBY."

"15, St. James's-terrace, Regent's-park, August 16.

"Dear Sir,—I have carefully considered the whole of the details of the cases of poisoning from food, as described in your letter of yesterday. The only conclusions to which I can come are, first, that no mineral or vegetable poison was added to the junket: and, second, that the symptoms resemble those which arise from animal food which has undergone partial decomposition or decay. I have known similar symptoms arise from cheese, and in one case two children suffered from the use of milk taken from a cow which was not in good health. I found in this case blood mixed with the milk.

"It is probable that the milk used for the junket had undergone the lactic and butyric fermentations, and that lactic and butyric acids had been produced in unusual quantity. These organic acids are irritating to the mucous membrane of the stomach and bowels, and might well account for the symptoms under which your patients suffered. As the cow had recently calved, there may have been some colostrum with the milk, and this would more readily undergo a chemical change. Although the cow's milk did not affect the calf, it may have been so changed by exposure to air as to render it in a few hours irritant to the simple stomach and bowels of a human being. The calf draws the milk in a perfectly unoxidised state from the teat. Milk drawn in the ordinary way should be neutral, but it almost always is found acid in an hour or two, and some samples more acid than others, the secreted milk not being always in a healthy state.

"All the cases resemble animal-food poisoning in the length of time after the meal before symptoms came on, in the similarity of the symptoms, in the head symptoms and feverishness, and in the recovery of all after the action on the stomach and bowels.

"The rennet may have operated by favouring the lactic fermentation. If it had contained a mineral acid, it would have acted upon all animals, and produced effects on mouth, throat, etc.

"I return you your letter, but I shall be glad to have a memorandum of the cases for reference in a future edition of my book on poisons.

"You are perfectly welcome to this opinion.

"Believe me, dear Sir,
"Yours very truly,
"C. W. Whitby, Esq." "ALFRED S. TAYLOR.

CHARGE OF NEGLECT AGAINST A MEDICAL MAN.

LETTER FROM MR. D. HARTLEY.

[To the Editor of the Medical Times and Gazette.]

SIR,—I beg to send my account of the accident mentioned in to-day's *Times*. As I was going to see a case of midwifery, I was taken unexpectedly to the police-station to see a man who, they said, had met with an accident. He was stripped, and I examined him, found an abrasion of the skin beneath the right groin, no fracture or dislocation. The patient was intoxicated at the time, and made no complaint of any pain. I never saw the case afterwards. I am, &c.

D. HARTLEY, M.R.C.S.L.

Fern House, Accrington, August 18.

THE CONTAGIOUS DISEASES (ANIMALS) BILL.

LETTER FROM DR. BREWER, M.P.

[To the Editor of the Medical Times and Gazette.]

SIR,—My objections to the seventh schedule of Mr. Foster's Contagious Diseases (Animals) Bill, which is herewith sent, as well as the vote-paper containing the three amendments proposed by me on July 13,(a) are—first, that by this schedule the Legislature for the first time sanctions, and thereby encourages, the open sale of meat derived from animals labouring under a disease induced by specific virus poisoning the blood.

The history of this disease, known in Bohemia and Silesia as the "*Lungen-seuche*," is in England not that of an enzootic. I do not find its birth or cradle in any of our native pastures; it is an imported disease. It is a native of Asia and Southern Africa, and, when found among our herds, it has invariably been traceable to the introduction of some beast of an infected lot which has found its way into the market, pasture, or among the cattle of our native herd. The incubative stage is a very long one; all eminent veterinary authorities allow it to reach thirty and some even to forty days. During this period but little indication is visible of the havoc the poison is really making, but within a week of the exhibition of disease the pulse is accelerated, and the thermometric indications of active febrile accession come on. The "*râle*" indicative of the local development may now be observed, true pleuro-pneumonia supervenes, and, if the animal dies of disease, gangrene of lung and adhesions of pleura will very commonly be found. From the tenth day before the *râle* is audible the beast loses flesh, and, as the attack progresses, this wasting is very noticeable.

But this disease is now rarely allowed to have its fatal termination in and about London, for the owner of the cattle finds it more profitable and a less risk to have the infected beasts slaughtered and sold to the butcher. In 1862 out of 44 dairies containing 879 cows 490 were killed on account of the disease, but so greatly accelerated was the decomposition that 96 of

(a) The following was the amendment proposed by Dr. Brewer:—Seventh Schedule, after line 29, insert, "Cattle affected with pleuro-pneumonia, and slaughtered under the provisions of this Act, shall not be sold in the fresh state, but only after being submitted to salting; and carcasses of animals slain with this disease sold for consumption in a fresh state shall subject the seller to the penalties provided for the infringement of the provisions of this Act. The offal of cattle affected with pleuro-pneumonia shall be treated with quick lime or other disinfectant. Other cattle in the same field or premises shall be placed under the supervision of the local authority, and subjected to such preventive measures to arrest the spread of the contagion as shall be directed by the Privy Council."

the carcases were sold for pigs' meat and 394 for human food, and of a second batch, out of 584 slaughtered labouring under the disease 187 were found to be in a state fit only for pigs' meat and 397 for human food. This history proves amply that the animal at the time of its slaughter was in a diseased condition; that the disease had infected every organ and every member of the body; that, so far from the animal being in a condition of fattening, it was in process of emaciation; that its flesh was, when sold to the butcher, at best in a state of *adulteration* consequent on the poisoning of the blood.

2. The flesh had not simply lost much of its nutritive property, ut was infected with a poison destructive to animal life.

3. The easy slaughter and sale of meat derived from infected animals facilitate the concealment of the disease, and consequently favour its propagation, whilst they hinder that vigorous search for an application of hygienic preventives, which can alone bring immunity to holders of stock and safety to the general public. The milk of cows affected with this disease is often found to produce griping diarrhœa and thrush, and the flesh sold in open market as the flesh of animals killed in "condition" is at best a fraud.

The test proposed is that all flesh derived from animals slaughtered in lung disease should be subjected to salting; if the animal were killed in an advanced stage, the flesh will rarely, if ever, be preserved by the salting—"it would not take the salt," as the phrase is; if it does "take the salt" it is simply harder than meat in prime condition, and will require longer boiling.

It was impossible, from the lateness of the hour at which I rose to speak, to do more than sketch very cursorily my points. The House (being about to rise) asked me to bring up my amendments again on the report, but Mr. Foster replied to me that the Bill was to legislate for the health of beasts, and not of men. Of this I was but too firmly convinced without Mr. Foster's confession, and it is this which lies at the root of all defective legislation. Men are so engrossed with the immediate object before them, that they lose sight of the ultimate object of this and of all legislation, the health and welfare of the people who are the subjects governed, and for whose welfare governments are and were established.

When the report came up it was only at half-past three in the morning, and, as I said in the House, it was impossible, after sitting thirteen hours in the House, that I could attempt to detain the House by a succinct account of the history and nature of the disease, and the grounds on which I felt it my duty to press my amendments. My only chance was to raise my objections to this schedule in the Lords'. But the session had already elasped, and although I laid my reasons before some noble Lords in writing, all hope was gone, and on Tuesday last the Bill passed and received the Royal assent.

In as short an article as I could, I have shown you both why and how I endeavoured to prevent a most unwise, unthrifty, and, as I persuade myself, ruinous provision. It will never do to let things go on in this fashion; but at present I cry alone in a wilderness. I am, &c.

August 12. W. Brewer.

THE LATE ROBERT KEATE.

[To the Editor of the Medical Times and Gazette.]

Sir,—Your correspondent is not wrong when he says there are few men living who can pretend to describe Robert Keate. I do not grieve with him, however, at the loss of the papers that were promised. It is known that autobiographies are wont to prove disappointing, of which, if an instance were wanting, it might be found in that one left to us by Brodie, a most misleading document, with little of nature's hues.

Robert Keate was, I think, beyond a doubt, a nephew of the Surgeon at St. George's who had also a court appointment, was one of the Army Examining Board, and bore the selfsame name as he. It is quite new to me that he was in the navy. Against so decided an assertion as that of your able correspondent I will not undertake to deny it. There was a general feeling among his friends that he had spent a short time in the army, and that he drew a small pension thence; but he never spoke about this. I can, at least, take upon me to declare that from now some seventy years back he attended on the Princess Amelia, and was at that time living in Windsor Castle. Her Royal Highness had then a white swelling or some affection of the knee that required his daily attention. Keate was then a very young man, placed there no doubt by older heads, for whom he was *locum tenens*, and I think beyond question by his uncle, a Surgeon of very great eminence, whose interest with the royal family stood very high indeed. A recommendation from the sailor prince would not have had weight in that quarter; in the bosom of the royal family his opinion had not that amount of sway. When Keate was seventy years of age, I have heard him sometimes mentioned as young Keate; by this name he was always known in Windsor, to distinguish him plainly from his uncle. By a very ancient inhabitant I have even heard him described as rather an assuming young man. His marriage with the daughter of a gentleman, who was a member of the royal household, may have strengthened his hold on the family, at least in those early days. A friend of mine now deceased, the late Dr. West, of Greenwich, and formerly of the Kent militia, has described to me more than once Keate's first amputation at St. George's, soon after his appointment to the Hospital, when still a young man of small experience. It was a timid bungling performance, and extorted much envious criticism, his uncle scolding all the time. No force of words, I verily believe, could have served to persuade Dr. West that Keate had become a good operator.

When first I was brought more nearly into contact with the late Robert Keate, he might be said to be in his prime as regards Professional ability. I accompanied him in his carriage to St. George's, to be entered under his name and to pay there the Surgeons' fees. He told me in his crusty way that, were he beginning life, he would rather turn shoeblack for a trade, or take to the chimney-sweeping line, than trust to a Surgical career. His wife, in more chosen terms, would express the very same opinion. But already I was under bond—I wish now with all my heart that I had taken his homely advice and let a few hundreds go! It is scarcely necessary to say that I walked the Hospitals with Keate. His portrait should have been taken then—a square compact little man, with a rough complaining sort of voice, going through his task very leisurely. In conversation at odd times, or when wiping his hands in the wards after the usual preliminary scour, with his head well thrown in the air and one foot well planted forwards, and talking very aptly and intelligently, you could not mistake in him the gentleman. He had nothing of nasty pride, and was not a bit of a don. He had the best tone of all our men, not excepting the lordly Chambers; and yet, if the comparison may be allowed, with all its weakness of indication there was something of the Scotch terrier roughness in all that he said and did. He was always a favourite with the pupils. I never heard him turned into ridicule, in spite of his trying ways. He was a fairly educated man. I have known him quote Latin smartly, which is more than I ever heard from Brodie, who was supposed, but I think erroneously, to have had a superior education. Keate was perfect in minor Surgery, the placing of limbs, and bandaging, splints, pillows, strapping, and all that. Herein he contrasted with Brodie, who knew indeed as little of dressing, as he did of drugs and therapeutics—he was thoroughly ignorant of both. The only man I have ever known who could construct a linseed poultice was the aforesaid Robert Keate. From this exception I exclude myself, but I learnt it with some pains from him. When water-dressing and vulneraries have sufficiently fatigued attention, and Liston and Lister are forgotten, honest linseed shall then have its own. Keate did marvels with the red precipitate, such as I have not seen with other Surgeons. "My uncle used it for many years. I have used it all my life, that's why I always use it." This reply he made to a student who wanted a reason forsooth. He was by no means averse to blue lint nor even to Armenian bole. In fact, I have thought at times, that something of the old French Surgery must have filtered down into Keate—a school with many excellences. He was, I think, in standard operations the very best operator that I have seen, with not the least attempt at display. His circular amputations were perfection. When Liston first appeared in London, as it happened I was thrown by the side of this very popular Surgeon. I witnessed some of his operations in private as well as in public. They were unequal, not creditable performances, and contrasted most disadvantageously with what I had been used to see of Keate's. He had also the exceeding bad taste to speak contemptuously of Keate and of London Surgeons generally. It was some time before I could divest myself of a prejudice I thus early acquired against this boastful adventurer, this dashing blundering Surgeon. In London he had much to learn, and he learnt it, I allow, very fast. In the lateral operation for stone, Keate liked the *bistoire eaché*, whether it be for boys or adults. The blunt gorget he freely used. I remember now seeing him operate for vesico-vaginal fistula. "Anything a Frenchman can do an Englishman may undertake," was a remark he made about it; but he

was really not inventive or intellectual, as it is called, nor even a reading man, yet out of his own experience he was less at a loss than others. I have seen him set Brodie right, and the other have to take it of him. He was also the more careful Surgeon. In his treatment of diseases of the joints he was rather more free than Brodie in using the potassa fusa, and I feel sure that I have seen the pain much relieved by the use of caustic issues in certain joint-diseases. I remember, when I was his dresser, a sero-cystic tumour of the breast which he brought wholly away by ligature. The base of the tumour was encircled by a moderate skein of silk, and tightened some few times weekly. The enormous mass was thus strangled, and the case turned out very well. His judgment about tumours was very good; but his knowledge was entirely empirical; yet, although his range was narrow, he was not an enemy to new things. I do not think he cared for anatomy any more than Brodie did. He had no other tastes than for Surgery. He assisted admirably at operations, and was a very excellent colleague, not at all a party man.

Keate was certainly not liberal—I mean large-minded and generous—in no sense was he enlightened above his class and times, in understanding nor yet in conscience. He was not above taking a pupil in the same unprincipled way that was common, and indeed a rule, with most great Hospital Surgeons—a fee of some hundreds to be paid, and nothing given in return, or next to nothing at least, with a prospective view to patronage whenever an opening might occur. He had but one pupil that I know of—a very good fellow, but not bright. He became a dentist at Boulogne.

I cannot believe of Keate that royalty brought him to ruin. Keate was not quite the stamp of man to carve out for himself a career. We know of the great Brunswick family that nothing of parsimony attaches to them, nor did they understand economy. Much good service went unrewarded. Much devotion was ill repaid. The Duke of York's debt and the Prince's fell heavy on many good men. Keate's public appointments were uncommonly good. Their figure was certainly high. He had a consulting practice at Windsor that might help to pay his post-chaises. Keate was not altogether fortunate in life; he had very great crosses to bear; but a man who can pay his way and leave a fair family to succeed him, in the Medical Profession at least, is not an unsuccessful man. Though economical himself, and living within moderate bounds, he had ever a first-class home. His family moved in a circle that it is rather the right than the rule of a Surgeon's family to move in. He was naturally and justly proud of his children, and, I believe, was a most indulgent father. When I dined with Keate as a student, the appointments were all of the best, and not a shade of anything *de trop*. The Duke of Cambridge dined with Keate. I do not know what part he played in that cauldron of hostile ingredients, the College in Lincoln's-inn-fields. The system was wholly Venetian, and the same in the Hospital staffs; one never knew what had happened or what was coming next. I have heard him tell the story of the charter. It is no secret now, I believe, that this precious piece of legislation was one of Sir James Graham's mud-pies. It was sent very summarily to the College, with the notice that the Government had been engaged upon that head of subject long enough, and that they must either take it or leave it, to be that or none at all. Twenty-four hours given for a reply. The College did not behave with becoming spirit on the occasion. I do not think that Brodie and Keate were otherwise accountable than this for what was most odious in the charter, but rather lamented its injustice, and would have mitigated its unkind usurpations. Brodie was a Russell Whig, and he might have had the ear of the Government accordingly, as it was then constituted. Lawrence was the *Deus ex machina*, or bad genius of the epoch, too well seconded by Stanley, his satellite. Nor were they slow to disown their work, or slow to lay it to profit. To us sparse members of the craft, without metropolitan privilege, the Act, with all the stain upon it, was in the main perhaps beneficial. As life went on with Keate, the event of Brodie being sent for to lance the swelled legs of royalty, and the promise by the grateful George the Fourth, to this highly fortunate man, of the appointment of Serjeant-Surgeon in the reign of the monarch succeeding, was very much discussed at the time; it must have told heavily upon the subject of this memoir, however, that the matter was accommodated. In the latter period of his life he hung on St. George's too long; there were others very eager for his shoes. The same has been seen elsewhere. It was then with him a frequent lament how many five guineas he had given in annual subscription to St. George's. This was still necessary to make him a governor and to secure him a place at the Board above the level of a servant. His House-Surgeoncy, as I have been informed, was the only one then worth having, as something was left to be performed, something committed to trust. He would drop in at irregular hours and change the ordinary diets to broth, for Keate was very slow to learn the tonic treatment of pyrexia. His memory at this time was not good, and his strain was wholly one of elegy—one long incessant complaining. I chanced to see him tie the femoral a short time before his retirement; though his sight was then getting bad, he set about it *con amore*, with the greatest skill and coolness possible.

The brother of Keate was an Eton master, under Goodall in his early career, and later head-master at Eton. His history is largely written on the bottoms of little boys—a good working man in his day, of no great intellectual calibre, but, like his brother Bob, a character. Keate's son is the governor of a colony, another Robert Keate. His daughters are well bestowed. One of them was married to Dr. Page, a Physician of great mental accomplishments, who is now lost to the Profession, having died a few years back. This is all I can find to say of my old respected acquaintance, from whom I have taken good and ill. I only fear I have been led to describe a man of great merit and eminence with something of zoological minuteness, as Cowper describes his hares. His portrait in the board-room of St. George's is very much in the sign-board style. It serves to show the inroads of decay, but nothing of his livelier breath, nothing of his more courtly address, nothing of his fresher form. It even jars upon my remembrance.

I am, &c. Beeks.

ARMY MEDICAL DEPARTMENT.

[To the Editor of the Medical Times and Gazette.]

Sir,—With reference to certain queries in the House of Commons by Lord Bury, referred to in your issue of July 31, relative to alleged abuses of patronage and power, I quite agree with you that neither Lord Bury nor the officers of the Medical Department can or ought to rest content with an explanation so unsatisfactory as to be inaudible, and therefore the question ought to be repeated without delay.

It is believed that Mr. Cardwell's reply was, in substance, *sic volo, sic jubeo*. Now, a flagrant abuse of the roster involved in the practice of retaining a few officers, in no way specially distinguished, in what can only be termed life appointments; for although nominally for five years, they are virtually renewable for life at the will of the Secretary for War.

So great and manifest an injustice is this to the working officers of the Department, who really perform the whole of the foreign and field service, while they see the promotion, honour, and rewards given to these fortunate gentlemen, "who stay at home at ease," that I hope that portion of the Medical press not favourable to the abuses at Whitehall-yard going on for so many years, will assist us in exposing and remedying them.

I am, &c. Fairplay.

United Service Club, August 3.

SOLDIERS' DIET IN INDIA.

Letter from Assistant-Surgeon Alcock.

[To the Editor of the Medical Times and Gazette.]

Sir,—"I have long been convinced that many cases of hyperæmia, bilious congestion, enlargement and partial fatty degeneration of the liver cells, are caused simply by diet." Such was the opinion expressed by Dr. Parkes in his work on Hygiene, in 1864; and in a paper on the climate and diseases of one of our military stations in Oude, published in our columns, we have this opinion reiterated by another Medical officer, showing that the same cause still exists, followed by like results.

The direct relation of food to force has been so clearly laid down by the experiments and reasoning of Professor Haughton, that we cannot help seeing that while we persist in overfeeding men whose bodies are placed in a medium the warmth of which is but little, if at all, below their own normal temperatures, whose loss of heat is thereby reduced to a minimum, and whose expenditure of force by physical exercise is at the same time at its lowest, we are but throwing additional work on certain organs, whose functions must be disordered in their attempt to dispose of this surplus.

All innovation must be productive of dissatisfaction, but we cannot help thinking that it would be worth the consideration

of the authorities whether it would not be desirable to propose the issue of meat to soldiers during the hot weather in India on three days a week only, offering the optional substitution of money compensation therefor, with which other lighter articles of diet might be purchased, analogous to the extra messing fund now existing.

It may be raised, as an objection to this, that the money would be but diverted to the canteen, and be ultimately more productive of mischief. And here again reorganisation is more than ever needed. Would any Physician advise a client projecting a trip to a tropic climate to be sure to drink, during the hottest weather, rum nearly up to proof, and beer which has to be manufactured much stronger than that used for home consumption to prevent its being spoiled by the heat? Were cheap light wines introduced, men would at first despise them, but doubtless would ere long find that they turned out for parade with much less "of a head" on a morning after drinking them. I am, &c. N. Alcock,

Aldershot, July 23. Assistant-Surgeon, 30th Regiment.

DR. RICHARDSON'S PAINLESS KNIFE.

Letter from Dr. B. W. Richardson.

[To the Editor of the Medical Times and Gazette.]

Sir,—Allow me, in reply to the letter of "The *Times* Correspondent of the Leeds Meeting," published in your last impression, to say that his good memory did for once fail him. I remember having a very brief and friendly gossip with him as I was hastening to one of the meetings, and that the subject of my paper was mentioned; but I certainly made no report to him of having performed anywhere the experiment which he related in his report, and this for the simple reason that the experiment, as detailed, was never performed.

In correcting the error—and I really had no alternative but to correct it, for it caused me real anxiety—I conveyed no imputation, nor was any deserved, and I accept the error purely as an accidental misinterpretation of expression, gathered in the hurry of collecting for instant publication the details of a great meeting at which the business everywhere was hurried to the utmost. I am, &c.

12, Hinde-street, August 18. B. W. Richardson.

OBITUARY.

CHARLES WING, M.R.C.S.,

Died at Hammersmith on the 9th inst. in his 77th year. He was educated at St. Bartholomew's, and was for many years in large general practice at Louth in Lincolnshire. He subsequently came to London, and practised at St. John's Wood in partnership with the late Mr. Edwin Fogg, and afterwards with Mr. Henry Ancell. He was an amiable man and a good practical Surgeon. He was known as the author of a volume which attracted considerable attention in its day, entitled "The Evils of the Factory System." This publication had considerable influence in mitigating the factory laws.

DAVID FERGUSON.

We have to record the death, at the mature age of 81, of one who, though not a member of the Medical Profession, was yet so intimately linked with it during his long life as to have earned an honorary addition to his title—namely, Mr. Ferguson, sen., of Giltspur-street, the well-known Surgeons' instrument-maker. Mr. David Ferguson was born at Glasgow in 1789, and he settled in London when Surgical instruments, appliances, and apparatus were, as regards finish, mechanical skill, and adaptation to purpose, in their infancy. Mr. Ferguson's patience, unwearied energy, his great strength of hand and ready comprehension, gained for him an amount of confidence among the higher members of the Surgical Profession, and a reputation hitherto unsurpassed. The late Sir William Lawrence, Mr. Earle, and Mr. Stanley and others availed themselves constantly of his mechanical skill. But his claim upon public Professional recognition rests not so much on his well-polished cutting scalpels and amputation knives as upon his orthopædic appliances, his instruments for club-feet and distorted limbs. Just as Dr. Little, of the London Hospital, introduced the scientific practice, so did Mr. Ferguson, the Surgeons' instrument-maker of Giltspur-street, introduce the many appliances now in use, though even yet scarce fully appreciated. Mr. Ferguson leaves a family of five children, all grown up. His eldest son has long managed his business. He lost a younger son, James Ferguson, not long ago, one equal to the father in mechanical skill. Mr. Ferguson was for many years instrument-maker to St. Bartholomew's Hospital, to the Orthopædic, and to other Hospitals.

MEDICAL NEWS.

Royal College of Physicians of London.—At an extraordinary meeting of the College on Wednesday, the 11th inst., the following gentlemen were admitted Fellows:—

Alexander, William, M.D. Univ. Edin., Halifax.
Arlidge, John Thomas, M.D. Univ. Lond., Newcastle-under-Lyme.
Blandford, George Fielding, M.B. Univ. Oxford, 3, Clarges-street, London.
Coekle, John, M.D. Univ. R. Coll. Aberd., 13, Brook-street, London.
Daly, Owen, M.D. Univ. Dubl., Hull.
Day, Henry, M.D., Univ. St. And., Stafford.
Down, John Langdon Haydon, M.D. Univ. Lond., 39, Welbeck-street, London.
Maudsley, Henry, M.D. Univ. Lond., 38, Queen Anne-street, London.
Ransom, William Henry, M.D. Univ. Lond., Nottingham.

Apothecaries' Hall.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, August 12, 1869:—

James, David, Cardigan.
Lill, William Frederick, Nottingham.
Oliver, Josiah, Hadlow, Tunbridge.

The following gentlemen also, on the same day, passed their First Professional Examination:—

Elkington, Ernest A., Queen's College, Birmingham.
Harding, Alfred W., University College, London.
Mayne, Thomas, University College, London.
Mewstead, James, St. Bartholomew's Hospital.
Rimell, John George, University College.
Russell, William, Guy's Hospital.
White, Barrington S., King's College.

APPOINTMENT.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Fox, Wilson, M.D.—Physician Extraordinary to Her Majesty.

NAVAL AND MILITARY APPOINTMENTS.

Dr. Charles F. K. Murray, Dr. Thomas W. O'Sullivan, and Dr. Joseph Wood to the *Duke of Wellington*, for service in Haslar; Arthur V. Smyth and Bernard Renshaw to the *Royal Adelaide*, for service in Plymouth Hospital. The above Medical officers have been appointed on passing the competitive examination recently held at Chelsea Hospital.

Admiralty.—The following appointments have been made:—James R. Anderson, Surgeon, to the *Gladiator*; Cornelius R. Enright, Assistant-Surgeon, to the *Gladiator*; Charles Mitchison, Assistant-Surgeon, to the *Asia*; Alfred S. Crowdy, Assistant-Surgeon, to the *Indus*; Dr. Dugald M'Ewen and Dr. Alexander M'Donald, Assistant-Surgeons, to the *Inconstant*; Matthew F. Ryan, Acting Assistant-Surgeon, to the *Inconstant*.

6th Dragoons.—Assistant-Surgeon William John Page, from the 94th Foot, to be Assistant-Surgeon, *vice* John Edward Barker, M.B., who exchanges.

19th Foot.—Staff Assistant-Surgeon George Ryan to be Assistant-Surgeon, *vice* Francis Patrick Staples, appointed to the Staff.

94th Foot.—Assistant-Surgeon John Edward Barker, M.B., from the 6th Dragoons, to be Assistant-Surgeon, *vice* William John Page, who exchanges.

Medical Department.—Assistant-Surgeon Francis Patrick Staples, from the 19th Foot, to be Staff Assistant-Surgeon, *vice* George Ryan, appointed to the 19th Foot; Staff Assistant-Surgeon Joseph Septimus Steward has been permitted to resign his commission.

BIRTHS.

Burroughs.—On August 13, the wife of E. F. H. Burroughs, Esq., L.R.C.S.I., Mayfield, Sussex, of a daughter.

Groves.—On August 14, at Newland West, Lincoln, the wife of E. Groves, M.R.C.S., L.R.C.P., L.M., of a son.

Hodgson.—On July 30, at Sutton St. Mary, the wife of W. J. Hodgson, M.D., of a daughter.

Williams.—On August 11, at 78, Park-street, the wife of Dr. C. Theodore Williams, of a son, stillborn.

Wotton.—On August 13, at 62, Bedford-gardens, Campden-hill, Kensington, W., the wife of Henry Wotton, Esq., F.R.C.S.E., of a son.

MARRIAGES.

Blake—Douglas.—On August 12, at St. Stephen's Church, Westbourne-park, Arthur Troup, youngest son of the late B. Blake, M.D., R.N., of The Grove, Camberwell, Surrey, to Louisa Ellis, niece of the late Rev. Alexander and Mrs. Louisa Houstoun Douglas, of 42, Eaton-square, S.W., and Baads and Craigs, N.B.

GREAVES—COX.—On August 10, at Hardingstone, Northamptonshire, Charles Augustus Greaves, M.B., LL.B., of Derby, to Helen Eva, eldest daughter of the Rev. R. H. Cox, M.A., vicar of Hardingstone.

PRICE—NASH.—On August 11, at Box Chureh, Wilts, Henry Meredith Price, late Indian Army, to Terresa, third daughter of the late Dr. Nash, M.D., of Chilton-hill House, and granddaughter of the late Rev. Saml. Nash, LL.D., rector of Great Tew, and vicar of Eustone, Oxfordshire.

WATSON—KIRK.—On August 12, at Bathgate, by the Rev. Alexander Shennan, M.A., assisted by the Rev. J. Logan Aikman, D.D., Glasgow, David Watson, Esq., Bathville, to Robina, only daughter of James Balfour Kirk, M.D.

WILMOT—ELDERTON.—On August 17, at St. Gabriel's, Warwick-square, Pimlico, Alfred E. Wilmot, L.R.C.P. Lond., of Escrick, York, third son of W. Byam Wilmot, M.D., of Ryde, Isle of Wight, to Mary Macrae, youngest daughter of Charles M. Elderton, Esq., barrister-at-law.

WRIGHT—THOMPSON.—On August 12, at Easby, Robert Temple Wright, M.D., F.R.C.S. Eng., of H.M. Bengal Medical Staff, to Emily, daughter of the Rev. J. Thompson, vicar of Easby.

DEATHS.

COOKE, WILLIAM BISHOP, M.D., at Worcester-street, Gloucester, on August 12, aged 39.

COWAN, ELIZABETH MARIA, widow of the late Charles Cowan, M.D., of Reading, at Lee, near Ilfracombe, after a few days' illness, on August 11.

DUIRS, JEMIMA, relict of the late Dr. Wm. Duirs, Deputy Inspector-General of Hospitals and Fleets, at the house of her father, James Fettes, Esq., Surgeon, Lawrencekirk, Kincardineshire, on August 8, aged 37.

MONTGOMERY, HOWARD B., M.D., Surgeon, Madras Army, at Madras, on July 11, aged 43.

TIDMARSH, RICHARD, M.D., late of Adelaide, South Australia, at Greenwich, Kent, on August 16, aged 64.

WHEELER, MARY, the youngest daughter, and ARTHUR, the youngest son, of Daniel Wheeler, Surgeon, formerly of Reading, at 92, Wigmore-street, Mary on the 3rd, and Arthur on the 16th of August, both of consumption.

WING, CHARLES, M.R.C.S., at Hammersmith, on August 9, in the 77th year of his age.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

BRIGHTON AND HOVE LYING-IN INSTITUTION.—Resident House-Surgeon; must be a Member of one of the Royal Colleges of Surgeons of Great Britain or Ireland, or L.R.C.P.L. or L.S.A. Applications and testimonials to the Chairman of the Committee of Management on or before September 2, election on September 9.

BOURNEMOUTH GENERAL DISPENSARY.—Resident Surgeon. Candidates must be registered, and must possess a qualification in Medicine as well as Surgery. Testimonials, diplomas, etc., to be sent, under seal, to the President of the Bournemouth Dispensary on or before September 9.

EASTBOURNE UNION.—Medical Officer and Public Vaccinator for the First District. Candidates must be duly qualified and registered. Applications and testimonials to W. Barber, Esq., Clerk, Willingdon, Hurstgreen, on or before September 2, election on September 3.

GUILDFORD UNION.—Medical Officer for the Albury District. Candidates must have the qualifications required by Poor-law Board. Applications and testimonials to W. H. Smallpeice, Esq., Clerk, Guildford, on or before September 3, election the next day at twelve o'clock, when candidates are requested to attend.

KENT AND CANTERBURY HOSPITAL.—Assistant House-Surgeon and Dispenser; must be legally qualified to practise under the Medical Act of 1858, and be unmarried and not more than 40 years of age. Applications and testimonials to Thomas Southee, Esq., Secretary, on or before August 27, election the same day.

KINGSBRIDGE UNION.—Medical Officer and Public Vaccinator for the Stokenham District. Candidates must be legally qualified. Applications and testimonials to W. Jarvis, Esq., Clerk, Kingsbridge, on or before September 3, election on September 11.

METROPOLITAN FREE HOSPITAL.—Assistant-Physician; must be M.R.C.P. Applications and testimonials to the Secretary on or before the 31st inst.

ROYAL GENERAL DISPENSARY.—Physician. Candidates to send applications and testimonials to John Faulkner, Esq., at the institution, 25, Bartholomew-close, and to attend the meeting on September 2, at 1 o'clock p.m.

ROYAL HOSPITAL FOR DISEASES OF THE CHEST, CITY-ROAD.—Physician; must be F. or M.R.C.P. Eng. Applications and testimonials to Charles L. Kemp, Esq., Sec., on or before August 23, election on September 7.

ROYAL MATERNITY CHARITY, 31, FINSBURY-SQUARE.—Physician for the Eastern Districts of London. Candidates must be F. or M.R.C.P.L., and will be required to reside in the appointed district. Applications and testimonials to the Secretary on or before the 28th inst.

SHEFFIELD PUBLIC HOSPITAL AND DISPENSARY.—Assistant House-Surgeon; must be a Member of one of the Colleges of Surgeons of the United Kingdom, and be L.S.A. or L.R.C.P.L. Applications and testimonials to Dr. J. C. Hall, on or before August 22.

TOWER HAMLETS DISPENSARY.—Resident Medical Officer; must be L.S.A., and be registered. Candidates to attend personally at the election, at 7 o'clock p.m., on September 6.

WARNEFORD HOSPITAL, LEAMINGTON PRIORS.—House-Surgeon; must be M.R.C.S. Lond., Edin., or Dublin, and L.S.A. or L.R.C.P.L. Applications and testimonials to the Secretary.

WORKSOP DISPENSARY, NOTTINGHAMSHIRE.—House-Surgeon; must be legally qualified, and be unmarried. Applications and testimonials to G. Fisher, Esq., on or before August 31. The duties will commence on November 1.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Bromsgrove Union.—Mr. Edward Moore has resigned the Romsley District; area 4366; population 646; salary £12 per annum.

Carlisle Union.—Dr. Anderson has resigned the Stanwix District; area 11,730; population 11,677; salary £70 per annum.

Holyhead Union.—The Holyhead District is vacant; area 7362; population 9235; salary £60 per annum.

Lexden and Winstree Union.—Mr. Lewis H. Franklyn has resigned the Ninth District; area 11,530; population 3212; salary £65 per annum.

Newent Union.—Dr. G. B. York has resigned the Redmarley District; area 10,519; population 3167; salary £50 per annum.

APPOINTMENTS.

Atherstone Union.—Thomas Handford, M.R.C.S.E., L.S.A., to the Atherstone District.

Hemel Hempsted Union.—Robert R. Merry, L.R.C.P., M.R.C.S.E., to the Boxmoor District.

Hertford Union.—Henry B. Smith, M.R.C.S.E., L.S.A., to the Fifth District.

Kington Union.—John E. Kenyon, L.R.C.P., M.R.C.S.E., to the New Radnor District.

ROYAL COLLEGE OF SURGEONS.—The report of the proceedings of this institution has just been suspended in the hall of the College for the information of its members, and contains little more than has already been published in the *Medical Times and Gazette*. A letter was read from Mr. Erasmus Wilson, enclosing a receipt of his having transferred into the names of Messrs. Busk, Simon, Humphry, and Holden, trustees of "the Erasmus Wilson Trust Fund," the sum of £5000 new Three per cent. Annuities, whereupon it was "Resolved unanimously that the best thanks of the Council be, and are hereby, given to Mr. Erasmus Wilson for his liberal endowment of a Professorship of Dermatology in this College," and this resolution be engrossed on vellum, signed by the President, and transmitted to Mr. Wilson. Mr. Wilson has since been unanimously elected Professor of Dermatology. Messrs. Birkett and Flower were elected Professors of Pathology and Surgery and Comparative Anatomy and Physiology respectively for the ensuing year. At the last meeting of the Council the following members of the College, having been elected Fellows at previous meetings, were admitted as such, viz.:—Messrs. William Joseph Square, Portland-square, Plymouth, diploma of Membership dated May 11, 1835; and John Whipple, Mulgrave-place, Plymouth, March 5, 1824; both gentlemen are Surgeons to the South Devon and East Cornwall Hospital.

BRITISH PHARMACEUTICAL SOCIETY.—The sixth annual conference of this body opened at Exeter yesterday, and will continue until Friday. There was a large attendance of members from all parts of the kingdom. The report showed that the society, which holds its meetings in the week of the British Association, numbers about 680 members, including a large accession made during the past year. The income during the year was £80 in excess of the expenditure. On the motion of Mr. Cooper, seconded by Mr. Husband, both of Exeter, the report was adopted. The President, Mr. D. Hanbury, F.R.S., of London, then delivered his inaugural address, in which he dealt with various subjects in connexion with pharmacy, and the progress made last year. Mr. E. Smith, of Torquay, followed with an interesting paper, "On Pharmaceutical Responsibility and Remuneration," in which he expressed his opinion that pharmacentical chemists were a very ill-paid class of men, and that revision and uniformity of prices were very desirable. The President and others agreed that at present there was great inconsistency in the prices, and feared the trade could not have anything else but inconsistency. Papers were also read—"On Distillates," laboratory paper, by Mr. Joseph Ince, F.L.S., F.C.S.; "Lard, and its Preparation for Use in Pharmacy," by Mr. Edward Smith; "On the Application of Spectral Analysis to Pharmacy," by Mr. W. W. Stoddart, F.G.S., F.C.S.; "Contribution to the History of Buxine," by Dr. F. A. Flückiger, of Berne, honorary member of the Conference; "On Syrup of Phosphate of Iron," by Mr. T. B. Groves, F.C.S.; "On Syrup of Iodide of Iron," by Mr. M. Carteighe, F.C.S.; "The Assay of Ipecacuanha," by Professor Attfield.

EDINBURGH UNIVERSITY CLUB.—The quarterly dinner of this Club was held on the 11th inst. at St. James's-hall. Dr. Sieveking occupied the chair, and was supported by Dr. Duckworth, Hon. Sec., as croupier. At a meeting of the council held previously, Dr. J. Burdon Sanderson, F.R.S., in the chair, Dr. J. Crichton Browne, of the West Riding Lunatic Asylum, Wakefield, Mr. W. A. Mackinnon, V.C., C.B., Staff Surgeon-Major, of Netley, and Dr. Ninian A. Williamson, of the 7th Dragoon Guards, were elected members of the Club.

Honorary Health Officer. — The Fitzroy (Melbourne) Borough Council have presented an illuminated address to Dr. Tracy on his resignation of the honorary health officership of that borough, which he had held for thirteen years.

"Ladybirds."—An immense swarm of these insects, useful in destroying *aphides*, alighted in Folkestone and Ramsgate last Sunday. They abound all over the South of England.

An anonymous donor, who only left the initials of R. T. W., has just paid in to Messrs. Ransom, Bouverie, and Co., for the Hospital for Women, the munificent sum of £1000. A gift to the same amount has been made anonymously to the Great Northern Hospital.

The wife of Dr. A. Dobbs, of Boston, United States, has been shot dead in the presence of her husband and her son, by Major White, a resident patient. He had known and loved his victim for several years, and had once previously (in 1861) made an attack upon her with a knife. Upon that occasion he was placed in a lunatic asylum, where he remained for six months.

A Monument to a Doctor and his Wife.—A meeting of the committee for the erection of a monument to Dr. Chadwick and his wife, in commemoration of their munificent gift of £22,000 to the town of Bolton for the erection of an orphanage and model dwellings for the industrious poor, took place at the Coroner's Court, Bolton, on Wednesday last. It was announced that models of the proposed statue had been received from five competitors. The models will be on view to the public shortly.

Mr. John Bland, M.R.C.S. Eng., of Durham, was, on Saturday last, accidentally killed by a train whilst walking along the Bishop Auckland railway, which he was in the habit of doing, although he had been cautioned against it, and reminded that he was not only thereby committing a trespass, but incurring considerable risk. There is a considerable curve at that part of the road, which necessarily limits the vision; and it appears that the unfortunate gentleman therefore saw only one train, although there were two going in opposite directions, and that he stepped out of the way of the one into that of the other, which he had not seen, and could not hear from the noise. He was breathing when picked up, but insensible, and died almost immediately.

Alleged Neglect by a Medical Man.—A coroner's inquisition was held at Frodingham, Lincolnshire, on Thursday, August 12, to inquire into the cause of death of Arabella Aldridge, aged 38. Deceased had died in childbirth, and rumours had got abroad to the effect that her death had resulted from the carelessness and unskilful treatment of the Medical attendant, Mr. Paterson, Surgeon, Scunthorpe. The body had been interred, but was exhumed by order of the coroner, and a *post-mortem* examination performed. A good many witnesses were examined, chiefly females, who had been with the deceased on the day of her death and previously. One of these said Mr. Paterson was in liquor at the time he was attending, so much so that he staggered. Another said he asked her for a boot-hook, but not having one, she unscrewed a hook from the ceiling, which she gave him, and he used it. Most of these witnesses deposed to seeing that deceased was dying, and to telling Mr. Paterson so, but he said there was no danger. She commenced being bad on Friday, and she died on Sunday morning. Mr. Paterson was with her all Friday night, several times on Saturday, and once on Sunday morning. He then went for his instruments, but before getting back she was dead. Mr. Paterson was examined as a witness, and detailed his treatment of the case. He denied being in liquor, and said he asked for the hook with the view of getting it over the child's leg, but found it of no use, and went for his instruments, but deceased died before his return. Did not think she was in danger. Mr. Draper Mackinder, M.D., Gainsborough, gave the result of the *post-mortem*. He said there was no evidence of any injury by instruments. The womb was ruptured on its right side to the extent of six inches; through that rupture the whole of the left arm, the two feet, and the afterbirth had escaped into the cavity of the body. This caused her death. In a case such as this had been described no Medical man would have thought that such an accident could have happened. He had notes of more than 4000 cases, but never saw one like this before. Professor Casper states it only happens once in 5000 cases. Witness did not think the hook had anything to do with deceased's death. The rupture would not have been prevented if proper instruments had been used, for it had then taken place. Mr. T. T. Des Forges, Surgeon, Burton Stather, corroborated the last witness. The jury returned a verdict of "Natural death," and the Deputy Coroner told Mr. Paterson that he was by this verdict and the evidence given exonerated from all blame.

A child five years old died the other day at Newbury from drinking 2½ oz. of brandy.

A rumour has gained currency, through the *Wilts County Mirror*, that Dr. Lush, the senior member for Salisbury, has accepted the appointment of a commissioner of lunacy, and consequently he will resign his seat in Parliament.

A woman, aged 39, died in the Melbourne Hospital, Australia, on May 22, from exhaustion fifty-six hours after the performance of ovariotomy by Dr. Tracy. The disease had existed eleven months. The woman had been previously tapped three times, and had borne six children.

Alleged Increase of Lunacy.—The proportion of lunatics to the population has increased within the last ten years in round figures by one fourth—from 1 in 536 to 1 in 411—or, putting the figures in another shape, the lunatic population has increased within that period four times as rapidly as the general population. The figures, however, if properly analysed, will tend to mitigate the alarm which the general results are calculated to excite. The greater part of the increase has taken place in county and borough Asylums, and is due, no doubt, in some measure to the fact that many persons who, for their own sakes and for the security of society, ought to be in an Asylum, are now thus taken care of, who would probably have been suffered to go at large a few years ago. The horror of a "madhouse" which once prevailed has doubtless diminished, and recent alterations in the law, by which the burden of supporting a pauper lunatic is thrown upon the union instead of upon the parish, have also tended to increase the number of inmates in County Asylums. These considerations do not apply to private patients, and accordingly the increase under this head is only 17 per cent., not very much larger than the general increase of population. It is startling to find that the mortality among these unhappy persons is 10·31 per cent. with reference to the daily average number resident, and 7·80 per cent. with reference to the total number under treatment in the course of the year, the average mortality of the whole population being about 2·5 per cent. On the other hand, many readers will be surprised to learn that above one-third (34·93 per cent.) of the patients received into the various institutions above named are stated to have recovered. The proportion is 40 per cent. in the registered Hospitals—a fact which may indicate either that the treatment is superior to that in other Asylums, or that the authorities exercise some discretion in selecting those candidates for admission who are most likely to receive benefit.—*Standard.*

Mortality of Scotland.—19,499 deaths were registered in Scotland during the second quarter of 1869, being in the annual proportion of 242 deaths in every ten thousand persons, or 2·42 per cent. The mean death-rate of the quarter during the ten previous years was 222 deaths in every ten thousand persons, or 2·22 per cent. The death-rate, therefore, has been very high—indeed, has not been so high during the corresponding quarter of any of the ten previous years. In England, on the other hand, the mortality during the quarter has been below the average—viz., 218 deaths in every ten thousand persons, or 2·18 per cent., the mean of the quarter during the ten previous years being 220 deaths in a like population, or 2·20 per cent. The death-rate in the groups of town and rural districts bore a close relation to the birth-rate in each, being highest where the greatest number of human beings were massed together, and lowest in the sparsely inhabited rural districts. Thus, the proportion of deaths in every thousand persons of the estimated population was 33·4 deaths in the principal towns, 26·7 deaths in the large towns, 22·3 deaths in the small towns, but only 18·2 deaths in the rural districts. The like fact was shown with regard to the eight divisions of Scotland. In the sparsely inhabited Northern Division, in every thousand inhabitants, only 17·1 died, but in the densely peopled South-Western Division, 29·9 deaths occurred in the like population. Of the eight principal towns the mortality was highest in Glasgow and lowest in Perth. Thus, for every thousand persons in each town, the annual proportion during the quarter was 19·3 deaths in Perth, 22·2 deaths in Aberdeen, 30·1 in Dundee, 32·3 in Paisley, 32·6 in Leith, 33·1 in Edinburgh, 33·6 in Greenock, and 37·0 in Glasgow. Of the 19,449 deaths, 6650 were registered in April, 6424 in May, and 6375 in June, being at the rate of 222 deaths daily during April, 207 daily during May, and 212 daily during June.

THE report of the Commissioners in Lunacy, issued last week, shows a total increase in the number of insane persons in England and Wales on January 1, 1869, as compared with January 1, 1868, of 2177. The number of private patients appears, during that interval, to have increased in county and borough asylums by 6; in registered Hospitals by 70; in metropolitan licensed houses by 107; in naval and military Hospitals by 27; and in private charge as single patients by 50. On the other hand, the patients in provincial licensed houses have decreased by 138, the result being a net increase of 122 in the class of private patients. The number of the pauper class has been increased by 2020, distributed thus:—County and borough asylums, 1181; registered Hospitals and licensed houses, 184; workhouses, 497; outdoor paupers, 158. There appears besides an increase during the year of 35 in the total number of criminal patients in the Broadmoor Asylum.

THE *Pall Mall Gazette*, in an article on the French Salon, thus speaks of two very remarkable pictures which have to some extent a Medical interest:—"'The Plague of Rome,' by M. Delaunay, a picture which, by reason of its modest dimensions, takes rank among the class of *genre* paintings, has nevertheless all the elements of a grand historical composition, wherein the higher artistic qualities of originality of conception, severity of style, and sobriety of colour predominate, and which, had it only been dilated over a vast surface, and displayed in the *salon d'honneur*, would have been pronounced one of the most important works of the present exhibition. The artist has selected his subject from the Golden Legend of Jacques de Voragine, and laid his scene in an antique street at the foot of the Capitol. In a kind of twilight, dead and dying are discerned lying on the portico steps, and on the thresholds of the doorways. Some few living individuals, hardly less ghastly-looking than the actual corpses, glide silently under the walls, as though fearful of arresting the attention of the pestilential spirit hovering in the air over the plague-infected city. Others have fallen upon their knees to implore the clemency of Heaven—the Christians at the foot of the cross, the pagans before the statue of Æsculapius. The angel with pale wings pauses in his flight in front of a house which he points out to the exterminating spirit. This phantom, thin and of a wan leaden hue and terrible aspect, is full of a gloomy kind of poetry: he strikes the door with his spear. As if to temper this intensity of horror, in the background of the picture, an indistinct procession, touched by a faint ray of light, is seen, apparently implying that the divine vengeance is satisfied and the scourge about to cease. Almost equally powerful in conception and treatment with 'The Plague of Rome' is M. Guillaumet's 'Famine in Algeria,' with its detached groups of poor famished creatures, its dramatic incidents, and the painful sentiments which these are calculated to inspire. Unfortunately, however, the artist has allowed himself to overstep certain recognised limits, and the result is to awaken a feeling of repulsion at the sight of these terribly gaunt mothers clasping their emaciated offspring to their breasts and holding out their poor meagre arms to clutch the loaf of bread which some charitable hand is passing through a small square aperture in the wall above, and which other famished wretches, too exhausted to contend for it, eye with a covetous convulsive stare."

YELLOW FEVER AT RIO DE JANEIRO.—In the *Diario* of July 21 is an official declaration of this city being infected with yellow fever. It was not a bit too soon. A transatlantic-going vessel, the *Estremadura*, has quite recently arrived at Lisbon after leaving Rio de Janeiro with its bill of health, touching at several ports. Before the mid passage, it had twelve cases of yellow fever. These cases were classified as follows by its Physician, who was experienced in this affection from having passed some time in the West Indies, and given there his services during a grand epidemic—viz., two cases of bad yellow fever, with fatal termination; four cases of yellow fever, also intense, but cured; and of mild yellow fever with slightly pronounced symptoms, six cases. When the vessel arrived in Lisbon there were but two sick on board—one with advanced phthisis, who died soon after entering the lazaretto, and the other with intermittent fever. A chlorotic woman with damaged constitution died also on the voyage. This is the entire truth, as we learn from good sources. There is no epidemic in the lazaretto. But still the necessity is seen of much care with regard to vessels arriving from Brazil under existing circumstances.—*Escholiaste Medico*, July 31.

DEATH FROM SWALLOWING A MISWAK, OR TOOTH-STICK.—Mr. Watson's case in the current number of the *Indian Medical Gazette* recalls to me an extraordinary case, which occurred to me while civil Surgeon at Futtehpore, before the mutiny. An old woman came to me with most painful and urgent dyspnœa, exaggerated by a frequent cough. With great difficulty she unfolded her story, which struck me as marvellous and beyond belief. After cleaning her teeth, she was in the habit (like all natives) of passing the miswak far down, with the object of promoting retching, and thereby clearing the fauces of the mucus accumulated during the night. While so engaged three days previously, the stick became impacted, and eluded her hold; frightened out of her wits, she had not the sense to withdraw it, nor would any one in the house assist her. Gradually the stick disappeared, and the present urgent symptoms as gradually set in. According to the old woman's description, it must have been nine inches long. What had become of it? It was preposterous to think that it had bodily entered the trachea, but a fragment might have found its way thither, and occasioned the urgent and distressing symptoms present in the poor woman. It must, therefore, have slipped into the œsophagus, but, if so, why such distinct indications of bronchial mischief? The finger passed down into the pharynx could detect nothing, the pharyngeal forceps could grasp nothing, and an emetic, which acted freely, brought up no foreign body. I then opened the trachea and passed a pair of dressing forceps carefully up and down, but could detect nothing. In the course of the day, the poor woman died asphyxiated and unrelieved. A post-mortem revealed the miswak, nine inches long, lying quietly in the œsophagus, and resting on the lower margin of the stomach, where there was a patch of congestion, the size of an eight-anna bit, nothing else whatever. The lungs were stuffed with mucus, and presented the appearances to be expected in death from acute bronchitis. In this curious case, I could only say that death was due to bronchial complications, induced by the presence of a foreign body in the œsophagus; but I never heard or read of a similar instance.—*Dr. Hutchinson, Civil Surgeon, Patna.* (*Indian Medical Gazette.*)

A QUESTION IN LUNACY.—L., the proprietor of a farm at St. Marguerite, set fire to a portion of his property during a paroxysm of insanity, the damage done being estimated at 1500 fr., which the administrator of the lunatic's estate claimed from the insurance company. The company resisted the claim on the plea that the act was performed by the assurer himself, and an action was brought in order to try whether insanity did not come within the category of accidental and unforeseen circumstances (*force majeure*). The tribunal of Rouen decided that, in the absence of special stipulations, all unforeseen or accidental circumstances must be embraced by the contract. If the assurer, it was said, had let a torch fall from his hand on account of its weakness, and thus given rise to the fire, the company would have been held responsible, and *à fortiori* it must be so in presence of an aberration of intellect.—*Journal de Méd. Mentale*, May.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Supply of Subjects for Dissection.—We hope shortly to have our report complete, and to publish it immediately after the "Students' Number."

Dr. Willoughby Arding is thanked for his communication, in which he says;—"In the course of my experience I have become acquainted with the fact that the urethra is susceptible of very great dilatation, even to the extent of its diameter being augmented from about half an inch (its natural size) to an inch and a half or two inches, if not more."

Dr. Richmond, of Paisley, sends us a copy of a petition addressed to the Right Hon. Mr. Bruce, M.P., in favour of Dr. Joseph Bell's candidature for the Chair of Clinical Surgery at Edinburgh. The personal and ancestral claims of Dr. Bell are stated in terms which must prove extremely gratifying to him. Mr. Bruce's reply is civil, but nothing else.

Female Compositors.—The *Publishers' Circular* of August 15 contains the following:—

"It is very well known to the trade that the employment of women as compositors and printers is in effect a failure; that women are utterly unfitted for compositors; that they never really, wholly, and actually composed any books—lifting the formes, correcting, and imposing, etc., etc.—without the most efficient help of *men*; that they never have acted but as amateurs; and that, after paying to learn the compositor's art, there is no office—no general office—in England open to them, simply because their work won't pay; that 'diseases dire' peculiar to women afflict female compositors if they do work hard; and that the whole matter is an *ignis fatuus*, misleading poor creatures who need honest leading, covering them with the disappointment that maketh the heart sick, and of which it is the duty of an honest man to speak the truth, even at the risk of a rupture of our peculiarly delicate law of libel. Finally, it may be

as well to tell ladies who are cockering up the female compositors that there are always in London alone at least five hundred compositors out of work, any one of whom could work cheaper, better, and cleanlier than any female compositor who has been misled by the shoals of excellent, good-hearted, and well-wishing people who want to do good, and, not knowing how to do so, cause an alarming amount of misery and mischief."

Detection of Blood-stains.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Considerable doubt seems to exist in the minds of a good many of the members of the Medical Profession as to who is the discoverer of the guaiacum and ozonic ether test for the detection of blood-stains. Some months ago the discovery of this test was ascribed in the *Lancet* to "an Australian Practitioner," a statement which was doubtless true, although somewhat vague; and in the current number of the *Quarterly Journal of Science* the test is fully described as if it were a novelty, but is referred to as the discovery of Professor Bloxam.(a) Under these circumstances you will, I trust, permit me to state that the real discoverer is Dr. John Day, of Geelong, whom some of your older readers may possibly recollect as one of the House-Surgeons at the Middlesex Hospital nearly a quarter of a century ago. The test was originally described by Dr. Day in a paper "On Polarised or Allotropic Oxygen," which appeared in the *Australian Medical Journal* for May, 1867. Professor Taylor, to whom Dr. Day sent a copy of his paper, speaks in the highest terms of the value of this discovery, and gives several illustrations of its marvellous delicacy in a paper "On the Guaiacum Process for the Detection of Blood in Medico-Legal Cases" in *Guy's Hospital Reports* for the same year. A leading article was moreover devoted to the subject some months ago in the *British Medical Journal*, and Dr. Guy has favourably noticed it in the recently published edition of his "Forensic Medicine."

As I am not aware that the test has ever been fully described in your pages, I extract the following sentences from Dr. Guy's excellent work, and shall be obliged by your finding room for their insertion:—

"But, besides these characteristic properties of the blood solution, we have two tests of extreme delicacy, of which the one consists in a chemical reaction, the other in a physical change. The first was suggested by Dr. John Day, of Geelong; the second has been brought to perfection by Mr. Sorby, of Sheffield.

"Dr. Day's test, suggested by the discoveries of Schönbein, and justified by his own experiments as well as by subsequent careful inquiries of Dr. Taylor, consists in the joint use of tincture of guaiacum and the ethereal solution of peroxide of hydrogen or "ozonic ether." To a very weak faintly coloured blood solution we first add a few drops of tincture of guaiacum, and then a few drops of ozonic ether. The result is a rich sapphire-blue solution."—P. 313.

"It is to old blood-stains and the solution obtained from them, and to mere smears of blood, that the guaiacum test is specially applicable. The mode of applying it may vary with the material bearing the stain. When it is on linen or cotton texture, the following procedure may be recommended as convenient, and as illustrating the extreme delicacy of the test:—Cut out a small spot, or part of a spot, with a portion of the unstained cloth. Detach one of the fibres, and cut it off, so as to leave at the cut end the smallest visible speck, and place it on a microscopic slide, with the stain under the field. Moisten it with a drop of the tincture of guaiacum. The colour of the tincture being not unlike that of the spot itself, its colour will be somewhat heightened; but, on adding a drop of ozonic ether, the stain will be found to change rapidly to a beautiful sapphire-blue, which colour passes gradually into the surrounding liquid. When the stain is on a texture which cannot be thus unravelled, and especially when the texture is coloured, the best way is to moisten the spot with the tincture of guaiacum, and then with the ozonic ether, and to place upon it fragments of white filtering paper. These will be found to have the characteristic blue stain."—Pp. 316-317.

As Professor Taylor observes, no one who applies this test for the first time can fail to be surprised at its extreme delicacy, a single drop of blood being capable of detection in eight ounces of water.

I am, &c. Scum Cuique.

Poisoning by Devonshire Junket.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I send you the following details of a somewhat obscure case of poisoning, in the hope that some of your correspondents may, should it be in their power, relate any experience bearing upon the subject which may throw light on what remains doubtful.

Last week (the 8th), Mr. M., a clergyman in this county, and his family, also his curate and three servants, partook of a dish of junket, made in the usual way—with curds, cream, a little brandy, and nutmeg. Ten persons in all ate of it—eight at early dinner and two at supper. Mrs. M. and the youngest child had none. About twelve hours after dinner the eight first named were simultaneously seized in the night with violent sickness and purging, accompanied in some cases by crampy pain in the stomach. This continued all night. In the morning, Mr. M., though quite unfit, endeavoured to perform the early service in his church. He fainted in the middle of it, and was brought home. All the sufferers growing worse, Medical aid was obtained and every individual ordered to bed. The eldest daughter, who had not partaken of the junket until supper-time, drove herself four miles to fetch the doctor, and it was not until her return that she and her brother were attacked, making an interval of twelve to fourteen hours. This, added to the fact that Mrs. M. and the youngest boy escaped altogether, leaves no question as to cause and effect; moreover, the pig, which had only the washings of the dish, was so ill that its death seemed imminent. The prominent symptom with all was fever of a severe form, "resembling typhoid." The cook, who was one of the worst sufferers, exhibited a tongue black with fever; the others, vivid scarlet, with white tip, blood-red lips, glazed eyes, and a sunken look about the cheeks. I left the neighbourhood two days ago; it was then the fifth day of the illness. The youngest girl, a delicate child, caused the greatest anxiety, owing to the extreme difficulty of supporting her strength under the frequent recurrence of diarrhœa, which was in each case of a very obstinate nature—subdued, perhaps, for hours, and then bursting out again. The symptoms varied, depending possibly upon age and constitution. One had vomiting without diarrhœa, another *vice versâ*; Miss M. intense headache, her two brothers violent pain in the epigastric region, and so on; but all had fever. Mr. L., the curate, in his own house, exhibited precisely the same symptoms as the other victims. Now the question is, could the rennet, with which the milk is turned to curd, produce all this mischief, even supposing it to be not quite fresh? A junket had been made with the same rennet a week before which had no bad effect, and, after this occurrence, some was given to two cats and a rabbit without doing them any harm. There was no poison of any kind kept in the house, and not the slightest suspicion of foul play. Subsequent inquiry shows each ingredient to have been good except the rennet, which remains a disputed point. One cook says the smell of it is not right; others that they would use it without fear. The suffering family are anxious to know what poison would produce results similar to those I have endeavoured to describe.

I am, &c.

Devon, Aug. 16. C. A. B.

Since writing the above, I have received a note dated the 15th, which mentions that the eldest daughter and one of the servants "were considerably worse, the pain and sickness returning." My correspondent adds:—"It is a whole week now since they were all taken ill, and they are not at all out of the wood yet. No further light has been thrown on the cause."

(a) I am authorised in stating that Professor Bloxam totally disclaims the discovery of this test. He has exhibited the reaction to his classes, and speaks highly of its value.

Dr. Richardson on Electric Coil.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I have read the very interesting and important lecture by Dr. Richardson upon the physiological experiments made by him at the Polytechnic Institution with the large induction coil. Certain views and conclusions are, however, embodied in that address to which I cannot myself subscribe, and therefore you will perhaps favour me with space for a few very brief comments.

In the first place, then, I would notice that the Doctor, in the early part of the lecture, asserts that the escape of the animals referred to—viz., the pigeon, rabbit, and toad—after exposure to the direct discharge from the coil or to the spark of 29 inches in length, "is due to the ready course of the current over their bodies." Now, we are taught in all works upon electricity that hair and feathers rank very high in the list of the "non-conductors," or, more accurately, "imperfect conductors," and therefore I am unable to conceive how, in the case of the bird and mammal, such a position can be maintained; although, in the instance of the toad, the naked and generally slimy skin may certainly be regarded as an efficient conductor, and consequently the innocuous action of the direct current upon the body may be thus explained. It is evident, however, that this reasoning is quite inapplicable to the two warm-blooded animals included in the experiments. Then again, Dr. Richardson affirms that, "in fact, the body internally is not traversed by the current at all, but is surrounded by it." This inference appears to be quite at variance with a previous observation—viz., that at each shock there was a general muscular contraction; for how, we may ask, if the body be not traversed at all by the current, can this diffused muscular contraction be explained? Indeed, the fact that, by the repetition of these discharges upon the body of an animal, a state of anæsthesia may be induced, shows clearly that at each such discharge a certain quantity of the electricity must enter the body and act directly or indirectly upon the brain.

I venture, too, to question the conclusion of Dr. Richardson relative to the "difference in the effect of the shock" produced by the Leyden-battery discharge. He says that "when death does not follow the discharge, the shock has affected those nervous centres only which govern muscular motion and sustain common sensibility." But it is difficult to conceive how the brain can be acted upon by a powerful discharge without the centres which govern the involuntary muscular acts being also in some degree affected, seeing that in a living body, permeated as it is by fluids, every internal organ and every tissue must be regarded as a good conductor. This view of the question seems also to be warranted by the experiments with the break-current, under which, as just before related by the Doctor, "the muscles concerned in respiration become so much contracted that the animal may die purely from apnœa." For if this interrupted form of discharge acts thus potently upon the involuntary nervous centres, how can the direct discharge from the Leyden battery leave them wholly unaffected? When we consider, too, that the pneumogastric, a cerebral nerve, is most intimately associated with the great sympathetic, it seems very unlikely that the comatose state of the brain referred to can be induced without the other nervous centres being influenced, indirectly at least, by the discharge.

The reason that the ganglionic system is the least acted upon by the direct shock, may perhaps be found in the very general distribution of its centres, and in the consequent divided action of the discharge upon them.

Differing, as with all deference I do, from Dr. Richardson upon these and other minor points, I cannot, however, but think that the Profession and the whole scientific world are deeply indebted to him for his masterly and original researches, proving, as they incontestably do, that rigor mortis and coagulation of the blood may follow the electric discharge. Still, it is necessary to bear in mind the vast difference in amount between atmospheric electricity and that elicited even by the induction coil, and that consequently it is easy to conceive that, as in the instance of the rabbit's ear, the whole of the blood of an animal may be decomposed by the lightning-stroke, and thus Hunter's doctrine, in some cases, be found rigidly true.

Apologising for these very imperfect remarks,

I am, &c. W. H. Olley.

Mildmay-road, Stoke Newington, July 5.

All in my Eye!—Mr. Edward Carter, of Uxbridge, can bear pleasant testimony to the fact that it is not always true that a prophet is without honour in his own country. Mr. John Vagg, of the "Fat Ox" Brewery, Uxbridge, appears to have been the first to discover Mr. Edward Carter's profound knowledge and unerring skill in the treatment of diseases of the eyes inenrable in all other hands. We find that, in October, 1866, he addressed a letter to this effect to *Brodwater's Buckinghamshire Advertiser*, suggesting the publication of "a little statement of facts," and promising to contribute towards the necessary expense. After an apparent period of incubation of two years, the following testimonial engrossed on parchment was presented to Mr. Carter:—

"We, the undersigned inhabitants of Uxbridge and Hillingdon, in the county of Middlesex, feeling it to be our duty to give any useful information we possess to assist the afflicted in their trials, desire to recommend those who suffer from complaints in the eye and pains in the head, to pay a visit to Mr. Edward Carter, of Uxbridge, whose extraordinary cures in a great variety of cases, after all other treatment has failed, well deserve to be mentioned to all those who are unable to find relief elsewhere."

The above bears the signature of one rector, one newspaper proprietor,

two editors, and eighty-six others of the "vulgar" of Uxbridge. It affords Mr. Carter the opportunity not only of expressing and publishing his thanks, but also of adding the "facts" unfortunately omitted by his memorialists. The statement of facts is in the usual style of advertising productions, and betrays the usual amount of scientific knowledge. Mr. Carter considers "hill-iousness" (*sic*) and many other ailments to have their true seat in the eye. Our printer's devil begs us to add, with Mr. Carter's leave, that more things than "bill-iousness" are "all in his eye!"

An Old Member.—The late Mr. Keate acted as President of the College of Surgeons during the fatal illness of Mr. Headington in 1830, and on his death was elected President in 1831, and again in 1839. He was elected a member of the Court of Assistants in 1822, in which year the office was changed to Members of the Council.

BERRY DEFENCE FUND.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—At a meeting of the above fund, held on the 13th inst., it was resolved to close the list of subscriptions on September 8. Mr. Berry's expenses amount to sixty guineas. The following sum has been received:—Amount already acknowledged, £31 12s.; Medical sympathisers at Wolverhampton, per T. A. Turner, Esq., £1 10s. Further subscriptions will be gladly received by H. Woolcott, Esq., treasurer, Charing-cross Hospital, or by Yours, &c.

E. SANOWELL, L.R.C.P.E., M.R.C.S.E., Hon. Sec.

10, Charles-street, Soho-square, August 18.

Observer.—The question will not be decided by writers such as the one who figures in late numbers of the *West-end News*. The articles headed "Vaccination *versus* Nature," and signed "Maelcol of Skye," are the veriest nonsense it is possible to conceive. They may bewilder the ignorant; they will only excite the ridicule of the intelligent. It is to be regretted in a question of so much importance to society so much nonsense can be published.

Junction.—If he be subpœnaed, he can claim a guinea a day for his attendance and reasonable charges for travelling.

B.—The society has been long extinct. It was founded by John Hunter and some of his contemporaries.

Theta.—Unless he be registered he cannot recover.

COMMUNICATIONS have been received from—

Messrs. ASHER and WALLBROOK; Dr. MORIARTY; Dr. RICHMOND; Dr. CORNELIUS B. FOX; Mr. OLLEY; Dr. CUTHBERT; Dr. HITCHMAN; Mr. HOLMES COOTE; Dr. DUCKWORTH; Mr. J. B. HOLLOWAY; Dr. HEYWOOD SMITH; Mr. GASKOIN; Dr. OCTAVIUS STURGES; Mr. STEANGE; Dr. PARSONS; Mr. STONE; Mr. C. W. WHITBY; Mr. D. HARTLEY; Dr. GIBBON; Mr. E. SANDERS; Mr. SANOWELL; Dr. EDWARDS CRISP; Dr. F. CHURCHILL; Dr. WILSON FOX; Mr. JOHN WOODMAN; Mr. BEVERLEY RINDER; Dr. EYTON O. WILLIAMS; Dr. JOHN C. MURRAY; Dr. JOHN WARD COUSINS; Mr. JOHN CHATTO; Dr. B. W. RICHARDSON; Dr. BAEUMLER.

BOOKS RECEIVED—

Ueber sympathische Gesichtsstörungen, von Dr. Albert Mooren—Indian Medical Gazette, July—Bulletin Général de Thérapeutique—Report of the Metropolitan Board of Works—Chavasse's Counsel to a Mother—Traité de l'Alimentation, par le Dr. Cyr—British Journal of Dental Science, March—American Journal of Insanity, July—American Quarterly Journal of Psychological Medicine, July.

NEWSPAPERS RECEIVED—

Gazette des Hôpitaux—L'Union Médicale—Australian Medical Gazette, two numbers—The Melbourne Age—Tribune Médicale—Gazette Hebdomadaire—Liverpool Daily Courier—Aberdeen Free Press—West-end News—Medical Press and Circular.

VITAL STATISTICS OF LONDON.

Week ending Saturday, August 14, 1869.

BIRTHS.

Births of Boys, 1163; Girls, 1059; Total, 2227.
Average of 10 corresponding weeks, 1859-68, 1879·3.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	822	769	1591
Average of the ten years 1858-67	716·1	681·4	1397·5
Average corrected to increased population	...	...	1537
Deaths of people above 90	...	...	...

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-cough.	Typhus.	Diarrhœa.	Cholera.
West	463388	...	5	6	1	3	3	66	...
North	618210	1	9	20	1	24	5	65	...
Central	378058	...	6	17	...	11	6	31	...
East	571158	1	6	40	2	19	5	65	...
South	773175	3	5	31	2	11	6	119	...
Total	2803989	5	31	111	6	68	25	346	...

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·729 in.
Mean temperature	58·5
Highest point of thermometer	73·9
Lowest point of thermometer	47·4
Mean dew-point temperature	50·9
General direction of wind	Variable.
Whole amount of rain in the week	0·73

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, August 14, 1869, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the year 1869.	Persons to an Acre. (1869.)	Births Registered during the week ending Aug. 14.	Deaths. Corrected Average Weekly Number.	Deaths. Registered during the week ending Aug. 14.	Temperature of Air (Fahr.) Highest during the Week.	Temperature of Air (Fahr.) Lowest during the Week.	Temperature of Air (Fahr.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3170754	40·7	2227	1462	1591	73·9	47·4	58·5	0·73	74
Bristol (City)	169123	36·1	110	76	*70	71·5	42·6	58·4	0·89	81
Birmingham (Boro')	360846	46·1	277	175	175	70·0	47·1	57·9	0·74	75
Liverpool (Boro')	509052	99·7	371	295	346	64·1	50·6	56·0	0·91	92
Manchester (City)	370892	82·7	232	210	*248	...	...	...	...	...
Salford (Borough)	119350	23·1	83	60	77	64·6	42·2	54·5	1·22	123
Sheffield (Borough)	239752	10·5	180	126	124	68·0	42·0	56·3	0·27	27
Bradford (Borough)	138522	21·0	107	71	66	66·0	45·0	55·4	0·58	59
Leeds (Borough)	253110	11·7	220	129	133	66·0	44·0	53·3	0·69	70
Hull (Borough)	126682	35·6	88	59	76	68·0	38·0	53·1	1·04	105
Newcastle-on-Tyne, &c.	130503	24·5	111	69	68	64·0	45·0	53·3	0·95	96
Edinburgh (City)	178962	40·2	116	86	94	64·7	43·0	55·8	0·60	61
Glasgow (City)	458937	90·6	322	268	223	64·3	43·9	55·4	0·31	31
Dublin (City, etc.†)	320762	32·9	134	158	123	70·7	45·5	58·8	0·30	30
Total of 14 large Towns	6546587	35·5	4578	3244	3414	73·9	38·0	56·1	0·70	71
Paris (City)	1889842	...	...	...	827 Week ending Aug. 7.	...	...	...	...	...
Vienna (City)	(1868) 560000	...	...	...	351	...	...	70·7	...	...

Week ending Aug. 7.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·729 in. The barometrical reading increased from 29·39 in. on Monday, August 9, to 30·06 in. by the end of the week.

The general direction of the wind was variable.

Note.—The population of Cities and Boroughs in 1869 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous.

* The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

† Inclusive of some suburbs.

APPOINTMENTS FOR THE WEEK.

August 21. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 1½ p.m.

23. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 1½ p.m.; St. Peter's Hospital for Stone, 2½ p.m.

24. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.

25. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.

26. *Thursday.*

Operations at St. George's, 1 p.m. Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

27. *Friday.*

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

CHOCOLAT-MENIER.

(Manufactured only in France.)

ANNUAL CONSUMPTION EXCEEDS 5,000,000 lb.

The healthiest, best, and most delicious Aliment for Breakfast known since 1825; defies all honest competition, unadulterated, highly nutritious, and pure.

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Wholesale, MENIER, 23, Henrietta-street, Strand, London.

Retail by all respectable Houses.

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"We have examined a variety of the chocolates of the Compagnie Coloniale, and found them to consist solely of cocoa of superior quality and sugar."—Lancet.

"The chocolates of the Compagnie Coloniale boast themselves with justice on high quality, careful preparation, no admixture save sugar, and moderate price."—Medical Times and Gazette.

Sold by all the principal Houses.

HUBBUCK'S PURE OXIDE OF ZINC.

See Pharmaceutical Journal of May 1, 1856.

Sold in Stamped Boxes of 14 lbs. each, by the following Wholesale Druggists:—

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,, Cox, Gould, & Co.

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,, Drew, Barron, & Co.
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,, Southall, Son, & Dymond.
Mr. James Woolley.
Messrs. Wright, W. V., & Co.
,, Wyleys & Co.

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FRAS. NEWBERY & SONS, 45, ST. PAUL'S CHURCHYARD.

Prices for Dispensing, 1 oz., 9s.; ¼ oz., 3s. 4d.

BOUDAULT'S PEPSINE.

In 1854, after many experiments, **PEPSINE** was obtained in a pure state by **M. BOUDAULT**, Chemist, and Dr. L. Corvisart, Physician to the Emperor Napoleon III.

Boudault's **PEPSINE** was honoured with two Reports at the Academy of Medicine, Paris, and with having its formula inserted in the New French Pharmacopœia.

The International Jury of the Universal Exposition, Paris, 1867, awarded to Boudault's **PEPSINE** the ONLY MEDAL given for **PEPSINE** and its preparations.

Boudault's **PEPSINE** is the only one that has been furnished to the Hospitals in Paris since 1854.

PEPSINE Wine, in bottles, 4/. Dose—a tablespoonful before each meal.

PEPSINE Lozenges, in bottles, 3/. Dose—3 before each meal. **PEPSINE** Pills, in bottles, 3/. Dose—3 before each meal.

Boudault's **PEPSINE** or Poudre Nutrimentive. Dose—15 grains, sold in 1 oz. and ½ oz. bottles.

All the above Preparations are guaranteed to be genuine which bear the label and seal of the

SOLE AGENT FOR GREAT BRITAIN, **PETER SQUIRE,** 277, OXFORD-STREET, LONDON.

LITHIA with CITRATE of POTASH.
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CITRATE of POTASH with IRON.
CARBONATE of POTASH, SODA, &c.

HOGG, Pharmaceutical Chemist to the Queen, 9, Albion-place, Hyde-park-square.

Aerated Lithia Water.— Messrs. BLAKE, SANDFORD, and BLAKE are prepared to supply the LITHIA WATERS (of which they were the original manufacturers under Dr. GARROD's instruction) of any strength prescribed by the Profession for special cases. Those in constant use contain 2 grains and 5 grains in each bottle, either by itself or combined with BICARBONATE of POTASH or PHOSPHATE of AMMONIA.

The following Waters as usual:—Potash, containing 18 grains of the Bicarbonate in each bottle; Citrate of Potash, 30 grains; Soda, 15 grains; Ammonia, 10 grains; Seltzer and Vichy from their respective analyses, and a very delicious, as well as useful, MINERAL ACID WATER.

BLAKE, SANDFORD, & BLAKE, Pharmaceutical Chemists, 47, Piccadilly.

ORIGINAL LECTURES.

CLINICAL LECTURE
ON RESECTION OF THE KNEE-JOINT.

By Professor RICHET,(a)
Hôpital des Cliniques.

Gentlemen,—We shall have to practise to-day a resection of the knee for incomplete anchylosis with pathological luxation.

I will give you a hurried history of the patient, after which I shall discuss the value of the different treatments in our possession for so grave an infirmity, from which the patient asks to be relieved at all hazards.

This parallel study, weighing the advantages and the dangers of such armed intervention, will show the superiority of the one which we have chosen, and justify the energetic means to be adopted.

As the resection of the knee is an operation which is interesting in more than one particular, and as you will but rarely have the opportunity of seeing it practised in our Hospitals, I will profit by the occasion to give you its history in my next lecture after examination of the pathological piece. I shall have thus drawn your attention to an operation rarely practised in France, but very often abroad.

Our patient is a young girl 21 years old, robust and apparently in the best of health. She does not cough, and there are no pulmonary lesions. I should naturally be on the look-out for the possibility of this complication, for you have heard me speak of an hæmoptysis which came on several years ago in our patient, but which has not reappeared since that time. This spitting of blood must evidently be attributed to a complementary hæmorrhage of the menses, with which it coincided, and which that month was sparing and painful. Aside from this incident, and ever since that time, the patient has been perfectly regular.

The beginning of the affection which brings her to the Hospital is not without obscurity. At an epoch, the precise date of which she does not remember, when 5 or 6 years old, she has been told that she suffered from an affection of the right knee. The cicatrices bear proof of the activity of the medication put in practice to cure the disease at the onset. She only remembers that at the age of 10 years she walked on crutches, and that she had the measles.

The articular lesion has persisted ever since, though in a latent form, and without any notable change excepting some pain now and then caused by fatigue, but this always passed off with rest.

In fact, the patient moves about and is able to walk considerable distances by means of an apparatus which embraces the leg and gives a point of support to the thigh. The state of the articulation since the time of her entry into the Hospital (October 5, 1868) has remained about the same. There is less tumefaction and pain of the joint, however; rest and emollient applications have been of service here.

I may at once announce to you that our patient suffers from a white swelling of the right knee, of that variety termed *dry*, because the disease, grafted upon a good constitution, has but little tendency to suppuration.

The inferior extremity on the affected side is atrophied in all its dimensions, in circumference as well as in length. The measurement which I have repeated before you this morning gives a difference of 4½ centimètres in favour of the healthy side. This total shortening of the extremity is unequally divided between the thigh, which has nearly its ordinary dimensions, and the leg which is especially atrophied. But the want of development of the leg is not the only cause of the shortening; there is another more important one—I mean the pathological luxation of the knee.

The luxation which exists—and I wish to call your attention to this point—is the type of displacement which generally complicates white swellings of the knee. The tibia is always luxated back and outwards upon the femur; and you will find in all these cases the signs which so strikingly exist in this patient. The tibia, having gone backwards towards the popliteal space, and also up and outwards, has lost its relations with the condyles of the femur, which form in front, under the skin, two projections easily recognised.

The patella, flattened, deformed, and intimately adherent to the condyles of the femur, is fixed and immovable. The deep fossa below the patella, produced by the displacement of the tibia, is subtended by the ligamentum patellæ, which seems to prevent any further *chevauchement* of the two bones backwards.

The tibia is not directly behind the femur; it deviates to the right and protrudes upon the outer surface of the knee, so that, being no longer parallel to the thigh, it inclines upon the femur and forms an obtuse angle open on the inner surface of the member. We remark, moreover, a displacement by rotation of the leg upon the thigh; the point of the foot looks outwards, the inner surface of the tibia forwards, and the head of the fibula is in the popliteal space. There exists, besides, a considerable degree of flexion of the leg upon the thigh.

I have drawn your attention shortly to the atrophy in length of the member. The atrophy in circumference is no less pronounced. It is due (1) to the arrest of development produced by the unceasing action of the morbid cause which has continued to alter the nutrition since infancy; (2) to the absence of all spontaneous movements; (3) to the application of the circular apparatus which the patient wears when walking.

If we analyse the movements which still remain in the articulation, we find them to be very limited. The spontaneous movements are null, and how could it be otherwise when we remember that the patella, which transmits to the leg the action of the most powerful muscles of the thigh, is anchylosed with the condyles of the femur? The retraction of the posterior muscles of the thigh, which has largely contributed in the production of the luxation, opposes all movements of extension, whereas the ligamentum patellæ permits but a very small amount of flexion. To these causes of stiffness of the joint must be added the false membranes, which have filled the articulation and effaced its cavity.

The patient does not suffer when in bed, but she complains of pain when we press upon the articulation or when she walks, but all is relieved by rest.

While in this condition she consulted M. Nélaton, who advised resection. She thereupon entered the Hospital, where, after examination, I have concluded in favour of the same operation. This white swelling, already of old date, remains stationary; it does not retrograde, and, though not menacing at present, it may become so at any moment. The inflammation, badly extinguished, may rekindle and complicate the articular disorders. A slight contusion, a bruising of the articulation, or even a fatiguing walk, is able to bring about a painful tumefaction of the bones, redness of the teguments, and tension of the soft parts.

You witnessed one of these recrudescencies at the time of her entry into the wards. The tumour had augmented in size, the skin was glossy and of an erysipelatous tint, and the least examination caused violent pain. She had a little fever and no appetite, but a rest of ten days calmed everything. The patient is poor, and cannot live without work. She solicits an operation, be the consequences what they may.

The diagnosis of the disease presents no difficulty whatever. From the antecedents and the present state we have easily diagnosed a white swelling complicated with luxation. The bones, slightly enlarged, have, however, not lost their form. The destroyed articulation is filled by fibrous bands, extending from one surface to the other, and which hold the knee in the position which it assumed during the treatment.

The degree of movement, however slight, is a proof that osseous anchylosis does not exist. This is of great value as regards the treatment. The tendons of the semimembranosus and the biceps muscles are retracted, and show themselves very prominent at the posterior surface of the articulation. The skin is of normal colour and not adherent. The diagnosis is so evident that we will not discuss it.

I hasten to arrive at the question which dominates all others, that of treatment. What are we to do? What resources does Surgery offer to remedy this affection? Three means present themselves—(1) amputation; (2) reduction of the luxation by mechanical means; (3) resection. Let us at once put aside amputation—the patient does not demand it, and we do not intend ever to propose it. The amputation at the thigh gives deplorable results in our Hospitals. Malgaigne's statistics, which take all cases in a lump, without distinction, give 63 deaths per 100. There are cases, however, where, in spite of these sad consequences, we are still obliged to practise this operation, in great injuries for instance, when all other means are insufficient.

The reduction of pathological luxations of the knee is possible when they have been produced instantaneously by sudden violence, but we must reject it when the displacement

(a) This lecture, taken by M. Pénière, *interne* of the Hospital, has been perused by the Professor.

has come on gradually. For in that case there exist old adhesions. Straightening for the first-mentioned cases has often been performed successfully. Those of you who have followed my wards at the Hôtel-Dieu in 1867 will probably remember a patient who, consequent upon rheumatism, had a stiffness with permanent flexion of the right knee. The Physician in charge, in order to remedy the faulty attitude of the member, pulled violently upon the foot and attempted to straighten the knee without any further precaution. This procedure ended in a luxation of the tibia backwards and outwards. The patient was brought into my wards, where I straightened the leg and reduced the luxation. This I did by the help of an apparatus (constructed after my instructions by MM. Robert and Collin) composed of a metallic disk provided with a male screw at both extremities of one of the diameters, destined each one to act upon the femur and the tibia, and to bring them back to their places in a contrary direction.

The luxation which is before us to-day is of old date, and is, in this case, simply an epiphenomenon. The white swelling is the principal lesion, and for it reduction can be of no benefit whatever.

Let us now examine what resection will give us. This operation, but little practised in France, is received with great favour by Surgeons in England, where white swellings seem to be more frequent. It is resorted to (1) as a succedaneum to amputation in injuries of the knee, (2) in anchylosis, and (3) in pathological luxations of old standing. We shall resect a lamella of bone from the femur and from the tibia; the extension of the limb will be obtained by the reduction of the luxation, and if we can have osseous anchylosis, with the extremity in a good position, our result will be excellent.

One of the consequences of the operation will be the shortening of the member. Will this be of great inconvenience in case it should be considerable?

The shortening which generally accompanies this operation is from 5 to 6 centim. I do not think we need fear this for our patient. The shortening which exists to-day is from 4½ to 5 centim.; of this we may say 3 centim. are due to atrophy and 2 centim. to the luxation; add to the three centim. which will remain after the reduction the amount to be taken away by the operation—1 centim. from each bone—and we shall have a total shortening of 5 centim. With this the patient can still walk, especially if provided with a thick-soled shoe. The atrophy of the member may also decrease; the patient is young, and the movements may develope both muscles and bones.

Will the limb be strong enough to support the weight of the body? I do not hesitate to reply in the affirmative. The patient at present, aided by her apparatus (weighing from fourteen to fifteen pounds), is able to march quite a distance; the thigh, which now serves as the point of support, will doubtless be strong enough hereafter. But can the leg be restored from such long inactivity? The muscles are atrophied, it is true, yet I am led to believe they can be brought to their normal condition by exercise.

The danger of the operation remains yet to be examined. If we take M. le Fort's statistics of 1859, which include 219 resections of the knee, we find 45 per 100 of mortality. 141 of these cases occurred in England with but 24 per 100 of deaths. These figures, compared with those of amputations, speak strongly in favour of resection, and I do not besitate between the two means, for the one which gives the highest success is also the one which mutilates least and preserves for the patient a useful member.

I have cited the general results of resections of the knee in opposition to amputations at the thigh; but I might have given you statistics of resections where the operation, having been practised upon well-chosen cases, has been followed by much more favourable results. In those, as in our patient, the articular cavity had disappeared; consequently the white swelling was without the fungosities which generally accompany obstinate articular lesions occurring in feeble subjects incapable to support or to repair the disorders necessitated by an operation. The structure of the tumour, therefore, also furnishes a favourable indication, and goes to strengthen the prognosis we have already given.

Certainly the most innocent operation may have most formidable consequences; a simple incision may be the cause of death, and no one can foresee the complications which may carry off a patient suffering from a wound. But if a resection of the knee, practised under favourable conditions, is to succeed, the one which we are about to perform on this young girl will furnish another good result to be added to the statistics.

We now come to the method of operating. All the operative procedures in use differ principally as regards the incisions of the integuments. Bégin and Sanson practised a transverse incision below the patella, adding in certain cases two lateral vertical ones, which formed a quadrilateral flap, like that of Moreau. This method has the advantage of giving free exit to the pus by the posterior commissures of the very sloping transverse incision.

Park practised a crucial incision, with the horizontal branch passing below the patella. The procedure which I prefer is the one of Mackenzie, which consists of a semicircular incision with convexity downwards, circumscribing the patella and extending backwards in a line with the articulation, so as to permit the flow of pus. The flap thus circumscribed is partially dissected up, the lateral and the crucial ligaments and the fibrous bands of the anchylosis are then cut, care being taken not to carry the knife too far back for fear of wounding the popliteal vessels near the posterior ligament of the articulation. The bones—the femur first, the tibia afterwards—are then resected with a saw from behind forwards, or aided by the sound of Blandin, in case we use the ordinary saw. This double portion of bone once removed we shall force the member into extension. In this, however, I expect some difficulty. I have mentioned to you the retraction of the semitendinosus and biceps muscles, and which will probably oppose the extension of the leg. In order to overcome that difficulty I intend, if necessary, to practise tenetomy. The limb will afterwards be placed into a box, like that of Baudens for fractures of the leg, and secured by bands.

To secure perfect coaptation of the bones, I shall employ the osseous suture, applied for the first time in the resection of the knee by Gordon Buck. I have employed this suture several times with great advantage, and so has M. Nélaton, and I am astonished that the English Surgeons, who have so often recourse to the resection of the knee, should not make use of it. I am greatly in favour of keeping a drainage tube in the wound so as to prevent the stagnation of pus, and permit, if necessary, the application of lotions and injections.

All our efforts during the after treatment will be directed towards immobility of the member, which will be partly realised by the bony suture and the box of Baudens. We might also make a mould of plaster to insure immobility more completely.

*** The correspondent who has supplied us with the above valuable lecture adds the following note:—

"This operation was performed immediately after the above lecture (December 1, 1868.) Three centimètres of bone were taken away from the femur, a second section being necessary because of a carious cavity found in the condyle, and one centimètre from the tibia. Tenotomy of the biceps was necessary before the limb could be straightened. The bony suture was removed March 10, 1869 (on the hundredth day). The cure was perfect on May 1. The patient is yet in the Hospital, but more to show the good results of the operation than for any other purpose. The shortening is 6 centimètres; her walk is perfect, she has grown fat, and the knee is smooth and well formed, the atrophy of the leg is much improved, the anchylosis is solid and strong. It is the best success after resection which it is possible to imagine, and M. Richet's diagnosis of the case has been verified in every particular.

"The Hôpital des Cliniques is by no means our best; situated as it is in the midst of the crowded Latin Quarter, with low and narrow wards, we might expect discouraging results. This observation goes to prove, therefore, that resection of the larger articulations can succeed as well in Paris as in England. The fault is principally—nay, only—in the delay of the operation; and this patient, if the disease had been allowed to go on for another year or more, would doubtless have been in a condition which would have materially lessened her chances for life.

"How often have I seen patients in whom, when they entered our Paris Hospitals, life and limb could have been saved, but the Surgeon, either from antipathy to that operation or from other motives—that of being severely criticised, for instance, in case the result happens to be a bad one—has contented himself with the application of a blister or a starch bandage until the patient, emaciated and cachectic, was sent home to die! We are always told here we do not see articular lesions until the disease has gone too far. This is a mistake. Some one does see the disease when prompt Surgical interference can do a great deal, but it is not done; and I do not agree with M. Richet when he says white swellings are much more frequent in England than in France. Scrofula is by no means a stranger with us. Perhaps we are nearer the truth in

saying resections are too little practised in Paris, and too many patients are allowed to die (or are amputated) for the want of it."

ORIGINAL COMMUNICATIONS.

NORWEGIAN NOTES.

By JONATHAN HUTCHINSON, F.R.C.S.,
Surgeon to the London Hospital, to the Moorfields Ophthalmic Hospital, and the Hospital for Skin Diseases.

(*Continued from page* 188.)

Treatment of Fracture of the Patella.

THERE was at the Bergen General Hospital a case of transverse fracture of the patella, and I was glad to observe that Dr. Holmboe does not resort to the common, but utterly useless, plan of elevating the limb in this injury. The patient was under treatment with his leg flat on the bed, and the fragments had been got into good position.

Expectant Treatment of Syphilis.

I saw here, as in every Hospital I visited in Norway, a fair sprinkling of syphilis, some cases in the secondary stage; more, of course, in the later ones. Dr. Holmboe is not an advocate of syphilisation, nor does he use mercury. His prescriptions for primary and secondary symptoms are usually placeboes, and his treatment amounts to expectancy. He believes that his results are quite as good as those obtained by the advocates of either of the two more active methods. For all the later forms of syphilitic disease he uses iodide of potassium. I saw in the Hospital a good many cases of tertiary syphilis.

Scabies Norvegica not to be found.

I have stated, in a former note, that, amongst the peasants in the country districts, scabies is extremely common. I did not, however, witness any cases of unusual severity, nothing in the least approaching to an Englishman's notion of Scabies Norvegica. I asked at all the Hospitals to be shown a case of this kind, but was everywhere assured that it was exceedingly rare. Probably, in former times, many of the worst cases occurred in anæsthetic lepers, who tolerated it much longer than others would, and were also, to a large extent, unable to secure treatment. All the lepers are now well cared for, and kept scrupulously clean.

Treatment of Scabies.

In the Bergen Hospital were a great many cases of scabies, and its cure seems quite to constitute a sort of speciality. One ward contained only itch patients—soldiers from the country, I believe. Dr. Holmboe's treatment is as follows:—The patient is first put into a warm bath, and is afterwards well rubbed with the tar and soap ointment (equal parts of common tar and green soap). The inunction is repeated two or three times a day, and the cure rarely takes more than a few days. Sometimes troublesome eruptions remain afterwards, and in a few cases it is found necessary to resort to sulphur. The same plan is adopted both for young and old. It will be seen that the tar takes the place of sulphur with us. Petroleum oil, which is only a kind of tar, has its warm advocates amongst us, and is no doubt very efficacious. It may be doubted, however, whether sulphur cannot hold its ground well against its rival. The three tests are, (1) rapidity of cure, (2) as little annoyance as may be during cure, and (3) freedom from liability to cause eczema. Almost all remedies used energetically have more or less of risk in the last-mentioned direction, and sulphur and tar perhaps stand equal. If used cautiously, neither of them runs much risk. Inunction with Peruvian balsam is perhaps the pleasantest cure, but it is expensive. The sulphur-water bath is also a very safe, agreeable, and effectual plan, but it is certainly less rapidly curative than some others.

Prevalence of Scabies, and Government Measures for its Diminution.

In my remarks on the great prevalence of scabies in country districts (not in the towns) in Norway, I suggested that the Government might suitably think it worth while to attempt something for its suppression. My friend, Dr. Bidenkap, writes me that this has been done some years ago, and the following extract from his letter will, I think, be of interest:—

Extract from Dr. Bidenkap's Letter (dated Christiania, August 13).—"The Sanitary Commissions, an institution which only dates a few years back, and which is established in every community and every town, have had their attention especially directed towards that disease. Some of the commissions have issued popular directions for the cure and prevention of it; remedies have been distributed largely to the poor, and Government has even paid the travelling expenses for the Medical officers when it has been thought necessary to undertake inspections and circuits in order to stop the disease. Moreover, in some communities special establishments for curing the disease have been temporarily erected. Thus it must be said that the means of curing it are in the reach of everybody, even the poorest, and that the knowledge of its nature and the proper remedies is fast spreading among the inhabitants. It is to be hoped that, before long, every mother of a family will know how to treat her children for this complaint as well as for other vermin. I by no means consider the disease as a grave one or dangerous for society, but I think that the measures which are taken are not misspent, because a complaint of this nature has a certain moral influence, and the abhorrence of it will work in a salutary manner in other respects. But I willingly grant that we are still very far from the mark. In reality, scabies and the like complaints are a not very bad test of the degree of civilisation and well-being to which a nation has risen."

Further Note of the Cases of Congenital Syphilis treated by Syphilisation.

Dr. Bidenkap's letter also gives me a further report of the progress of the two infants whom I saw under treatment by syphilisation in the Christiania Hospital, and whose cases I have twice mentioned:—"The two children at the Hospital which I treated with syphilisation are still doing well, especially one of them, which now looks almost like any other healthy baby." The mothers of both took iodide of potassium with a view to its influence on their milk, and thus the syphilisation treatment has been complicated.

Government Zeal in Sanitary Matters.

In connexion with Dr. Bidenkap's statement of what has been attempted for the suppression of scabies, I may mention that I formed a strong opinion that the action of the Norwegian Government, in sanitary matters generally, is enlightened and liberal. Learning is held in very high esteem in Norway. All classes are well educated in relation to their position. There are, I believe, literally none who cannot read and write, and amongst the richer classes a knowledge of foreign languages is far more common than amongst ourselves. The Medical Profession receives its share of advantage from this high standard, which also, in its turn, it helps to advance. Many of the Medical men are of very extensive attainments, and to a man all are most zealous patriots. Hence the Profession has exercised great influence on the Government, and hence the excellent character of many of the institutions. I have already alluded to the vigour with which cases of contagious venereal diseases are isolated. Dr. Bidenkap told me also that he had, as sanitary officer for Christiania, large powers in reference to other contagious maladies, fevers, etc., and that he believed that he had more than once succeeded in stamping out fever by immediate and strict isolation of the first cases. He said that he had at command several unoccupied houses which he could on the shortest notice make use of as Fever Hospitals. As further proof of the intelligence and activity of the Government, I may adduce the fact that the statistics of disease, etc., have for long been most carefully attended to, and are regularly published. The Leper Hospitals and refuges are excellent, and reflect great credit on the country. That of Lungegaard, at Bergen, was, I believe, built solely for the purpose of allowing Dr. Danielson to carry on his researches as regards the treatment of this disease. The General Hospital at Molde appeared to me to be a model of what a small provincial Hospital should be. Of the large general Hospitals at Christiania and at Bergen, I have already said that they both want pulling down and remodelling, and that they will both probably soon get it.

Museum of Instruments, etc., in Christiania.

In the Christiania University there is a large room set apart as a museum of Surgical instruments and appliances. It is well arranged and very complete. Professor Boeck, who showed me it, and to whose energy, I believe, its collection is mainly due, asked me to test it by selecting any one class of instruments for inspection. I chose those for herniotomy, and was at once shown a variety of knives, directors, etc., with many of which I had had no previous acquaintance. All the most modern instruments for the radical cure of hernia—Wutzer's,

Wood's, etc., etc.—were also in their places. Many of the instruments must have been acquired at very considerable expense. Those for midwifery purposes were, as might be expected, very abundant. There were also models of fracture apparatus, and a great variety of splints, cradles, etc., etc. Will any one tell me where any similar collection can be seen in England? The College of Surgeons has some valuable relics of the olden times, but not anything illustrative of the modern Surgeon's armament. There is a special collection at Netley, but chiefly in reference to the wants of army Surgeons. There may also be a few more or less extensive ones in other places, but I doubt much if we could show anywhere one which in the least approaches in value, interest, and completeness that at Christiania. I doubt also whether the fact is creditable to the British Profession, and I beg respectfully to express this doubt for the especial benefit of the members of the Council of our College of Surgeons.(a) Paris, like ourselves, is behindhand (though much ahead of us), but in several German towns—Prague, Berlin, etc.—there are, I am told, excellent collections.

Frequency of Non-venereal Syphilis.

At Christiania, Dr. Bidenkap informed me that cases of accidental contagion of syphilis were far from uncommon amongst the Norwegian peasantry. Frequently several members of the same family, some mere children, and others grandparents, would apply together, with a history which made it certain that most of the inoculations had been quite unconnected with venereal acts. Often the primary sore had occurred on the mouth. He explained the frequency of these occurrences by reference to the habit of using the same drinking utensil, same spoon, etc., often without any preliminary washing. Other Norwegian Surgeons confirmed Dr. Bidenkap's statement as to the frequency of these irregular modes of contagion. I have already mentioned the example of it which I saw at Molde, and the opinion expressed by Dr. Sund, of that place. Probably the contagion is frequently from secondary sores, mucous patches, etc.

Unicity or Duality.

I may just mention here that Dr. Bidenkap is, I am glad to say, a firm believer in the unicity of the syphilitic virus. He has published lately a very interesting and valuable pamphlet on the subject, which the advocates of duality will do well to consult.(b)

ON THE CONDITION OF THE SEMINAL SECRETION IN DISEASE.

By M. LIÉGEOIS,
Surgeon of the Hôpital du Midi, Paris.

When Godart died he left to his successors the task of terminating a work which he himself had commenced under the most favourable auspices. Our regretted colleague had adopted as his favourite study, as every one knows, the genital functions of man. Unfortunately, his researches upon the Monorchidie and the Cryptorchidie only were sufficiently completed to form the substance of a monograph—veritable monument, which alone suffices to perpetuate his memory for generations to come. But his other scientific inquiries have not been completely lost sight of; we find them for the most part, in form of notes, attached to the above-mentioned subjects. Had Godart lived, these would have served to complete his work on the functional state, normal and pathological, of the internal organs of generation. And, although I cannot hope to accomplish what this great investigator has left undone, I propose, however, to follow the road—specially in the pathological field—which he so brilliantly opened. And for that purpose I shall make use of 151 observations—with microscopical examinations of sperm attached—collected in the last seven years. I might have made public a series of these facts, eminently worthy of interest, as they came to my notice; but I preferred to wait patiently until my materials might be sufficiently numerous to permit a conclusion upon certain points yet undecided and which as yet had scarcely been broached.

Of the many differential characters which the semen, altered in its constitution, and compared with normal semen, may present, there really exists but a single one, known up to this moment at least, and that is the presence or the absence of spermatozoa—indispensable element of fecundation. In the physiological considerations, therefore, which I shall offer first of all, I will leave aside quantity, quality, odour, and consistency of this fluid, for these may vary in different individuals, in health or in disease, and the variations are in the generality of cases but of little value. Of the different notions which exist as to the various forms, sizes, and anomalies of configuration which the spermatozoa may present—study of pure curiosity, and here of no practical importance—I shall say nothing. The only question truly useful which I have to put is this—Can the spermatozoa be absent in persons enjoying good health and in whom the internal genital organs are perfect? Not many years ago such a question would have been answered in the negative. But more recently some authors, Casper, MM. Hirtz, and Mantegazza have published quite a number of facts calculated to shake the opinion so long adopted by all physiologists.

Casper, in his treatise on Legal Medicine (1862), speaking of the examination of spots of semen, cites thirty-one cases which had been submitted to him for legal investigations, where the microscopical characters of semen taken from the seminal vesicles had been studied. In these thirty-one cases the author had noted the presence of spermatozoa twenty-one times, and ten times their complete absence. These last were as follows: (1) a man, aged 54, died from pyæmia; (2) age 54, drowned; (3) age 63, crushed to death; (4) age 35, hanged; (5) age 33, asphyxia; (6) age 14½, pneumonia; (7) age 30, drowned; (8) age 44, asphyxia; (9) age 43, asphyxia; (10) age 35, hanged. These cases show, says Casper, "that the semen of man does not always contain spermatozoa." Further researches will decide if a long illness or venereal excesses can influence these productions. "And our observations," adds Casper, "would suffice to prove in practice that the spots certainly come from semen when the microscope shows that they contain spermatozoa, but also that the absence of animalcula cannot prove that these spots do not come from semen." I will simply pause for the moment at this last conclusion, and remark that if in France equal propositions have not been so formally expressed, such has nevertheless been the opinion of all, especially since M. Gosselin's researches upon the subject. In 1861 Professor Hirtz, of Strasbourg, published in the *Medical Gazette* of that city a work entitled "De la Stérilité chez l'Homme." The author there gives the history of two robust men, several years married, and childless, yet presenting no apparent disorder of the genital organs. In these subjects coition was not only performed normally, but with more than ordinary vigour, and yet neither one nor the other possessed traces of spermatozoa. "A remarkable thing," says the author, "and upon which both have insisted, is, that the ejaculations are never followed by that sense of fatigue so generally experienced in the physiological state." Hirtz treated these patients with oil of phosphor, nourished them on truffles and fish, but, in spite of this regimen, neither one nor the other had children. The author concludes, therefore, that there may be persons deprived of the fecundating elements, while the general health and the local state of the genital organs furnish no explanation for such a particularity. In these cases, Hirtz remarks, sterility is idiopathic.

Lastly, M. Mantegazza, Professor of General Pathology at the University at Pavia, speaks of the absence of spermatozoa in the seminiferous organs inspected after death. In 100 subjects of different ages, he finds this absence nine times in one, and twenty-two times in both testicles. In some of these cases, however, this absence is explained by material lesions, such as tubercles of the epididymis and testis, by fatty and fibrous degeneration of the epithelium lining the seminal ducts, etc. But on different occasions it was impossible for M. Mantegazza to discover, either with the naked eye or by the aid of the microscope, any alteration capable to account for the aspermatozie, and he then draws these conclusions:—"In certain obscure cases of sterility during marriage the fault may be in the man, even though the development of his genital organs should cause us to look to the wife for the cause of infecundity."

When noting in my "Physiology" the opinions of the authors just cited, I possessed so small a number of observations that I could not contest them, and they, besides, seemed so well guarded against attack. I waited, therefore, to collect facts which might corroborate those opinions, but without success. I possess up to this moment seventy-two samples of semen coming from individuals of different ages and constitutions, exempt, however, from any disease capable of influencing either the secretion or the ex-

(a) Not, of course, at the expense of the College or the Profession. The Christiania collection and that at Berlin are, I believe, both maintained at the cost of the State, and so ought ours to be.

(b) "Om det syphilitiske Virus. Til besvarelse af Prüsopgaven. 'Ere de Sygdomsformer, som vi hidtil have ind befattet under Benœvnelsen Syphilis, fremtragte ved eet Virus eller ved flere forskjellige?'"

cretion of the seminal fluid, and I must say that in all these cases—apart from a single one, and which I shall explain further on—I have never met with an example of aspermatozie. When observers in their researches arrive at such variable results, it is evident that the cause of these divergences must depend upon particular conditions in which the subjects under observation have been placed. As regards Casper's results, I would observe that those individuals examined after death were in a most favourable condition for post-mortem ejaculations, and which, as every one knows, are not even unfrequent after natural death. With the exception of the two subjects, dead the one from pyæmia, the other from pneumonia, they were asphyxiated, hanged or drowned. In these cases ejaculation is nearly constant. Its abundance, even, has often been noted—a fact which is easily explained by the exciting influence which the venous blood exercises upon the contractile fibres of the seminal reservoirs. One of the subjects was crushed to death, and here I will let Godart speak:—"I must call to mind," says he, "that since 1853 I have frequently noticed semen in the urethra a short time after natural death, and yet in these cases there existed neither semi-erection nor ejaculation as in persons or animals dead from violence. In the numerous animals which I have sacrificed or seen slaughtered, the emission of semen was always abundant, and took place one, two, or three minutes after the animal had been bled, slaughtered, or strangled. During the whole time of the discharge of semen, the tail of the animal was agitated as in normal coition, and I have observed in a hedgehog at this moment the contractions of the bulbo-cavernous muscle. I have seen the ejaculated semen from animals which were killed contain animalcula endowed with movements, and on February 28, 1855, I found upon the person of Guyet, who was crushed to death, semen at the meatus one hour after death, and provided with living spermatozoa."

These facts lead us to believe that the absence of spermatozoa so often observed by Casper in persons dead without disease was due to the evacuation of the spermatic fluid a short time after death. Casper, it is true, was yet able to find a sufficient quantity of seminal fluid in the vesicles for microscopical examination, but it is more than probable that this liquid was a product of cadaveric exudation, favoured by the abundance of the venous blood contained in the seminal plexus. As regards Mantegazza's researches, we must not forget that they consisted in the examination of the semen after death found in the seminiferous ducts. Now, whoever has undertaken such researches will understand how difficult it is to discover spermatozoa in these canals, whereas we frequently find them in the seminal vesicles of the same subject. This is doubtless owing to the great debility and anæmic condition of the system from the fatal disease, and which may so much diminish the quantity of spermatozoa as to escape notice altogether.

The two cases cited by M. Hirtz, referred, like all of our own, to individuals in good health, but were, contrary to our own, deprived of fecundating elements. I have been able to assure myself from all the cases which I have collected that one of the most powerful of causes contributing to a diminution of spermatozoa is the frequent exercise of the genital functions, be this in accordance or not with the erotic temperament of the individual. In my notes, taken with great care before and after each microscopical examination, and counting seventy-two observations of spermatic samples appertaining to persons in health, I find ten cases remarkable for the small number of spermatozoa, presenting only 1, 2, 5, 10 under each field of the microscope. These persons, with the exception of two, in whom the testicles were of small size, though not atrophied, had all, previous to their entry into the Hospital, abandoned themselves to or were in the habit of venereal excesses.

One of the most instructive observations in this respect which I have gathered is the following:—A student, after having had three to four connexions daily for ten successive days, asked me to examine his semen. Out of seven or eight preparations which I made I could not discover any spermatozoa. There existed no lesion of the testicle. Some months later the same person brought me a new sample of spermatic fluid, but this time after three weeks of sexual abstinence. I then found spermatozoa in enormous quantity, covering nearly the whole field of the instrument. After these observations, which manifestly prove the depressive influence of venereal excesses upon the secretion of the gland, we may be authorised to believe that the individuals observed by M. Hirtz owed their sterility to an abuse of their genital functions; moreover, that these troubles were merely of a temporary character, and, I am led to believe, would have disappeared altogether, had they, instead of taking oil of phosphor, truffles, and a fish diet, been advised more moderation in their conjugal relations. The microscopical examination was never renewed in these two cases.

There is no doubt that aspermatozie can be definitively caused by venereal excesses; I am far from denying the fact. I shall myself have occasion, in the course of this work, to refer to a case of madness where this occurred; though this was most likely due to the functional troubles which coincided with a perturbation in the genital powers, and some material alteration of the secreting ducts.

It remains to be seen now what difference there exists in the semen of the adolescent, the adult, and persons advanced in age. Few authors have paid any attention to the composition of this fluid in individuals under 20 years of age. I can only find a small number of observations on this point collected by M. Mantegazza. In these there were only two—and these had passed the age of 18—who possessed spermatic filaments.

The occasion to examine the semen of young subjects has offered itself to me eight times—two 14, four 16, and two 18 years old—and in all these cases I have found spermatozoa in abundance. M. Mantegazza explains the absence of animalcula in the adolescents submitted to his observations by the fact that they belonged to a class of poor peasants, badly nourished and anæmic from malaria, causes which necessarily retard puberty. This is possible, but it is also likely that the seminal secretion had been much diminished or even completely suspended by the disease which had caused death.(a)

As to persons advanced in age, it was the belief not many years ago that they were deprived of the fecundating elements. This opinion, however, was not based upon microscopical observations; it was simply a generally admitted idea, that old persons are unfit for reproduction.

Wagner was the first to announce that he had been able to find spermatic filaments in persons aged 60 and 70. But the honour of thoroughly investigating this matter is due to M. Duplay, who was afterwards followed by M. Dieu.

M. Duplay has examined the semen taken from the seminal vesicles of fifty-one persons advanced in age. In these spermatozoa existed thirty-seven times, or 72·55 per cent.; they were absent fourteen times, or 27·45 per cent. Among the first thirty-seven there were eight sexagenarians, twenty septenarians, and nine octogenarians. The proportion of the sexagenarians in whom spermatozoa were found, compared to those of the same age in whom they were absent, was 72·7 per cent.; ditto for the septenarians, 74 per cent.; ditto for the octogenarians, 69·9 per cent. The number of spermatozoa found was often considerable, sometimes few but well developed, and the more consistent the fluid, the greater was their number.

M. Dieu's researches, made at the Hôtel des Invalides, include 105 subjects. In these the seminal vesicles contained spermatozoa forty-one times, or 39 per cent.; they were absent sixty-four times, or 61 per cent. The highest age at which they were found was 86; and this is not yet the last limit, for Casper mentions an individual who died at the age of 96 in whom spermatic filaments were yet present. In the forty-one cases of M. Dieu there were nine sexagenarians, twenty-two septenarians, and ten octogenarians. The sexagenarians with spermatozoa in proportion to those of the same age in whom they were absent was 64·3 per cent.; ditto for the septenarians, 44·8 per cent.; ditto for the octogenarians, 26·3 per cent. We notice that the principal difference existing in the result of these researches lies in the number of subjects presenting spermatozoa. These are more numerous in the statistics of M. Duplay than in those of M. Dieu.

My own researches upon semen in persons of advanced age only include thirteen cases. Of these, two were 56, three 58, one 60, two 62, one 63, two 64, one 65, and one 70 years old. Spermatozoa were present in all; they were even numerous, lively, and moreover, in many instances, of unusual length. It is true, thirteen observations represent but a feeble number to judge the question which occupies us; yet it seems a most peculiar coincidence that if in old age spermatozoa are so frequently absent, as is the opinion of MM. Duplay and Dieu, I should not have met with a single case in the thirteen which presented this condition. I am therefore disposed to believe that old persons, if enjoying good health, are just as apt to produce spermatozoa as is the adolescent or the adult. I shall refer again to this difference in results between the researches of the authors just cited and my own, when speaking of acute and chronic diseases, and their influence upon the activity of the spermatic functions.

From the details into which I have just entered it results,

(a) We must not forget that Mantegazza's researches were all made after death.

therefore, that every man in health carries in his semen the material elements of fecundation. This conclusion, as can be easily understood, is of the greatest importance; for if, in fact, it were proven that there are quite a number of subjects normally deprived of spermatozoa, the researches into the morbid condition of these elements would necessarily lose a great part of their scientific value. But are we authorised to affirm, from the presence of spermatozoa, that the person furnishing them is fruitful? No! There still remains to be seen if these elements are endowed with motion. Godart states that in some sterile individuals this movement is totally absent. Now it seems to me that this must be an exceedingly rare occurrence. From the numerous samples of semen which I have examined, one and even two hours after emission, I have never been able to note that fact. The question may lastly be asked if the spermatozoa, though animated with motion, must not be possessed of a certain constitution in order to produce the efficacious impregnation of the germ. This proposition suggests itself to me because of the change which takes place in the ovule—female element of fecundation—towards the age of 40 or 42. It is quite certain that the ovule in woman of that age is much more difficult of fecundation than in earlier life; and yet, as I have several times assured myself by direct observation, there is no difference as to aspect in the ovule of a woman of 40 or a young girl of 20 years old. The change therefore must lie in the molecular arrangement, and so it may happen that the semen after a certain age, although containing spermatozoa little differing from those of the adult, has lost its fecundating properties, and that the rare cases of fecundation in old age are exceptions, like pregnancy in woman at the end of her menstrual life, without, as far as man is concerned, a diminution of the virile powers being necessary. I need not dwell on the modifications which occur in the secretion of the testicle when there exists an anomaly of position or development of the organ. This question remains where Godart has left it. However, having had the opportunity of observing a cryptorchide who very materially differed from the description which this author has left us, it may be well to mention the subject.

The cryptorchides are, according to Godart, generally of middle stature, little embonpoint, pale colour, sandy hair, and no beard. They are not as strong as other men, and their voice is feeble; they seem younger than they are; they are timid, have no energy, and rather occupy themselves with work appertaining to woman. Lastly, the cryptorchides are potent, but their semen is deprived of animalcula, and consequently sterile.

The case which I have observed is the following:—X., a Corsican, aged 37, has four brothers perfectly formed: two of them are married, and have children. At the age of 17 or 18 this man had gonorrhœa, a soft chancre, and a consecutive bubo, but suffered no pain in the abdomen during his illness. He has been married thirteen years; no children. His Physician attributes the want of offspring to his wife, who is suffering from an anteversio uteri. His virile faculties have always been strongly developed, especially up to the age of 25. X. is a man of good size, coloured face, powerfully muscular, with very black and abundant hair and beard. His voice is quite strong; he talks well, and seems intelligent; his character does not appear to lack in energy; his bodily activity is great; he is a farmer by profession, and passionately fond of hunting. Upon examination of the genital organs, I find the scrotum absent, the penis voluminous, and the pubes covered with hair. No prominence can be felt in the inguinal canal. Pressing upon the different parts of the abdominal walls above Poupart's ligaments, no body which might give suspicion of the presence of a testicle can be discovered. Two days after this examination, X. presents himself with some seminal fluid. The quantity was three grammes—that is to say, it was abundant. Its aspect is opaline, transparent, tolerably viscous, and of feeble odour. Under the microscope I found numerous proteic and creamy granulations, some few pavement epithelial cells, and crystals of phosphate of magnesia. But in vain did I take the precaution to agitate the fluid; in vain did I repeat a dozen times my preparations; it was impossible to find a single spermatic filament. The above description, as can be seen, contrasts strikingly with that of Godart, and yet there existed neither in the antecedents of our patient nor in any particularities of his organisation anything to explain this exception to the general rule. It confirms, however, the fact of infecundity of the cryptorchides—a fact yet to-day put in doubt by certain authors—and it shows, moreover, that sterility may exist in them when their stature, physical powers, and moral faculties are developed as in other men.

I shall now study the influence of disease upon the composition of semen in the following order:—

1. In acute or chronic diseases foreign to the genital apparatus.
2. In diseases of the testicle and epididymis.
3. In lesions surrounding the testicle or the epididymis.
4. In diseases of the spermatic cord.
5. In spermatorrhœa.

(*To be continued.*)

A CASE OF HIP-JOINT DISEASE SUCCESSFULLY TREATED.

By SAMUEL OLDHAM, M.R.C.S.E.

O. B., an intelligent youth of 14 years of age, after having been under treatment for a period of two months, was discharged with discouraging remarks to his widowed mother.

On December 14 last I was asked to see the youth as a means of affording him temporary relief. Out of commiseration I volunteered to undertake the treatment of the case if he would submit to long-continued confinement in bed, which he readily acceded to, assuring his mother at the same time of the successful results I had witnessed in the Manchester Royal Infirmary under the skilful treatment of Mr. Jordan. The case had every symptom very prominent, as being one of morbus coxæ in rather an advanced stage. There was great tenderness over iliacus and psoas muscles; tapping the sole of the foot or great trochanter gave him considerable pain, the knee contracted, and the usual nocturnal pain referable to that joint, which was waning life away. I got a splint made which extended three inches beyond the foot and about eight inches above the joint. I gradually extended the limb and placed it at perfect rest by the means of a bandage from the foot to the groin, at the same time making extension and counter-extension in the ordinary way. He was placed on a generous diet, but preferred milk with lime water as his chief food, also ordered to take a dessert spoonful of cod-liver oil three times a day. At the commencement of the treatment I was obliged (to relieve his sufferings in the night) to give him an opiate, but after the first seven weeks had passed this was no longer required, as the pain entirely left him. About the fourth month a distinct abscess formed in Scarpa's triangle, which at one time I was afraid would give way, but his general health kept improving, and with time and slight pressure I was pleased to find the tumour lessening, until there remained nothing but a hard concretion. After remaining in bed for twenty-seven weeks, and finding all the symptoms had disappeared and could bear deep pressure over the joint, I consented for him to go about on crutches with his leg suspended, hoping that out-door exercise and fresh air would hasten convalescence. He now bears his weight on the once diseased joint, and, only for the stiffness which continues in the knee, would be able to dispense with sticks.

In conclusion I may say that Mr. Jordan laid great stress on this plan of treatment of this particular disease, and his theory is that the extension and counter-extension relieve the acetabulum from the pressure of the head of the femur, and by long-continued rest, which is so essentially necessary for Surgical cases, allows the joint to partially recover itself.

Burslem.

PHTHISIS AMONG THE LYONS SILK-WEAVERS.—At the Croix-Rousse (the weavers' quarter) Hospital a register of deaths for the quinquennial period 1862-66 shows that while the entire number of deaths amounted to 2024, those from phthisis constituted about a third (771). Among these 771 were 269 young women (105 *dévideuses* and 164 *tisseuses*) between 15 and 25 years of age. These young women, M. Chatin observes, arrive from the country at a hundred leagues from this seat of "lymphatism" strong, blooming, and fresh-coloured. After two or three years' residence in their crowded habitations at Lyons, those of them that survive are no longer to be recognised, so marked are the effects of chlorosis and anæmia. The acts of vegetative life have fallen into an utterly torpid state, and in a few months afterwards a dry cough is set up. Treated at their place of work as long as they can be, the workgirls are obliged at last to go to the Hospital, where phthisis is recognised, and which, following its course, in two or three years brings the poor Savoyards to the dissecting-room. This is not the exception with these girls, but the general rule.—*Gaz. Hebd.*, July 23.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

THE MIDDLESEX HOSPITAL.

FRACTURE OF BASE OF SKULL—RECOVERY WITH PARALYSIS OF CERTAIN CRANIAL NERVES.

(Under the care of Mr. HULKE.)

W. R., a strong healthy man, a carman, aged 29, was brought to the Hospital on April 7, 1869, and placed under Mr. Hulke's care in the male accident ward, with this history.

The man had not felt well all day, although with no definite complaint beyond constant and unusual palpitation. He was riding on the side of a van when he felt suddenly giddy, and believes that he fell over head first to the ground, his head being ground by the wheel against the curb-stone. He was picked up at once and brought to the Hospital.

When first seen by the House-Surgeon, the patient was just recovering consciousness. There was a small lacerated wound on the right temple which bled freely, the right ear being also much torn. There was bleeding from the left ear, and the right eye was unduly prominent and quite blind. Pupils dilated and equal. Pulse 100, of good strength. His right arm and left hand were also bruised.

Two hours after admission the wound on the temple began to bleed afresh, but that was readily stayed by pressure. The proptosis of the eyeball had increased. He slept fairly through the first night, save for occasional vomiting, passing his urine and motions naturally.

On the following day, it was noticed that the right pupil was much dilated and motionless, the conjunctiva injected and ecchymosed, and the lids also swollen with ecchymosis. There was still no sight with this eye, absolute deafness with right ear, and some difficulty of hearing with the left; and incomplete anæsthesia of all the facial branches of the fifth cerebral nerve, but no other paralysis. He complained a good deal at times of severe pain in the right side of the head, which abated somewhat next day; but now further symptoms of nerve lesions began to show themselves in some difficulty in swallowing, and inability to protrude the tongue. The hair was cut away on the right side of the head, and ice constantly applied.

On the third day there was more distinct paralysis of the face on the right side, and a free watery discharge from both ears, the sight and hearing remaining in same state.

On the fourth day the condition was much the same. Still the difficulty in swallowing. "I can get it into my mouth," said he, "but not down my throat." There was incomplete paralysis of the soft palate, and still some anæsthesia of the right cheek.

By the eighth day he could swallow well, but the other paralysis was now more marked, the mouth being drawn over to the left, whilst the tongue was protruded to the right. The pain in the head had now much abated.

On the thirteenth day the serous discharge from the left ear, which had nearly ceased, returned, and with it increased deafness and much pain in the head. The appetite, however, remained fair, and the man was steadily improving in general health.

By the twenty-fourth day after the accident the general health was greatly improved, but the right eye remained quite blind, the right ear deaf, and the same side of the face anæsthetic to some extent. The discharge from the left ear had given place to a constant ringing noise, not altogether, however, interfering with hearing. There remained of the former severe pain only a little occasional shooting behind the right brow.

The patient remained in the Hospital for five weeks longer, and, when discharged on June 9, had recovered fair health and strength, but the senses had not returned to the right eye and ear.

Remarks by Mr. Hulke.—The principal interest in this case consists in the patient's recovery after an extensive fracture of the basis cranii. That this was the nature of the accident is inferable from the bleeding and serous oozing from both ears, together with the implication of branches of each of the three primary divisions of the fifth cerebral nerve (which fixed the injury in or behind the spheno-maxillary fissure), so the protrusion of the eyeball, which was probably caused by hæmorrhage in the back of the orbit. The blindness was due to the rapid stretching of the optic nerve, not to any changes observable in the first instance in the interior of the eyeball; subsequently, the lesion of the nerve trunk progressed, atrophy of the ocular end of the nerve being evident when he left the Hospital. The treatment consisted in ice to the head, purges, and a limited diet.

UNIVERSITY COLLEGE HOSPITAL.

FALL FROM A SECOND FLOOR ON TO THE BACK OF HEAD — PARALYSIS OF SOME CRANIAL NERVES.

(Under the care of Mr. MARSHALL.)

For the notes of the following very interesting case we are indebted to the kindness of Mr. Rushton Parker, the House-Surgeon.

F. R., aged 19, a painter, whilst painting the outside of a house on May 27, 1869, fell backwards from the second floor window, striking the back part of the head and neck. On admission into the Hospital at 5 p.m. on the same day, he was somewhat comatose, but could be momentarily roused. He then complained of great pain and of a feeling of constriction around the neck, also of much tenderness at the back of the neck, opposite to the fourth cervical vertebra. A slight irregularity of the spinous process of the third or fourth cervical vertebra was observed, but it seemed not to be of much importance, and no crepitus was felt. On examination of the back of the pharnyx with the finger, a prominence was felt on the right side of the middle line, projecting from the vertebral column. There was no paralysis of the face, trunk, or limbs, but the pharynx had lost its usual sensitiveness, and there was great difficulty in swallowing. The patient had bled from the right nostril, but not from either ear. A soft swelling was found over the upper part of the occiput, a little to the left side. The hair was cut short, and a bladder of ice applied to the head. 7 p.m.: Patient has been sick several times, and brought up some blood at first. The urine was drawn off. 9 p.m.: Still slightly comatose, or perhaps drowsy, though easily roused. Frequently turns over in bed of his own accord, raises himself on his hands and knees, and then sits up, looking vacant and lost. 10 p.m.: Patient very restless; keeps sitting up every five or ten minutes; cannot swallow. Pulse only 60; respiration laboured and rather noisy—no stertor.

28th.—2 a.m.: Still restless. Has passed water freely of his own accord, signifying his wish to do so by signs. 10 a.m.: Still drowsy; cannot articulate, though he attempts to do so, uttering slight noises. When he was roused he recognised his father. No paralysis, unless the difficulty in swallowing was due to this cause. Ordered an enema of beef-tea ℥j., brandy ℥j., and one egg, three times a day, on account of the inability to swallow. 3 p.m.: Still in a drowsy, though not strictly comatose, state; skin hot, pulse 54, full and soft; respirations 26 per minute; bowels not open. Croton oil mj. and calomel gr. iij., given at once. Tongue and mouth dry; still unable to swallow; respiration naturally performed; pupils equal, sensible to light, and not dilated.

29th.—Patient remains drowsy, though easily roused; passed a very restless night. He has had muscular twitchings of face and platysma. No other muscles so affected. The tongue cannot be protruded, and when the twitchings are coming on it is moved backwards and forwards quickly, but not to the extent of protrusion. When told to put out his tongue, he simply opens his mouth. Bowels have been freely opened; sordes on teeth; skin hot; face flushed; tongue dry and rather brown. Pulse 56; respirations 26. Cannot retain the enemata. This morning he swallowed a little milk with some pain.

30th.—He is a little better this morning; he swallows better, though still imperfectly. He always gets out of bed to defecate; will not use the bed-pan, and asks for urine bottle when he wants to make water. Muscular twitchings as marked as yesterday, but the paroxysms are less frequent. Breathing more intercostal than diaphragmatic. He cannot yet speak so as to be easily understood. Skin cool; tongue dry; no sordes. He was very troublesome all night, constantly attempting to get out of bed.

31st.—Condition the same as yesterday; twitchings more marked on right side of face than on left; right limbs also twitched during the night. Right side of face paralysed when quiescent.

June 1.—Twitchings less frequent; still very torpid.

2nd.—Is better. Looks more intelligent; recognised his father, and showed the dresser the bruise on his arm. He can to-day put out the tongue, which is moist and covered with white fur. In protruding the tongue, that organ is always narrowed for about an inch at the tip only, the rest remaining broad; this gives the tongue a very curious appearance. Bowels opened twice to-day. Pulse 50; respiration 20. About 4 a.m. had twitchings of face and arms, more right than left, also of right leg. This lasted about an hour, and continued in the face for four hours more.

3rd.—Complains of pain in lower occipital region. Can swallow easily and without pain. Speaks, but still very indistinctly. Tongue moist and clean. Bowels open twice during the night. Pulse 50; respiration 20. Passed a quiet night, but face twitched a little. Took two pints of beef-tea and two eggs.

5th.—Paralysis of right side of face not so marked, as tested by telling patient to blow, shut his eyes, etc. Pain still continues in occiput. Speech more distinct.

7th.—Was found reading a newspaper. Ice is still kept to head, as it has been since admission as far as restlessness permitted.

10th.—Paralysis of facial muscles gradually diminishing. He now sits up to his meals, which he takes heartily, though not yet allowed meat. Was playing dominoes with another patient this afternoon. Speech much improved.

13th.—Sat up for a few hours to-day.

14th.—Can talk much more distinctly now, so that he is able to pronounce his name. Still feels pain at back of head.

30th.—Prominence at back of pharynx less distinct now. Sits up during whole of day. Still some indistinctness in articulation.

July 3.—Pain at occiput still continuing, a blister was applied to the nape of the neck, which gave temporary relief, also ordered potass. bromidi gr. x., aquæ f. ʒj. ter in die.

8th.—Discharged. Is going to the Convalescent Hospital at Walton-on-Thames for a month.

Remarks.—This case seems to derive its interest not from any special line of treatment adopted, but from the severity of its nature, the complexity of the symptoms, the obscure nature of the lesion produced—whatever that may have been—and the so far successful termination. On admission, the first impression by Mr. Bolton, the House-Surgeon in charge, was that the injury was mainly to the spinal cord on account of the prominence on the cervical portion of the vertebral column in the pharynx, but this was not afterwards confirmed, at any rate to the extent supposed, for the only persistent evidence of this was the fact that, when examined on the day of discharge, rotation of the head to the left side was much more complete than to the right; and there had never been any paraplegia. As to the head, there was bleeding from the right nostril. This rendered the supposition that some fracture of the base of the skull had occurred not without reason. The paralysis and spasms of the limbs were unilateral, and therefore due to cranial rather than to spinal injury. The facial and the hypoglossal nerves were both more or less disturbed in function. But what caused the paralysis of the parts supplied by those nerves? This question was frequently discussed by Mr. Marshall at the bedside before the class, and the suppositions which he thought most plausible were that either some effusion of blood had taken place at or about the centres of these nerves, or that they were injured in their intracranial course or as they passed out at their respective foramina of exit from the skull by fracture there or by effusion of blood pressing on them, or by both causes, and subsequent inflammation of the meninges or nerve-sheaths in connexion with the reparative processes going on at the base of the skull. The impairment of speech was evidently not laryngeal, for vocalisation was performed as soon as consciousness returned, though articulation was imperfect. The great difficulty seemed to be with the letter "r," to pronounce which the superior lingualis muscle must act, which it could not when the facial nerve with its branch the chorda tympani was paralysed. The loss of power in this muscle specially would also explain the peculiar narrow and pointed form of the tongue which was noticed for a time. The patient's name was Frederick Rogers. He could say "F—ede—ick" pretty soon. After a few days he said "Frederick" imperfectly, and some days later he could pronounce "Rogers."

Iodine Gargle.—M. Cullerier prescribes the following in syphilitic ulceration of the mouth and throat, and in ozæna:—Iodide pot. 1 part, honey syrup 30, and decoction of barley 120 parts.—*Union Méd.*, July 24.

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SATURDAY, AUGUST 28, 1869.

LONDON WATER.

Whether the Royal Commission on Water Supply will lead to definite action with regard to the London water companies, we know not; but Mr. Netten Radcliffe's investigations can hardly fail of it. In the supply of a huge and growing city with water we want economy and responsibility, and we have neither. The notion of economy is set at nought by the existence of half a dozen companies drawing water from the Thames, each with separate suction pipes, reservoirs, filtering beds, and pumping engines—to say nothing of duplicate directors, secretaries, clerks, and offices. The East London Water Company, whose legitimate source is the Lea, is empowered to get additional supply from the Thames above Hampton, and for this purpose constructs a main thirteen miles long. Why this waste of plant and waste of engine power to propel water this enormous distance, seeing that they go by the very doors of the West Middlesex, Grand Junction, and New River Companies, who could supply the additional water at little extra cost? The public must pay for this, and so we think the time is clearly come when the companies should be disestablished and bought out before the bargain becomes worse. At the least, they could amalgamate; the Southwark and Vauxhall and the Lambeth might form one company for the distribution of Thames water to the south, and the Chelsea, West Middlesex, and Grand Junction united, might supply the town to the mouth of the river. The New River and East London might run in the same mains, as they draw from the same source, the Lea, which, if Mr. Mylne's scheme be carried out, will give a purer and more abundant supply. The Kent, for a time, might stand alone. But true economy demands that all these companies should be consolidated, and replaced by a public department. And the public safety demands it no less. All that was alleged against the East London Water Company receives confirmation from what is discovered as to a certain reservoir at Battersea. There was, according to Professor Frankland, on September 10, 1868, four times as much common salt (13·6 parts per 100,000) in the water of the Southwark Company as in the water of any other company. This can be accounted for by the admission of the tidal water from the Thames at Battersea; and it is a significant fact that Mr. Radcliffe points out three ways in which the tidal water can find its way into the Battersea reservoirs. Every day's experience confirms the general sentiment as to the untrustworthiness of companies. It is the business of the chairman and directors to look after the commercial interests and secure a good dividend. It is the business of the engineers to take care that

there is water enough—good water, if possible. If not, "want knows no master," and that must serve which comes to hand. If the public want their water pure, they must take the reins into their own hands.

CHEMICAL FORCE AND VITAL FORCE.

A small pamphlet, by Dr. Broadbent, of St. Mary's, has just appeared which, as it seems to us, is worthy of a fuller consideration than either of the two papers of which it is composed has hitherto received. It is entitled "An Attempt to apply Chemical Principles in Explanation of the Action of Remedies and Poisons," and consists of a paper read before the Royal Medical and Chirurgical Society and of an article published in the *Journal of Anatomy and Physiology*. To any one conversant with the progress of Theoretical Medicine in later years, nothing can be more striking than the gradual abandonment of vitalistic for physical doctrines as to life, nutrition, and disease. We cannot for a moment pretend that, as matters now stand, the known laws which govern physical changes are capable of explaining everything going on in the human organism, but enough is known to encourage inquiry, and to hold out hope that, at some future time, laws of the same kind as those now known may be found out which will explain much of which we are now ignorant. A glance backward to the Medicine of the past will better explain what we mean than will anything else. Thus we may reflect on the known mechanical laws which preside over the action of our muscles on their bony levers, on the evolution of force in these muscles owing to the chemical changes of carbon, on the electric phenomena of nerves and muscles, on the laws of liquid and gaseous diffusion which preside over respiration, absorption, transudation, etc.; finally, on the essentially chemical changes which food undergoes to fit it for assimilation. There is not one of these which at one time was not supposed to be vital in its nature, and consequently to be beyond the domain of physical inquirers. We may, therefore, reasonably contend that if so much has been done in the past, more may be done in the future, and it is surely more philosophical to conclude that a subject is within the range of human inquiry than that it is altogether beyond our ken, and that consequently time spent in investigating it is time spent in vain. With such notions Dr. Broadbent, in accordance with some amongst the most advanced thinkers and workers in Medical science, is deeply imbued, and we regret to say that from the hands of some of our brethren he has received but scant measure of justice. No doubt the views advanced in these papers are crude; they are, perhaps, on that account not the less worthy of attention, as being of the suggestive kind.

Professor Christison was probably the first in this country to institute an extensive series of experiments into the relative actions of various poisons, and to compare them one with another. This line of research was subsequently followed up chiefly by Blake, on behalf of the British Association for the Advancement of Science, and by each of these important discoveries were made. Consequently, on these investigations it was concluded, if not exactly proved, that certain isomorphic substances had similar effects on the organism. Since that time, however, great advances have been made in chemistry as in physiology, and Dr. Broadbent seeks now to show that individuals of the same chemical group have similar physiological effects. Even in this matter of grouping bodies chemistry has made rapid strides, and nowadays substances formerly separated wide as the poles are brought into close approximation. It is this advance which has chiefly enabled the physiological researches to which we refer to be carried out. Thus, nowadays, phosphorus and arsenic are both grouped as non-metallic bodies, closely allied one to another, and research has shown that they are so in their therapeutical as well as their chemical properties, for Dr. Broadbent has found phosphorus to rival arsenic in the treatment of certain forms of skin disease. So, again, in the chemical group made up of iron, manganese, nickel, and chromium, each substance is found to have an action somewhat similar to that of iron, which may be looked on as the type of this series; all possess hæmatinic powers, and although the others yield to iron in this respect, that is no argument against the force of the general statement that their therapeutic influence is similar. It was somewhat confounding to find that zinc—a metal ordinarily classified with these bodies—had no such effect; but nowadays zinc is classed by chemists with magnesium rather than with the iron group of metals, so that it could not be expected, on the principles enunciated, to exercise an influence at all similar to iron.

Thinking men cannot help being impressed with the daily increasing importance of the parts assigned to physical and chemical laws in the explanation of vital phenomena, but, in the face of the effects of certain of our remedies or poisons, these explanations have seemed impotent. When we consider the small quantity of prussic acid or of strychnine which suffices to destroy life, and consider, further, how closely each of them is connected with harmless substances, we are puzzled to account for their tremendous power. They must either contain within themselves an enormous mass of force, or be capable of eliciting it from the system. Physiological investigation has shown that carbonic oxide, the dangerous product of imperfectly consumed coal or wood, acts by attacking the blood-corpuscles, by combining with their hæmoglobin, with which it forms a permanent compound, whereby the necessary taking and giving up of oxygen is totally prevented. This process is plain and intelligible, but it requires time; whereas the effect of prussic acid is almost instantaneous. Clearly, then, the effects of prussic acid must be explained in some other way—perhaps by acting indirectly on the nervous system rather than by a comparatively slow process of blood-poisoning. As an illustration of the two modes of action these two poisons seem to represent, we may cite that of electric force, which in certain cases is characterised by volume, in others by intensity. Electric force of enormous volume, if of low intensity, may be sustained with impunity, or even with benefit, by the human body; but if the intensity is greatly increased, death may result. Something of the same kind would seem to distinguish the death-dealing force of carbonic oxide or carbonic acid from that of prussic acid. In the one case we have volume, in the other intensity. It would further appear that this intensity or tension depends mostly on the presence of nitrogen, for Drs. Crum Brown and Frazer have shown that by modifying a poisonous base by bringing it back towards the ammonia type—in other words, by rendering its nitrogen more stable—its poisonous properties are markedly decreased. This, however, cannot be the only cause of intense poisonous action; for a substance now unfortunately too well known for its highly dangerous degree of chemical tension—we mean nitro-glycerine—is not markedly poisonous. We trust, however, we have said enough to induce our readers to inquire into this subject somewhat more closely; as a field of research it is of the most promising as of the most unbounded character. The results hitherto obtained are so encouraging and of such an interesting character, that we shall be glad to hear of, and to record, any additions to our store of knowledge. To Dr. Broadbent our thanks are especially due, inasmuch as he has persevered in the face of a chilling reception, if not of actual opposition to his views, in researches which, to our mind, are of the highest value, not alone for what they themselves tend to show, but also as pointing out the way to future inquirers.

THE LAW OF BEAUTY, AND PROPORTIONS OF THE HUMAN FIGURE.(a)

The investigations in the military and anthropological statistics of American soldiers, published by the U. S. Sanitary Commis-

(a) "Investigations in the Military and Anthropological Statistics of American Soldiers." By B. A. Gould, Ph.D., etc., Actuary of the U. S. Sanitary Commission. New York, 1869.

sion are of a twofold character, as the title of the work indicates. The first or military portion will remain a valuable record for the historians of the great contest between North and South, and for politicians who are concerned with an estimate of the resources of the country.

Chapter 5 commences the anthropological, which is much the larger, portion of the work, and by the tabulation of "mean statures at each age by nativities," and again "by region in which enlisted," leads up to various conclusions of interest. For the law of growth we have these inferences:—

1. The rate of growth suddenly diminishes at about 20 years. Stature continues to increase until about 24.

2. A period of suspension of growth at about 24 years. Subsequently a slight increase until full stature is attained.

3. The normal epoch of maximum stature generally as late as 30 years. It varies for different classes of men.

4. The annual variations after about 23 years are very small. The epochs of suspension and maxima vary with the class of men.

These results corroborate the conclusions of Quetelet from much more limited collections, and the same is the case with his law of the relation of weight to stature—"that the weights of individuals of different heights who have attained their full development are approximately (Dr. Gould strengthens this expression) as the squares of their statures." On the other hand the American statistics disallow the supposed law "that frequency of pulse varies in the inverse ratio of the square of the stature,' or indeed any law of interdependence whatever.

It is another corroborated result that the mean increase of pulmonary capacity appears closely proportional to the increase of height, and, what is noteworthy, by no means so distinctly with reference to *length of body*, although variations in stature depend so largely on the length of the legs. A paradoxical deduction of Hutchinson that girth of chest exerts but trifling influence upon pulmonary capacity is materially qualified. The importance, however, of this collection of tables of mean values is not to be limited by the deductions that are here presented along with them; they constitute a store of reduced observations of which the full significance has to be drawn by comparison with still other observations, or by the analytical processes of students who can spare time for analysis precisely through being saved all this preparatory labour in observing.

The zeal and energy with which the scientific objects of the commission were carried through would command respect in any case—how much the more when we have such an illustration of the conditions as the fact that the war had so far trenched on the numbers of skilled mechanics in the country, that great delay occurred in preparing the sets of necessary apparatus! It was one consequence of this, which is repeatedly regretted, that some graduations were made in inches and tenths, instead of all uniformly by the metric system, which, besides "its universal use among scientists," gives less opening to a besetting tendency of new observers to read off round numbers rather than fractions.

We have still, and indeed principally, to remark on the large section of the volume that refers to the interesting questions concerning the mean dimensions and proportions of the human body. The tabulations give the mean results of an enormous mass of observations; their value will be influenced further by the sufficiency of the classification of the subjects measured, the judicious selection of the points of measurement, the accuracy of the observers, and the elimination of their personal errors.

Dr. Gould candidly admits and regrets the absence of many of these conditions—in most cases necessarily, when a system had to be improvised hurriedly in the midst of the exhausting excitements of the war. His own appointment as actuary was as late as June, 1864; and then it was necessary to supply at the moment a revised schedule of questions, and sets of apparatus according to the best information within reach, and excluding much that with longer notice would have been most serviceable.

So far as the measurements taken are to be applied in determining the characteristic differences of various races, white or coloured, and of various occupations, they are apparently sufficient, and the detailed results have much interest. Thus as regards soldiers and sailors.

"Notwithstanding a superiority of stature on the part of the soldiers over the sailors measured, amounting to 0·73 inches for the New Englanders, 0·87 for the natives of the Middle States, 1·14 for the Englishmen, and 0·37 for the Irishmen, the legs of the sailors are all longer, the excess amounting to 0·217 for the aggregate averages; and their arms all shorter, by an amount averaging 1·09 inch for the men, and entirely disproportionate to the difference in height."—P. 288.

It was not found practicable to assort the measured coloured soldiers with precision. "Three or more distinct races of negroes are to be found in the Southern States, and these present themselves in every degree and mode of admixture with one another, and with the Indian and white races." The only classification available, therefore, was into full blacks and mixed races, comprising all other coloured men. All access to rolls in the War Department was denied to the commission, or the tabulations here would have been as complete as those for the whites. The distance from tip of finger to upper margin of patella gives the most striking contrast between the races white and black, and the black is again surpassed by the red man in length of arm. "The arm of the Indian is certainly longer by more than an inch and a half on the average than that of the white." These and other differences are thus tabulated:—

	Black.	Mixed.	Indians.	White.
	In.	In.	In.	In.
From tip of finger to margin of patella	2·884	4·125	3·653	5·036
Mean length of head and neck ...	9·62	9·56	—	9·94
Length of body	24·52	24·76	26·87	26·14
Height to perinæum	32·100	32·010	31·81	31·065
Height to knee	19·169	19·446	19·01	18·61
Height to perinæum from knee ...	12·964	12·692	12·88	12·46
Mean girth of neck	13·920	13·83	—	13·62
Lower arm and hand	16·103	16·415	17·035	15·545
Acromion to elbow	13·302	13·856	13·757	13·605
Acromion to tip of finger ...	29·405	30·271	30·792	29·153
Mid body to finger tip extended ...	35·808	35·882	37·198	35·042
Height or stature...	66·210	66·251	68·225	67·143

At page 319 we find results thus summarised:—

"The curious and important fact that the mulattoes, or men of mixed race, occupy so frequently in the scale of progression a place outside of, rather than intermediate between, those races from the combination of which they have sprung, cannot fail to attract attention.

"In the length of head and neck, and in the distance from the middle of the sternum to the tip of the middle finger, the order by races is the same as that deduced from the ratio between the upper and the lower arm, except that the men of mixed race come after the full blacks.

"As regards the breadth of pelvis, the red men come first, then the whites, mulattoes, and blacks in order; and the same holds true for the circumference of the hips, excepting that here also the mulattoes follow the pure negroes.

"The most marked characteristics of the races here manifested appear to be—for the whites, the length of head and neck and the short forearms; for the reds the long forearms, and the large lateral dimensions, excepting at the shoulders; for the blacks, the wide shoulders, long feet, and protruding heels.

Among the whites, the sailors are conspicuous for their shortness of body, which is clearly the chief element of their defect of stature, while the students are remarkable for their height to the knee."

To the deductions that follow on another important branch of the subject we are disposed to take serious exception; the hope has been held forth (p. 246) of discovering "the type of humanity, as well as the types of the several classes and races of man"—the average man, of whom the external form, constructed by deduced numerical expressions of physical manifestations "may be legitimately adopted as a standard of beauty and a model of art."

This hope is not resigned at last, but it appears from the tables "that the simple numerical ratios popularly supposed to

exist between the normal dimensions of different parts of the body, do not exhibit themselves otherwise than as coarse approximations;" they always, represent, indeed "a near approach to the true typical ratio, but are demonstrably removed from it in the cases here investigated. Thus the average span of the extended arms uniformly exceeds the height. The height to the pubes surpasses half the stature; the mean distance between the nipples is always less than one fourth the circumference of the chest, and so on."

There is here a gratuitous assumption that the deduced averages necessarily express the "true typical ratio." Let it be granted to the argument, that nature occupies in the production of individuals a position analogous to a troop of marksmen, numerous as may be desired, aiming at a target. Confessedly the mean or central point of all the shots fired will not be the true centre of the target. Multiply and combine trials as we please, there will at last be a certain want of coincidence between average hits and real centre; if the true centre be known, we are thus no doubt warned of and put upon search for the disturbing influence; but if it be unknown, the character and value of causes of deviation which may or may not tend to countervail each other, must be sought in new trials under new circumstances if we can invent or control such.

Our best chance manifestly will be in judicious, classification, in sagacious selection of the more promising, and varying the circumstances for the better, albeit the fewer, marksmen. Our average will scarcely be improved by reckoning in a multitude of mere random shots; and so there is no reason to conclude that the average type of man as he exists will coincide with the most beautiful type. The gardener does not identify the beautiful type of a pansy with the average type—with the mean of existing variations—but with that true circularity of the flower, the approach to which he finds carries with it a constant enhancement of beauty. The sense of beauty is here the guide to experiment, and in the morphology of the human form no less the sense of the beauty of proportion has been the guide to the search for, not to say discovery of, the secrets of proportion on which, by something more than "fancy or wild conjecture," it has been so long assumed that beauty must depend. It is a very hard saying, that a belief in the dependence of beautiful types on simple numerical proportions of parts, admitted to be not only popular, but almost universally adopted by artists, and inculcated by many eminent and learned men, is a belief sufficiently accounted for by (p. 320) the predisposition to believe it. Whence the predisposition? The answer is from no irrational superstition; from the direct observation of particular instances—the perception that, however averages may fall, the arrangement of the face on a principle of equal thirds tends to beauty; from the analogy of all the arts to which, as to music, exact measures are applicable; from the experimental proof that the Greek artists who held to the principle most absolutely, realised beauty most successfully; in brief, from observation of general nature and of organised life. The two sides of the human frame are not more palpably in proportion to each other than, in any particular instance not self—condemned for deformity, the upper to the lower members, though the ratio may not be as uniform or as obvious as in that case, or even as between the fore and hind quarters of a quadruped. It is no vain assumption—no false principle of guidance in physical investigation—that when number and quantity have rule in the production of harmonious effects, simple ratio and definite proportion assert their supremacy; and no investigation is on the best track that does not lead on to the determination of them, or is likely to find it unless holding hard by this preliminary assumption.

The elaborate works of the Greeks on symmetry as applied both to architecture and the human frame are unfortunately lost. As regards architecture, in the measurements of the Parthenon by Mr. Penrose we may be said to have the illustrative drawings of the lost work of Ictinus; and from these very much of the theory has proved to be recoverable. Polycletus wrote not only on the symmetry of theatres, but of the human figure, and his renown certifies that he did not write at random. Galen, quoting intermediately from Chrysippus in a well-known passage, states that his theory set forth the proportionateness of each member to that adjacent and their joint proportionateness to the whole—thus of finger to metacarpus, of hand to arm, of arm to body, and so forth. This leads us little way towards the recovery of the ancient theory, which was certainly not only precise, but so flexible that it could furnish consistent scales of proportion for various types of beauty. The investigation has to be commenced anew, and must be carried on by art and science conjointly, and if it must needs be left to artistic taste to indicate subjects of comparison and to sanction results, to science it must be conceded to insist that a law of self-consistent numerical proportion must be dominant in every case. So erroneous do we hold the conclusion "that the æsthetic as little as philosophical considerations demand that simple numerical relations should be implied by the highest beauty in organised form." That "the hypothesis finds no support from these observations," (p. 365) we must be allowed to ascribe to the observations, valuable as they are in other respects, not bearing from their direction and their treatment appropriately on this question.

THE WEEK.

TOPICS OF THE DAY.

We have no intention to offer an opinion as to the probable nature of the report which Mr. Montague Bere, the Special Commissioner appointed to investigate the charge made against Mr. Harley and the new guardians of St. Pancras, will present to the Poor-law Board, or as to the verdict the Board will think proper to pronounce. There are, however, a few points which a careful review of the published evidence has left uppermost in our minds. One is that the most mistaken and perilous position in which a Medical man can allow himself to be placed is that of the agent or representative of a political or local party. The gist of the charges against Mr. Harley is not that he made errors in diagnosis or prognosis, but that he had been sent into the Infirmary by Mr. Watkins and the new guardians with direct, or understood, or implied orders to clear it, and that in acting as he did he had been simply obeying the commands or wishes of the new guardians. This alone has made the whole case against him wear so serious an aspect. In the discharge of his Professional duty to the sick under his charge the Medical man can safely listen to no dictates save those of his own conscience and judgment, and if he permit himself to be the agent of any party—even though it be one with whose opinions he himself may sympathise—his acts will be sure to attract suspicion, and when simply doing his duty he will still lie under the imputation of being prompted by interested motives. We do not assert that this has been proved to have been Mr. Harley's position, but it is the main point in the case for the prosecution, and one which gives a particular meaning to the whole story. With regard to the case of Mary Allen, we do not think that the woman's death from erysipelas can be at all fairly traced to Mr. Harley's management of her case. The evidence by no means proves that the woman had suffered from scarlatina. We have not seen that it was stated by any witness, Medical or non-Medical, that the woman had any rash or subsequent desquamation of the skin. And even if she had been under the influence of scarlatina poison, it would be difficult to connect her convalescence with the erysipelas from which she died, for erysipelas cannot be said to be an ordinary sequela of scarlatina. The woman did several days' hard work before she was attacked with erysipelas, and had she been a struggling widow and a ratepayer instead

of a pauper, it is not improbable that her disease might have taken a similar course. The fact, however, that the woman's children were convalescent from scarlatina, and that sending them back to the lodging-house from which they had come might form a fresh focus of contagion, is one which should have been allowed due weight by a Medical officer, and would, we think, have suggested the propriety of retaining them in the Infirmary. Three other cases of supposed premature dismissal from the Infirmary were investigated. In one of these kidney disease, and in the others congestion and consolidation of the lung, were said to have been overlooked by Mr. Harley. One of these patients, Ann Daley, was ordered to be discharged by Mr. Harley, but Dr. Markham, who happened to be visiting the wards, went to her bedside and from the appearance of the woman suspected kidney affection, a suspicion which was confirmed on subsequent examination of the urine. Now we are not concerned to defend Mr. Harley's care in diagnosis, and it may have been a mistake to order these particular patients to their own homes. But all men are liable to mistakes, and, moreover, allowances must be made for differences of opinion as to whether certain cases of chronic disease would do better within the walls of a workhouse infirmary or outside. As we have before said, these cases acquire their point from the allegation that Mr. Harley was acting directly under the direction of the board of guardians, and, should this allegation be considered unfounded, the cases, at the worst, belong to the category of errors of judgment. The whole case shows, moreover, a want of system in the management of the pauper sick in St. Pancras. As was pointed out by the Special Commissioner, patients are sent into the Infirmary by the parochial Medical officers outside without any communication being made to the Surgeon of the Infirmary by the outside Medical officer of his diagnosis or of the special reasons for which the patient was sent in. Such a disjointed mode of conducting the parochial practice would neither conduce to harmonious action on the part of the Medical staff nor to the welfare of the patients. With regard to the quarrel which is at the bottom of the whole case, we have before expressed our opinion, and we see no reason to alter it. The struggling class who form a large proportion of the ratepayers of St. Pancras have a reasonable ground of complaint that unfair burdens are laid on them for erecting palatial buildings for sick and infirm paupers, who will thus obtain advantages which the lower class of ratepayers cannot obtain for their own sick and infirm. We believe that this in principle is unjust, and that it is equally impolitic, for such a course must tend to foster and increase pauperism, whilst it proportionately increases the burdens and diminishes the stimulus of honest industry. The new guardians have been elected by the discontented ratepayers. Because, however, the ratepayers have ground for complaint, it by no means follows that their representatives, the new guardians, have shown wisdom in the way they have discharged their trust, and it is to be especially deplored that a Medical man should lie under the accusation of allowing himself to be a mere instrument in carrying out their ideas of reform.

Professor Huxley has been appointed the next President of the British Association for the Advancement of Science. The place of the meeting next year—Liverpool—had suggested the idea of offering the presidential chair to Lord Stanley, but his Lordship both gracefully and wisely, as we think, declined the honour, in deference to the high scientific claims of Professor Huxley. The Professor is a man holding strong opinions, and he is one by no means disposed to hide his lights, as he regards them, under a bushel. As only a section or school of scientific men see things through the same glass as Professor Huxley, we cannot be surprised that a feeling of hesitation and reluctance was produced by the nomination of so outspoken a champion of—so-called—advanced opinions for the presidency of the Association. Even the proposer of Professor Huxley thought it necessary to speak in a half-apologetic tone, and to profess his disagreement with the Professor's tenets on some subjects. We believe, however, that such hesitancy and doubt are utterly out of place. Mr. Huxley is far too sensible a man to lower the presidential chair of the British Association by making it a channel for the diffusion of sectarian opinions of any kind. The field of scientific research in which he has honourably won the highest reputation is quite wide enough to supply topics for presidential oratory without touching on disputed points that lie beyond the borderland of science.

The communication by Mr. Woodward, read at the Exeter meeting, on the recent discoveries in Essex, of which we publish a notice in another column, will, we suspect, dispose a good many people to modify their opinions on the subject of geological time. In the same deposit are remains of the stone, bronze, and iron ages, together with earthen pottery, and the remains of the beaver, the reindeer, the gigantic ox (*Bos primigenius*), the mammoth, and the elk. A people who made earthen pots, some by hand and some turned on the wheel, do not suggest the idea of a very remote antiquity.

We are very glad to see that Dr. Lush, the member for Salisbury, has contradicted the statement that he had been offered by Mr. Gladstone's Government, and had accepted, a Commissionership in Lunacy. Of his fitness for such a post we entertain no doubt, but Medical members of Parliament are not so numerous that we can afford to lose any, and we congratulate the Profession of Medicine, as well as the electors of Salisbury, on Dr. Lush's expressed determination to occupy his seat in Parliament "as long as he is enabled to preserve the confidence of those who freely placed him in the position he has the honour to occupy."

The man Black, who is accused of having unlawfully received and boarded a lunatic, one John Bagnal Wild, and of abusing and illtreating him whilst under his charge, has been committed for trial at the next Leicestershire Assizes. The evidence given before the magistrates proved that the insane man had been kept fastened with iron chains and handcuffs and anklets.

The *Pall-mall Gazette* has lately noticed the crowded state of the Metropolitan and Middlesex Asylums for the insane. It appears that Mr. Brierley, the insane barrister, whose case has lately excited much public attention and commiseration, was kept for at least many hours in the imbecile ward of the Clerkenwell Workhouse, and the reason alleged was that all the asylums were full. Mr. Brierley has since been received at Hanwell. The want of accommodation for lunatics has been lately discussed by the Middlesex magistrates, and we believe that a proposal is on foot for erecting a new asylum capable of receiving two thousand patients.

The Registrar-General's Weekly Return shows that cases of epidemic disease are just now above the average in London. Last week there were registered 5 deaths from small-pox, 21 from measles, 132 from scarlet fever, 5 from diphtheria, 60 from hooping-cough, 13 from typhus fever, 17 from enteric fever, and 5 from simple continued fever. The deaths from zymotic diseases were 595, the corrected average number being 535. Fourteen children died from cholera or choleraic diarrhœa, and 3 adults from choleraic diarrhœa.

A Mr. Thomas Barron Brooke, "a medical galvanist," has been tried at the Middlesex Sessions for ill-treating one of his children, a girl between two and three years old. The chief witness against him was a discharged servant, and her evidence being contradicted by other members of the family, the jury at once acquitted the accused. The child's body was, however, proved to have been covered with bruises, which were attributed by some of the witnesses to the application of galvanism, to which the child had been subjected as a treatment for constipation.

The substance chloral, which has been introduced to notice

by Professor Liebreich, of Berlin, formed a subject of interest at the British Association this week. At the request of the President of the Biologists, Mr. Busk, Dr. Richardson undertook to experiment on chloral, and report, before the meeting was over, the results of his inquiries. The museum and laboratory of the Devon and Exeter Hospital were promptly placed at his command, able assistance was volunteered for carrying out his research, and on Tuesday he brought up a report which will make the action of chloral, its value and its dangers, thoroughly known in this country. Next week we shall publish a full notice of the report, as prepared for us by the author.

HERBERT HOSPITAL, WOOLWICH.

The direct control and administration of this Hospital have, we are informed, been lately assumed by Deputy Inspector-General of Hospitals J. G. Inglis, M.D., C.B., the Principal Medical Officer of the Woolwich district, the late Governor, Colonel H. J. Shaw, having ceased to hold that appointment. Dr. Inglis will be assisted in his new duties by Mr. D. Pringle, who has been lately promoted from his former rank of Sergeant-Major in the Army Hospital Corps to the local rank of Ensign, while he performs the duties of captain of orderlies at Woolwich. Mr. Pringle is well and favourably known to all Medical officers who have served at Netley, where for some years he was chief clerk to the Principal Medical Officer.

CHOLERA IN BENGAL.

We are gratified to hear by latest accounts, dated July 15, that no case of cholera or choleraic diarrhœa has occurred among the British troops serving in the Bengal command for more than a fortnight previous to the date on which our correspondent writes.

HEALTH OF MADRAS.

The Report of the Sanitary Commission for Madras for the month of April, 1869, states that during the first quarter of the present year the total number of deaths in the city of Madras was 2466, which, in a supposed population of 450,000, amounted to an annual death-rate of 22 per 1000. This bears a remarkably favourable comparison with the death-rate of former years during the corresponding quarters. The improvement is due in great part to the entire absence of cholera, which for a period of three consecutive months was never before witnessed in any first quarter, so far as the records of fourteen years are reliable; the average mortality from cholera during the nine preceding first quarters having been 457, the number of deaths varying from 7 in 1860 and 11 in 1868 to 1279 in 1863. There was a decrease, as compared with the first quarter of 1868, in the mortality from special diseases as follows:—

	1868.	1869.	Increase.	Decrease.
Small-pox	372	16	—	356
Measles	50	3	—	47
Fevers	524	476	—	48
Dysentery	306	191	—	115
Diarrhœa	223	108	—	115
Cholera	11	—	—	11
Total of special diseases	1486	794	—	692
Other diseases	1656	1672	16	—
General total	3142	2466	—	676

Other diseases include non-preventible and non-curable diseases and accidents, such as asthenia, privation, murder, suicides, old age, convulsions, etc., dependent more upon constitutional and non-natural causes than upon climatic influences.

Compared with the mean mortality of ten first quarters from 1859 to 1868, we find that there has been a decrease among Europeans of 15·4; East Indians, 15·5; Hindoos, 545·9; Mahomedans, 167·3; general total, 744·1.

It is matter for regret that Madras is still without any reliable census, and that a purely arbitrary figure must be assumed as representing the population of the city. It is, however, hoped, through the exertions of the Municipal Commissioners, who have appointed a sub-committee for the compilation of a reliable census, that Government will, by the end of the present year, be in a position to estimate the actual population habitually residing within the municipal limits of the city.

Measles, like scarlatina, has been rarely witnessed in the epidemic form in Madras. Many Medical men have passed their professional life in India without having seen a single case of either disease. The detection of these diseases in dark-skinned native patients is a matter of considerable difficulty. It cannot, however, be averred that, like diphtheria and typhoid fever, they are recent importations by native Practitioners. Small-pox, measles, and scarlatina are frequently classed as merely modifications of one common disease, and the returns of mortality from such causes are generally received on the direct or indirect authority of persons who have received education in European practice of Medicine.

The decrease in small-pox is very remarkable, although, as compared with the last quarter of 1868, there has been an increase. It is a matter of experience that the first and second quarters of the year are those in which this disease has the greatest tendency to become epidemic. Owing to its extensive prevalence in 1868, vaccination was very vigorously carried on, and only one-twentieth of the operations were unsuccessful during that year; but, as the Sanitary Commissioner remarks, it is unsatisfactory to observe that during the quarter under report the failures amounted to more than one-tenth of the operations. It is probable that additional vaccinators will soon be maintained at the cost of the municipality.

The Government of India have sanctioned the sinking of a well, the erection of a steam-pump, and the laying of pipes for the supply of water to the barracks and Hospitals occupied by British infantry in South Trimulgherry, and the works have been commenced, the allowance of water being sixteen gallons per head per man, and eighty gallons for officers, or, in round numbers, 25,000 gallons daily. The estimated allowance of water for soldiers at home for all purposes is, we believe, fifteen gallons per man. It would therefore appear to us, taking the exigencies of Indian climate into consideration, that, while the quantity for officers is by no means excessive, the allowance for soldiers at Trimulgherry is a good deal below their requirements. We find that the Sanitary Commissioner is of the same opinion, as in his report on the subject he says the amount per head should be twenty-five gallons, which is rather under the allowance recommended by the Barrack and Hospital Improvement Commission in their "Suggestions in regard to Sanitary Works required for improving Indian Stations." He also observes that a margin should be allowed for waste, but considers that the yield of the well, which averages 35,000 gallons per diem, will apparently be equal to the demand upon it, even in the hottest and driest period of the year, and he considers the quality good.

FROM ABROAD.—ACTION OF ARTIFICIAL LIGHT ON PLANTS—THE HOSPITALS AND HOSPICES OF FRANCE—STATE OF MEDICAL LITERATURE IN BELGIUM.

At the last meeting of the Académie des Sciences, M. Prillieux communicated an interesting note "On the Influence of Artificial Light on the Reduction of Carbonic Acid by Plants." The action of artificial light in the production of the green colour of plants has been placed beyond all doubt, first by the experiments of De Candolle, who employed the light of several lamps, and afterwards by M. Mangon, who made use of the electric light. But to the present time the influence of no other light than the solar has been shown to promote the disengagement of gases by plants. De Candolle did not obtain the

slightest trace on exposing the leaves of various plants to the light of the six lamps, which sufficed to render etiolated plants green. Biot's experiments on the leaves of the *Agave americana* lighted up by the reverberating apparatus used on the signals during his geodesic operations were not more successful. The leaves gave out no gas, the disengagement of oxygen only commencing when they were exposed to the light of day. M. Prillieux' experiments were performed in M. Jamin's laboratory, who placed at his disposal the light proceeding from a powerful magneto-electrical machine, Drummond's light, and the light of ordinary illuminating gas. From these experiments, conducted with great delicacy, and repeated sufficiently often, he believes himself authorised to state that ordinary gaslight produces the same effect on plants, though in a diminished degree, as Drummond's light and the electric light. These various kinds of light act on the chlorophyll in the same manner as solar light acts, though with less energy, imparting to it the power of decomposing carbonic acid, and extricating oxygen.

A report has recently been issued concerning the administration and financial position of the Hospitals and Hospices of the French Empire. Its preparation has occupied a commitee of Inspectors-General during the last three years, and we shall have occasion to return to it in order to notice some of the recommendations it contains. In the meantime the following statistics may be of interest.

On January 1, 1869, there existed in the French Empire 1557 Hospitals and Hospices, governed by 1382 Administrative Committees. Of these, 415 are designated as Hospitals, 291 as Hospices, and 851 as Hospital-Hospices. The total number of beds was 141,576; and the following is a list of the administrations which had the largest number of beds:—Paris, 18,785; Lyons, 4176; Nantes, 2716; Lille, 2188; Rouen, 2073; Orleans, 1641; Marseilles, 1617; Bordeaux, 1599; Montpellier, 1581; Toulouse, 1554; Angiers, 1318; Strasbourg, 1285; Amiens, 1106; Grenoble, 1081; Reims, 1044; Rennes, 1016. During the year 1864, 553,061 individuals were treated or maintained in the Hospitals and Hospices. The number of days passed in Hospital (*journées de présence*) was 35,912,967, and the ordinary receipts amounted to 61,973,950 fr. In relation to the Hospitals, the General Council of Inspection suggests that the law should be altered in order to render the admission of the indigent inhabitants of the rural communes easier than it is now, the means of treating the sick *à domicile* being also at present very inefficient. In the whole number of Hospitals 44,575 deaths took place during 1864, the mortality of lying-in women being put down at 816, out of 14,794 accouchements.

The *personnel* of the Hospital service was thus composed:—Physicians and Surgeons, 2348; *pharmaciens* with diplomas, 55; *internes*, 425; *maîtresses sages-femmes*, 55; *sœurs*, 8854; *infirmiers* and servants, 9026. The Medical and Surgical attendance is represented, and that, we are sure, with justice, as being made with the greatest care and disinterestedness, several visits being paid daily to cases that are urgent. Of the 2348 Physicians and Surgeons, 291 rendered their services gratuitously; 1764 received a salary of from 100 fr. to 500 fr.; 184 one of from 600 fr. to 1000 fr.; and 109 one of from 1100 fr. to 1500 fr. Of the 1382 Hospital administrations only 55 were provided with *pharmaciens* specially attached to the establishments, and 664 were supplied by the *pharmaciens* of their respective communes. In 32 *Hospices* the medicines were furnished by the Physicians. In 630 establishments *sœurs* were exclusively employed in the pharmaceutical manipulations, and the committee suggests that a special diploma of an inferior degree should be delivered to such *sœurs*, and who within a given time shall be obliged to undergo an examination to obtain it. They think also that every Hospital with 100 beds should have its *pharmacien*, and that the *sœurs* there employed in preparing medicines should have diplomas.

A writer in the last number of the *Presse Médicale Belge* touches upon a point that must have often struck others—the utter sterility of the Belgian Medical press as regards original works. They may be counted on the fingers' ends, while their academical discussions seem to be bent on imitating their French models in their endless verbosity, however far they may fall short of them in scientific and practical importance. The Medical journals of the country, too, are of the poorest quality. From among Dr. De Smeth's observations we extract the following:—

"The relative rarity of Belgian Medical publications must have struck more than one mind curious in scientific matters. While voluminous catalogues published annually, or even monthly, in neighbouring countries testify to a truly incredible fertility, scarcely does a national Medical work from time to time seek publicity. The silence and indifference with which their labours are received soon discourage conscientious workers who believe themselves in a position to communicate useful researches and observations; and the office of writing is left to young men whose ardour is scarcely a compensation for their want of authority, whilst those amongst us who, fortified by experience, are best able to lay down the rules of practice, allow themselves to become absorbed by the exigencies and profits of their art. We are not ignorant enough to suppose that Belgium should be placed on a par with the powerful nations which surround her, and it would be eminently unjust to demand from a small people the movement, brilliancy, initiative, and fertility which can only belong to large centres of population and civilisation. But let us look for points of comparison in a more modest sphere. Holland, with a population inferior to our own, publishes on an average 160 Medical works annually. We need not specify how many are published in our own country, as every one is able himself to enumerate them. Taking them at the most, are there 25? And the comparison with other small countries would not be more favourable to us. It is in vain here to dissimulate the fact—and we believe that only ill-judged patriotism would conceal the exposition of an evil which is increasing every day—that Belgium, exclusively absorbed in politics, the arts, trade and commerce, which confer upon her nationality, artistic glory, and material well-being, is taking less and less interest in scientific subjects."

The writer does not indicate a chief cause of this state of things—viz., the facts of the French tongue being the national language, and the wholesale piracy of works published in France.

THE MAIN DRAINAGE SCHEME AND THE HEALTH OF BARKING.

*** We had heard such conflicting accounts with reference to the Metropolitan Main Drainage scheme and the Northern Outfall works at Barking, that, in order to give our readers a just view of this important undertaking, we sent a special commissioner to inspect the works, to make inquiries as to the general sanitary arrangements of the town, and to report upon the increase or decrease of epidemic and malarial diseases. The following is the account which he has forwarded to us, and for which he holds himself personally responsible:—

(*From a Special Correspondent.*)

THE MAIN DRAINAGE WORKS.

Our readers are aware that during the past fifteen or twenty years the rapid increase of London, combined with the importance given to all sanitary and hygienic measures, was the means of directing the attention of the Legislature to the defective drainage of the metropolis. After some years of delay it was decided to confine the channel of the river Thames between two solid walls of masonry, so as to increase the current and "scour" of the river, and to reduce to a minimum the exposure of the banks at the receding of the tide. At the same time all the intercepting and other drains emptying themselves into the river were to be diverted into main sewers to run along the Thames Embankment, and by this means be conveyed towards the mouth of the river by a covered way. Notwithstanding the millions of money that have already

been spent on this scheme, it is far from complete. The drainage of London north of the Thames has been conveyed across the marsh lands of Stepney and Plaistow to the mouth of Barking Creek just opposite Woolwich. The South Thames Drainage empties itself into the river at Crossness, about three or four miles further down, and in both cases the sewage is discharged into the river at the ebb tide. We shall briefly describe the arrangements for storing and discharging the sewage at Barking.

A reservoir occupying an area of nine acres, and capable of storing 39,000,000 gallons of sewage, has been constructed close to the mouth of the creek; it is divided into four compartments, and is covered in with brickwork, and three feet of soil on the top. During nine hours out of the twelve this reservoir is being filled. At high tide the "penstocks" are opened, and the sewage passes out into the river. This reservoir takes three hours to empty. At the same time the sewage in the pipes is diverted from the reservoir and passed directly into the river. By this means the tide has three hours to run after the gates have been closed, so as to conduct the sewage some miles down the river before the flood tide. It has been calculated by experiment with floats that the sewage matter is taken down seven miles and returns five—thus gaining two miles every tide. However, the Thames Conservancy, who have carefully examined the bed of the river since the construction of the works, report an alarming increase in the deposit of mud at this part of the river, and consequent filling up of the tidal way, so that vessels of a certain tonnage are obliged to alter their course. In addition to this the inhabitants of Barking have memorialised the Home Secretary in consequence of the nuisance said to arise from the proximity of the works to the town. Our Commissioner spent upwards of two hours at the reservoir, and was conducted over the works by Mr. Barnes, the acting manager, who very courteously explained to him the main features of the undertaking. He had the good fortune to arrive just as the sewage was being emptied, and saw the black stream passing out into the river through nine 6-feet culverts. In this way about 32,000,000 gallons of sewage are disposed of daily. Experiments have been undertaken with a view to ascertain the proportion of solid material. For this purpose forty-eight gallons were collected at different periods of the day and placed in a tank, that the solid material might fall to the bottom. The clear fluid was gradually drawn off, until it left a black creamy mud sufficient to fill a three-pint measure. This concentrated deposit, when examined under the microscope, was found to consist almost entirely of amorphous molecular material, a few hairs, epithelial scales, muscular fibre, fat and oil globules, and vibriones, with angular particles, probably road grit.

Tracts of land have been under cultivation for some years in the immediate neighbourhood of the works, manured with sewage water.

Where the embankment crosses farm lands some of the farmers have obtained permission to "tap" the pipes in order to irrigate their fields. Some of the Maplin sand has been brought up to Barking irrigated with the sewage, and sown with the Italian rye grass, potatoes, beetroot, etc., but it has been found that the grass alone yields a fairly remunerative crop. The Essex Reclamation Company have commenced the construction of a large sewer to convey the whole of it away to the Maplin sands, a distance of fifty-six miles, but they have failed to complete it for want of capital. We have long thought that a scheme should be devised for separating the fluid from the solid material, and we were glad to see that this has been carried out on a small scale in irrigating the fields at the side of the reservoir, and would no doubt be practicable for the whole of the sewage: this, at least, if we mistake not, is the opinion of the engineers and other scientific men who have visited the works. A six-inch pipe empties itself into a large wooden box at the end of which is a hole about two feet square covered over with coarse wire gauze; the sewage is strained through this, and the fluid part is conducted by a long trough to the field which it is to irrigate. The solid material quickly dries, and may then be removed in carts or trucks to any part of the country. It is a popular but erroneous idea to suppose that there is anything offensive in this material, as any one who will take the trouble to inspect it may prove for himself. There is scarcely any odour from it, and our Commissioner, as particular as most men, had no compunction in freely handling and smelling it. In fact, the *débris* from manufactories, gas works, etc., constitute a large part of this material. The whole of it is broken down and pulverised by the force of the stream, so that its individual character is masked or destroyed.

A portion of the sewage is pumped night and day, for seventeen hours, through a fifteen-inch pipe up to the Lodge Farm close to the town of Barking, but no complaints appear to have been made that any nuisance has been caused thereby. The question as to the value of this sewage material, and the possibility of conveying it by train to different parts of the country, is just now being actively discussed in the columns of the *Times*. Mr. Hope, the proprietor of the Lodge Farm, gives it as his opinion that any scheme for conveying "the fluid sewage" away would not be remunerative or practicable. Mr. Hope has had much experience in the cultivation of land irrigated by sewage, and he appears to have been very successful. He would, therefore, be sorry to have the works carried further away, or to be deprived of the use of the sewage. Rumour has it that the farmers are in league with the inhabitants to get compensation for the nuisance of the Outfall Works. We are informed that none of the complainants have ever visited the Outfall Works to ascertain for themselves the nature of the scheme and the arrangements for getting rid of the sewage.

From the evidence recently given before the committee at the House of Commons, it was stated that "within three-quarters of a mile from the outfall there was no appearance of sewage, either to the eye or nose," and this opinion was confirmed by Mr. Hawksley and other engineers. We shall here quote a few interesting facts which came out in evidence. Mr. Hawksley stated that "the ordinary sewage of London contained only about a two-thousandth part of solid matter, or thirty-five grains to the gallon. This was only what was undissolved, not that which was chemically combined with it. There was at the mouth of Barking-creek a deposit of mud of a very light character, which could be easily removed by contracting the mouth of the creek. There was also a single shoal opposite Mr. Law's works. On this he found no mud at all. The sewage from the outfall was discharged on the receding tide, and the water, which was also coming out of the creek at that time, drove it diagonally, in a south-south-easterly direction, and prevented the possibility of the sewage entering. He stated this not merely from theory, but from positive observations. The operations of the outfall did not prejudicially affect the navigation of the Thames or the health of Barking." Mr. Gregory, C.E., gave evidence as to a recent inspection of Barking-creek. "On sounding at the mouth the bottom was gravel; within the creek it was mud for about a quarter of a mile. Beyond that it was gravel. Close to the town quay there was mud of an offensive character. It was impossible for that to have arisen from the sewage delivered at the Outfall Works."

THE TOWN OF BARKING.

After a walk of about two miles our Commissioner arrived at the outskirts of the town, where a large jute mill has recently been erected, employing upwards of 500 hands. We were informed that the operatives are very liable to a mild form of fever, lasting but a few days, the temperature running very high, but not usually fatal. The parish of Barking is very extensive, and includes the districts of Rippleside and Ilford; the population is about 6000. The town, as everybody knows, is very old, dating from Saxon days, and the remains of a Roman camp still exist in the immediate vicinity. The population has decreased during the last few years, in

consequence of the fishermen and their families having migrated to places on the east coast. Like most old towns, Barking is not remarkable for cleanliness, but until within the last few years it was one of the healthiest places in England. At the present time the inhabitants suffer much from fever and diarrhœa. A street on the banks of the creek, where a large number of the inhabitants live, consists of small, badly-built, and ill-ventilated houses, and in this part fever is said to be very prevalent. The rest of the town stands on a rising ground, and consists of larger houses less densely packed. In fact, the greater part of the town is more like a large straggling village. The sanitary arrangements are very defective, there being no Medical Officer of Health and no satisfactory municipal government. The water supply is very bad, though we understand the South Essex Company are making arrangements to provide the town with an ample supply of pure water. The drainage is not yet completed, though the works are in progress, and cesspools still exist in some parts of the town. One well belonging to a private person, who might at any time close it up, supplies the whole town with water. The back yards of some of the public-houses are in a most filthy state from accumulated fæcal deposits. In walking through the streets on a warm day, the stench is very perceptible. We are indebted to some of the Medical men at Barking for the particulars with regard to the town. One of them informed us that the greatest nuisance, in his opinion, was the constant daily transfer of manure through the town, decomposing and diseased carcases constituting a large portion of this manure, which is brought up the creek from Thames Haven and elsewhere, and carted through the main street of the town by the farmers of the neighbourhood. This might all be carried up outside the town if the farmers would be at the expense of erecting a landing-stage further down the Creek. Some of the streets in the lower part of the town are extremely dirty, and those of the population who reside near the Creek suffer much from fever, diarrhœa, and diphtheria. The annual death-rate has increased since the establishment of the sewage outfall as follows:—

In 1864 it was	. . . . .	114
„ 1865 „	. . . . .	120
„ 1866 „	. . . . .	134
„ 1867 „	. . . . .	127
„ 1868 „	. . . . .	146

There were ten times as many cases of enteric fever registered in 1868 as there were in 1864, and during the same year there was an epidemic of scarlet fever. Whether the increase in these diseases is in consequence of the accumulation of decomposed sewage in the Creek, or whether it can be traced to causes nearer home, it is capable of being remedied, and the sooner the Barking people set about it the better. The town is now in a more healthy state, and apparently free from any epidemic of fever or malarial disease. Five men, three women, and twenty-five children constantly reside on the Outfall Works, and about half a dozen other men are employed daily. There has been no fever or sore-throat in the neighbourhood. One of the workmen informed us that during the five years the main drainage works have been in operation, not one of the men, their wives or children, have ever had any serious illness. The doctor was called in once last year to see Mr. Barnes for an attack of diarrhœa, but no one else was ill at the same time; this is said to be the only occasion on which a Medical man has been required.

Perhaps, if the Court of Inquiry had taken the trouble to make a more careful inspection of the town and a less rigid scrutiny of the works near the Isle of Dogs, they might have concluded that the memorialists' Barking was worse than their biting.

Death of Professor Alexander Quadri.—This distinguished oculist, who had acquired a great reputation in Naples, recently died at the early age of 42.

BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

(*From our Correspondent.*)

Exeter, Tuesday, August 24.

The week, as is usual, seems to have passed away before it had recommenced, and this evening the learned are on flight in numbers considerable. We may compute now the character of the meeting, and very honestly say that it has been a success. Less brilliant than some meetings that have gone before, and perhaps less solid in particular sections, it nevertheless sustains the repute of the parliament of science.

I spoke last week in my very brief note of the introductory address of Professor Stokes. I fear, on reading the address—for reading, after all, is a grand corrective of hearing—I fear, I say, that my remarks upon it were perhaps rather too brief to convey the idea of its real character, and scope, and object. I will therefore supplement my last report by adding a few quotations from the address, selecting only those which bear, directly or indirectly, on Medicine.

ADVANCE IN CHEMISTRY.

In chemistry (observed Professor Stokes), I do not believe that any great step has been made within the last year; but perhaps there is no science in which an earnest worker is so sure of being rewarded by making some substantial acquisition to our knowledge, though it may not be of the nature of one of those grand discoveries which from time to time stamp their impress on different branches of science. I may be permitted to refer to one or two discoveries which are exceedingly curious, and some of which may prove of considerable practical importance.

The Turaco or plantain-eater of the Cape of Good Hope is celebrated for its beautiful plumage. A portion of the wings is of a fine red colour. This red colouring matter has been investigated by Professor Church, who finds it to contain nearly 6 per cent. of copper, which cannot be distinguished by the ordinary test, nor removed from the colouring matter without destroying it. The colouring matter is, in fact, a natural organic compound, of which copper is one of the essential constituents. Traces of this metal had previously been found in animals—for example, in oysters, to the cost of those who partook of them. But in these cases the presence of the copper was merely accidental; thus oysters that lived near the mouths of streams which came down from copper mines assimilated a portion of the copper salt, without apparently its doing them either good or harm. But in the Turaco the existence of the red colouring matter which belongs to their normal plumage is dependent upon copper, which, obtained in minute quantities with the food, is stored up in this strange manner in the system of the animal. Thus in the very same feather, partly red and partly black, copper was found in abundance in the red parts, but none, or only the merest trace, in the black.

This example warns us against taking too utilitarian a view of the plan of creation. Here we have a chemical substance elaborated which is perfectly unique in its nature, and contains a metal the salts of which are ordinarily regarded as poisonous to animals; and the sole purpose to which, so far as we know, it is subservient in the animal economy is one of pure decoration. Thus a pair of the birds which were kept in captivity lost their fine red colour in the course of a few days in consequence of washing in the water which was left them to drink, the red colouring matter, which is soluble in water, being thus washed out; but except as to the loss of their beauty it does not appear that the birds were the worse for it.

A large part of the calicoes which are produced in this country in such enormous quantities are sent out into the market in the printed form. Although other substances are employed, the place which madder occupies among dye-stuffs with the calico-printer is compared by Mr. Schunck to that which iron occupies among metals with the engineer. It appears from the public returns that upwards of 10,000 tons of madder are imported annually into the United Kingdom. The colours which madder yields to mordanted cloth are due to two substances, alizarine and purpurine, derived from the root. Of these, alizarine is deemed the more important, as producing faster colours, and yielding finer violets. In studying

the transformations of alizarine under the action of chemical reagents, MM. Graebe and Liebermann were led to connect it with anthracene, one of the coal-tar series of bodies, and to devise a mode of forming it artificially. The discovery is still too recent to allow us to judge of the cost with which it can be obtained by artificial formation, which must decide the question of its commercial employment. But assuming it to be thus obtained at a sufficiently cheap rate, what a remarkable example does the discovery afford of the way in which the philosopher, quietly working in his laboratory, may obtain results which revolutionise the industry of nations! To the calico-printer, indeed, it may make no very important difference whether he continues to use madder, or replaces it by the artificial substance; but what a sweeping change is made in the madder-growing interest! What hundreds of acres hitherto employed in madder cultivation are set free for the production of human food, or of some other substance useful to man! Such changes can hardly be made without temporary inconvenience to those who are interested in the branches of industry affected; but we must not on that account attempt to stay the progress of discovery, which is conducive to the general weal.

Another example of the way in which practical applications unexpectedly turn up when science is pursued for its own sake is afforded by a result recently obtained by Dr. Matthiessen, in his investigation of the constitution of the opium bases. He found that by the action of hydrochloric acid on morphia a new base was produced, which as to composition differed from the former merely by the removal of one equivalent of water. But the physiological action of the new base was utterly different from that of the original one. While morphia is a powerful narcotic, the use of which is apt to be followed by subsequent depression, the new base was found to be free from narcotic properties, but to be a powerful emetic, the action of which was unattended by injurious after-effects. It seems likely to become a valuable remedial agent.

ORGANIC AND INORGANIC SUBSTANCES.

No other physical science has been brought to such perfection as mechanics; and in mechanics we have long been familiar with the idea of the perfect generality of its laws, of their applicability to bodies organic as well as inorganic, living as well as dead. Thus, in a railway collision when a train is suddenly arrested, the passengers are thrown forward, by virtue of the inertia of their bodies, precisely according to the laws which regulate the motion of dead matter. So trite has the idea become, that the reference to it may seem childish; but from mechanics let us pass on to chemistry, and the case will be found by no means so clear. When chemists ceased to be content with the mere ultimate analysis of organic substances, and set themselves to study their proximate constituents, a great number of definite chemical compounds were obtained which could not be formed artificially. I do not know what may have been the usual opinion at that time among chemists as to their mode of formation. Probably it may have been imagined that chemical affinities were indeed concerned in their formation, but controlled and modified by an assumed vital force. But as the science progressed many of these organic substances were formed artificially, in some cases from other and perfectly distinct organic substances, in other cases actually from their elements. This statement must indeed be accepted with one qualification. It was stated several years ago by M. Pasteur, and I believe the statement still remains true, that no substance the solution of which possesses the property of rotating the plane of polarisation of polarised light had been formed artificially from substances not possessing that property. Now several of the natural substances which are deemed to have been produced artificially are active, in the sense of rotating the plane of polarisation; and therefore in these cases the inactive, artificial substances cannot be absolutely identical with the natural ones. But the inactivity of the artificial substance is readily explained on the supposition that the artificial substance bears to the natural the same relation as racemic acid bears to tartaric—that it is, so to speak, a mixture of the natural substance with its image in a mirror. And when we remember by what a peculiar and troublesome process M. Pasteur succeeded in separating racemic acid into the right-handed and left-handed tartaric acids, it will be at once understood how easily the fact, if it be a fact, of the existence in the natural substance of a mixture of two substances, one right-handed and the other left-handed, but otherwise identical, may have escaped detection. This is a curious point, to the clearing up of which it is desirable that chemists should direct their attention.

PAPERS RELATING TO MEDICINE.

In previous reports I have been able to arrange the papers which most interest Medical readers under distinct heads, according to the section in which they were read. I shall not attempt this formal, but strictly correct method to-day; for, in truth, the Medical essays this year have been very few, and can be recorded without any sectional classification.

Report on the Physiological Action of the Methyl and Allied Series.

By Benjamin W. Richardson, M.D., F.R.S.

The report by Dr. Richardson came on first of the Medical communications. It was read at the Biological Section on Wednesday morning: it occupied an hour and twenty minutes in reading, and created a discussion, out of which a second report was projected, as will be seen in the sequel. The author, in the first place, recalled the work of previous researches, and laid before the section reports and notes on the value and administration of bichloride of methylene as a general anæsthetic from Mr. Peter Marshall, Dr. Junker, Dr. Taylor (of Nottingham), Mr. Bader, Mr. Rendle, Mr. James Adams, and Mr. Wood (of Brighton). These reports had reference to the experience on the action of the substance in the Hospitals of Guy's, London, Charing-cross, and Samaritan. They went to prove, each in their respective ways, that the bichloride is equally applicable to the shortest as to the longest operations. In operations on the eye Mr. Bader begins to operate in twenty seconds after inhalation, and operates without pain, and sees his patient fairly recovered often in three or four minutes; while Dr. Junker has sustained deep anæsthetic sleep by the vapour for one hour and thirty-five minutes. Dr. Taylor reported that of late he introduced the bichloride to Von Graefe, who now employs it with much success in his clinique. In recording his new researches Dr. Richardson explained that he had so arranged his work as to put the examination of the physiological action of all the substances used side by side with the chemical constitution of the substances. Thus he grouped his substances in tables under five heads—the nitrites, the hydrides, the alcohols, the chlorides, and the iodides—introducing respectively the representatives of each series from the methyl up to the amyl group. At the close of each chapter on different series he gave a general review of all the facts. He showed that the nitrites act chiefly and always primarily on the sympathetic nervous system, and that the hydrides are negative substances, insoluble in blood, unirritating, but, in many minor applications of Medicine, of great service. He held the alcohols to be strictly anæsthetic substances, and was unable to separate them from the other chemical bodies under observation. The chlorides are simple anæsthetics, and the iodides produce at one and the same time general insensibility and increased secretion from glandular structures. In regard to all it was shown that their action on animal bodies is attended invariably with decrease of temperature, and that the effect in all cases is more determinate, as the weight of the substance is increased by increase of carbon. In the course of the different essays from which these general inferences were drawn several new and useful additions to Medicine were carefully noticed. Amongst these may be specially named hydride of amyl, iodide of butyl, and chloride of amyl. In a further chapter the mode of proceeding in cases where the administration of narcotic agents had produced dangerous and apparently fatal effects was discussed, and a new instrument for artificial respiration was described. Dr. Richardson concluded as follows:—"I have thus brought my labours this year to a close. Had time been permitted for further research, I should have entered upon the study of one or two new series of bodies, comprising the sulphur and zinc compounds, especially sulphide of ethyl and zinc ethyl. But these studies must be held in reserve. We cannot pretend, in reports like these, to vie with our more fortunate brethren in other departments. The physiologist has no ground of pleasant work in common with the astronomer, geographer, geologist, ethnologist, chemist. His researches are hard, excessively minute, laborious, and at all times, however absorbing, painful; many of them can, in fact, only be carried on under the spur of a sense of duty amounting to necessity, and with the sincerest, solidest feeling that they are being conducted for the ultimate benefit of all the higher classes of animal existence. In the preparation of this report I have held on throughout by this sense of duty, and earnest belief that good must come out of the labour. One object which I had directly in view has been to introduce certain new substances which may be

directly applied for the cure of disease or relief of pain; another object has been to discover the best means of removing danger from the use or abuse of some of the more potent agents; but the leading idea of the report is that which I brought forward at the Birmingham meeting—the idea of studying the action of substances which are to become remedies, not by the old and faulty method of so-called experience, but by proving physiological action and the relation of chemical constitution to physiological action. I am certain the time must soon come when the books we call Pharmacopœias will be everywhere reconstructed on this basis of thought, and when the chemist and Physician will become one and one. That this huge reform should be commenced by the authorities in this country is to me an earnest hope. But whether this shall be the final result or not, I shall always recall with satisfaction the remembrance that the idea of the plan and the first working of it began in England, and under the auspices of the British Association for the Advancement of Science."

In the discussion which followed the report, Mr. Brady, Dr. Heaton, Dr. Michael Foster, Dr. Lawson, and the President, Mr. Busk, took part. In the course of the discussion it was stated that a specimen of chloral was in Exeter, the substance which Liebreich has recently brought into use in Berlin, and which in action closely resembles several of the substances which Dr. Richardson has studied. At the request of the President Dr. Richardson undertook to experiment with chloral, and to report to the meeting before the close.

The Moral Imbecility of Habitual Criminals exemplified by Cranial Measurements.

By Dr. Wilson.

Dr. Wilson, whose paper was read in the Biology Section on Wednesday, the 19th, said there was a prevalent idea that the majority of criminals are more or less imbecile. He firmly believed they not only did not possess a proper amount of discrimination between right and wrong, but that the majority were devoid of all moral sense and principle. The habitual thieves were of a low type of intellectuality. The most prominent craniological feature exhibited in the professional thief class was the tendency to retrogressive variation—in other words, a tendency to revert to the types of the uncivilised races of mankind. The cranial deficiency was also associated with a real physical deterioration. Forty per cent. of all the convicts were invalids, more or less, and that percentage was largely increased in the professional thief class. Habitual criminals were not only much below the average in education, but some were so backward as to be unable to surmount the merest rudimentary difficulties. His parentage was criminal, and he himself had been reared in crime and poverty. Herein lay the real cause of his criminality, for he could not help himself. He was the victim of inherited proclivities, to which he must yield, and of a course of training which had so warped his affective life as to render him unfit to discriminate between right and wrong, and incapable to appreciate any code of morality which did not harmonise with his own inherent vicious tendencies. He (Dr. Wilson) by no means maintained that these criminals were entirely irresponsible as regards their criminality, and were therefore legally and in reality moral imbeciles. Nor did he maintain that this moral imbecility was due to the arrested or deficient cranial development exhibited in them, but that both were concomitant effects of the same deteriorating causes. Probably imprisonment of a more reformatory than punitive character might have a good effect, and he suggested that the Government should adopt a system of probation similar to that in Ireland, and after a certain period of imprisonment the prisoner should be subjected to a test to afford proof of his reformation. If he could not go through the examination without committing himself, he should be kept away from society, for his own sake, and for the good of society, for the rest of his life. He had examined and measured about 460 heads, and from the observations he made had no doubt that habitual criminals were cranially deficient, especially in the anterior lobes of the cerebral portions of the brain.

Discussion.

The reading of Dr. Wilson's paper was followed by a long and very interesting discussion, which the hearers seemed vastly to enjoy. The President, Mr. Busk, attacked Dr. Wilson's propositions *in toto*; he affirmed that the mode of measurement was most unsatisfactory, and expressed his opinion that the posterior rather than the anterior convolutions of the brain were the great seats and centres of mental power. As to the relation of crime to insanity or to feebleness of intellect, that he felt to be, in the main, a delusion. Many criminals were men of great ability, and actually, in some cases, demonstrated their ability by the skill they had shown even in criminal proceedings. In the course of his observations Mr. Busk demonstrated from a skull the methods of cranial measurements, and the errors into which he thought, in this respect, Dr. Wilson had fallen.

Professor Cleland supported Mr. Busk, and expressed his belief that the posterior convolutions of the brain were more important than the anterior as centres for mental work and activity. He contended that, in these convolutions, the grey matter predominated.

The Rev. Mr. Caine, Chaplain of the County Gaol at Manchester, made an admirable speech, giving in it his own long and personal experiences. He urged that whatever might be said as to the imbecile nature of those who are habitual criminals, the education of the mind held little relation to the diminution of criminals. In the gaol to which he acted as chaplain he found that out of 700 criminals, Protestant criminals, 81 had been Sunday-school teachers, many were clergymen and sons of clergymen, and solicitors, schoolmasters, and commercial travellers were there in considerable numbers. In short, the uneducated classes were the exception, and he (Mr. Caine) doubted whether any clergyman in England had each Sunday a more intelligent or critical congregation than he had himself. What, then, was the cause of this criminality on the part of the educated? He traced it all to one cause—to drink. Alcohol was the cause; it led these men to ruin in the first instance, it made them reckless as to consequences, it lowered their general mental power, and thus lowering them in their own estimation not less than in the estimation of others, they fell imperceptibly, but almost inevitably, into some crime which brought them under the hand of the law. The efforts of the school teachers and of Sunday-school teachers were undermined by this cause of crime, and it was practically vain to teach either common or moral learning to the child when, so soon as the lesson is over, the learner is at home seeing father and mother and friends taking strong drink, and, by example, implanting the taste for the practice or encouraging it. He (Mr. Caine) was in favour of education for the prevention of crime; but the education must be supplemented by the better example of parents, and by the suppression of traffic in intoxicating drinks.

Dr. Bucknill dissented from the view that the posterior convolutions of the brain were the chief centres of mental activity. On the whole, he believed in the soundness of phrenology, although he could not, with the extreme school of phrenologists, support the refinement of details and the mapping out of parts, as was their custom. He sustained the great truths nevertheless, and believed that careful inspection of the principal regions of the cranium, as they had been defined, was of immense service in forming an estimate of the mental characteristics of individuals. Dr. Bucknill then described with much care and judgment (the value of personal observation of facts being the marked feature of his speech) the influence of mental disturbance on crime. He defined acutely between those acts which spring purely from emotional influence and those which were the result of reasoning power, and explained that the emotional might neutralise, or even for a time command, the reasoning faculties. Taking his speech as a whole, there can be no doubt Dr. Bucknill in large measure gave support to the argument of Dr. Wilson; and, indeed, in one respect he went further, for he traced the effect of hereditary influence as a cause of criminal tendency, and held that impressions acting upon the mother during pregnancy were capable of exciting the tendency in her offspring to which she was about to give birth.

Mr. Prideaux warmly advocated phrenology, and denounced Professor Cleland's opinion respecting the posterior convolutions in no measured terms.

Dr. Wilson, in a brief and modest reply, expressed that his opponents had silenced each other, and he need therefore merely recall attention to the fact that in his paper he spoke of none but habitual criminals.

Voltaic Electricity in relation to Physiology.

By W. K. Bridgman, L.D.S.

Mr. Bridgman's paper was read before the biologists in the Physiological Section.

At the last meeting of the British Association, held in Norwich, the author read a paper on "Electrolysis in the Mouth," referring to a very singular case in which some upper front teeth had been decomposed electrically by a ligature of silk twist, and which was brought forward as a corroboration of

the electrolytic theory of dental caries. A complete parallel to this occurrence has since been obtained with the metals, fully establishing the identity of the action as one of electrolytic transfer. But in carrying out the experiments in pursuit of this object, it was discovered that that which had been assumed by the late Professor Faraday to be a fact, and on which his conclusions respecting the theory and the source of power in the voltaic battery were founded, is altogether erroneous. It is stated in the "Experimental Researches" that a plate of amalgamated zinc dipped into cold dilute sulphuric acid exerts no sensible chemical action unless it be touched with some dissimilar metal. This, however, proves to be not the case; chemical action does take place, although but slowly, yet with complex and very decided results, as was shown by examples and by diagrams. The metal, here styled the primary, when so dipped becomes polarised by the atmosphere, and is thus rendered capable of decomposing water. The polarisation of the one metal, instead of the two hitherto considered to be essential, was then instanced as the initial point in the construction of the battery. From the chemical action thus induced the polarisation of the secondary metal is obtained, and this reacting upon the primary through the electrodes causes the current. The same condition of polarity was stated to pertain to organic life as well as to inorganic substances. The tree, placed one end in the earth and the other exposed to the atmosphere, is subject to the same influence as the metal, and with corresponding results. The hairs upon the skin are equally in the same condition—one end placed within the soft layers of the cutis, and the other exposed to the external air; each one becomes polarised, and chemical action consequently is effected at its root, which is among the capillaries and the papillæ, where in the one the blood is altered in its character, and from the other sensation is derived. The act of breathing introduces air to the lungs, where also it effects polarisation, and blood is again altered by the chemical action, which thus refits it for renewed use. This polarisation by the atmosphere, which consists of gases in only mechanical admixture and not combined, is attributed to the action of its free nitrogen more particularly, just as it is the free hydrogen of the electrolyte which polarises the secondary metal of the battery. The effect of fresh and pure air upon the system is represented as affecting the intensity of this polarisation and also the condition of the electrolytic fluid sent from the lungs to give up its elements through the chemical action induced by the former. Anæsthetics are supposed to act by the gas or vapour not possessing this power of polarisation in the lungs, and by thus not effecting the chemical changes necessary in the blood, this fluid will be sent to the capillaries and the papillæ of the skin in a state unfit for performing its share of the work, and consequently the previous polarisation at the surface of the body will be rendered ineffective, because the materials combined with the electrolyte are unsuited for providing by their chemical decomposition the force required for development from the brain, as consciousness, and as sensation or feeling, these organs being the first to succumb to the defective state of their natural stimulus.

On the Phosphorescence of Sea and Ozone in connexion with Atmospheric Conditions.

By Dr. Moffat, M.D.

Dr. Moffat detailed the result of observations taken at sea, to show that ozone is in maximum quantity with decreasing readings of barometer, and the conditions of the south or equatorial circuits of the atmosphere. He supposed there might be some connexion between ozone and the phenomena of phosphorescence of the sea. In this paper, which was read in the Chemical Section, over which Dr. Debus presided, the author sustained his good and well-earned repute as one of the most laborious of inquirers on ozone and its effects.

On the Oxidation of Phosphorus, and the Quantity of Phosphoric Acid excreted by the Kidneys in connexion with Atmospheric Conditions.

By Dr. Moffat, M.D.

The author stated that, from results of observations on the luminosity of phosphorus in connexion with atmospheric conditions, extending over a period of six years, that periods of phosphorescence and ozone periods commence, continue, and terminate under uniform atmospheric conditions. While the barometer is increasing, and the wind is veering towards the north, phosphorescence diminishes in brilliancy, and ozone increases in quantity, and so on in various quantities, according to the change of wind and barometrical influence. Liquid and gaseous bodies, when in contact with phosphorus in a non-luminous state, become, under certain conditions, ozonised. As venous blood contains phosphorus, which, in coming in contact with the oxygen of the air, is converted into phosphoric acid, and combines with certain alkalis and earths in the liquor sanguinis, and forms phosphates of soda, magnesia, and lime, it is not unreasonable to suppose that the quantity of phosphorus oxidised, and the phosphates formed in the system and eliminated from it through the kidneys, is in some degree determined by the pressure and temperature of the atmosphere and the state of the weather generally. With a view to ascertain the quantity of phosphoric acid excreted by the kidneys, Dr. Moffat tested the urine of a healthy man under certain conditions, and, by his results, is of opinion that the amount of phosphorus oxidised in the air and the amount oxidised within the body vary with similar atmospheric conditions. This paper was also read in the Chemical Section.

In Section C. Geology the following interesting communication was read by Mr. Woodward, F.G.S., F.Z.S. (of the British Museum), based upon observations made during the formation of new reservoirs and filtering beds by the East London Waterworks Company. Two new reservoirs are now being made, covering 120 acres in extent, and of an average depth of 10 feet. The "puddle walls" are excavated to a depth of about 25 feet. The materials removed are all of post-tertiary age, consisting of surface soil, loamy clay, peat, shell marl, coarse and fine sands, rounded and subangular gravels from the chalk and Woolwich series, with pebbles of chert and sandstone from the older rocks. The deposit is rich in vegetable remains, the peat attaining a thickness of 3 feet, and containing evidences of the oak, the alder, the hazel, and other trees and plants. The shell marl is at places equally thick, and is rich in shells, twenty-six species having been determined by the author. The bivalve shells are still united, and the *paludinæ*, etc., have their opercula still in place. Of the animals may be mentioned human remains and works of art of the stone and bronze and of the iron age. The wolf, the fox, the beaver, horse, wild boar, red deer, roebuck, fallow deer, reindeer, the elk, the goat, three oxen (including *bos primigenius*, *bos longifrons*, and *bos frontosus*). The sea-eagle and some fish remains complete the list. In the deep trenches of the puddle walls tusks of the mammoth and horns of the gigantic *bos* and *cervus* have been found. Mr. A. W. Franks, F.S.A., Keeper of the Ethnographical Collections in the British Museum, has obtained from this deposit a flint scraper, two bronze spear-heads, one bronze arrow-head, one bronze knife, an iron sword (late Celtic), bronze sheath, a Kimmeridge clay armlet, a pierced axe-head of stag's horn, a bone knife, a stag's horn club, various earthen pots (some hand-made and some turned on a wheel), besides many cut bones. In 1743 Bowden's map shows this tract under forest, and in 1300 all Essex was one vast forest. In 1154 the forest of Middlesex commenced at Houndsditch and extended north and east for many miles, and the forest is described as abounding in wolves, wild boars, stags, and wild bulls. The Walthamstow marshes have not been disafforested more than 100 years. Of the antiquity of these deposits no doubt can exist, for the presence of the reindeer, the elk (determined by Professor Owen), and the beaver is conclusive. Their preservation so near the surface is entirely due to the protective influence of forest vegetation, which has precluded the inroads of agriculture. Mr. Woodward expressed his belief that the deposits indicated, at places, the effects of beaver works, tracts of forest having been submerged and destroyed by the action of beaver-dams.

On Tuesday Dr. Richardson brought a report on the physiological action of chloral. The report was the result of work carried out during the sitting of the Association at the request of the President and section, and will be reported to you in full next week.

I shall hope also by that time to have abstracts of papers from Mr. Ray Lankester, Dr. Burdon Sanderson, Professor Cleland, Dr. Heaton, and Dr. Blanc, and others.

Already the signs of the end of the meeting are obvious. The reception-room is losing its busy population, and might to-day be readily mistaken for a quiet and elegant club room. The red lions are about to be fed, and Lord Houghton, known better as a lion by the name of Monckton Milnes, is to be the lion king. It is hoped he will sing to the menagerie his once famous song, after Thackeray, of the enterprising three sailors who took a boat and went to sea. But if his Lordship should fail, the lions will not want mirth, for the frolicsome Pengelly, whose roar is terrible, who is always in fettle, is sure to have something to amuse "y^e^ philosophers at play."

The next meeting of the Association will be held at Liverpool, and the President elect is Professor Huxley.

INDIAN MEDICAL SERVICE.

The Military Secretary, India Office, presents his compliments to the Editor of the *Medical Times and Gazette*, and begs to enclose, for publication, a list of the candidates for her Majesty's Indian Medical Service who were successful at the competitive examination at Chelsea on August 9 last.

Forty candidates competed for forty appointments. Thirty-nine were reported qualified.

India Office, August 23.

	Names.	Total number of marks. (Maximum 3400.)
1.	O. T. Duke	2570
2.	F. Nicholson	2225
3.	J. S. Gunn	2150
4.	W. H. Gregg	2055
5.	T. H. Hendley	2005
6.	Fakeer Chunder Ghose	2000
7.	D. Sinclair	1955
8.	A. B. Seaman	1925
9.	F. A. Smyth	1905
10.	S. M. Salaman	1885
11.	F. C. Barker	1870
12.	H. Boyd	1865
13.	A. B. Strahan	1805
14.	J. Lloyd	1800
15.	R. Caldecott	1770
16.	W. M. Courtney	1770
17.	F. Jones	1755
18.	C. J. W. Meadows	1725
19.	P. Murphy	1705
20.	D. N. Martin	1665
21.	W. N. Keefer	1655
22.	J. S. Carswell	1650
23.	W. A. C. Roe	1610
24.	W. F. Murray	1595
25.	A. H. Kelly	1575
26.	T. Robinson	1570
27.	A. H. Hughes	1565
28.	E. B. Ruttledge	1560
29.	A. Dean	1510
30.	W. M'Conaghy	1450
31.	G. Waters	1425
32.	E. Faweett	1410
33.	F. R. Paterson	1390
34.	W. Hastings	1365
35.	F. C. H. Spencer	1340
36.	R. M. Wall	1290
37.	H. J. Jones	1155
38.	J. North	1130
39.	H. G. Hall	1090

ARMY MEDICAL DEPARTMENT REPORT FOR 1867.

(*Continued from page* 231.)

The admissions from tubercular diseases were 13·1 per 1000, being 3·1 lower than in 1866, but the mortality amounted to 3·27, or ·30 higher than in 1866, and, taken on the aggregate of the groups of stations, has been higher than in any year since 1862.

The deaths by suicide were 25, or ·34 per 1000 of the strength. Thirteen were by firearms, 6 by cutthroat, 3 by poison, 2 by hanging, and 1 by drowning.

The epidemic of cerebro-spinal fever among the troops in Dublin during 1867—of which a detailed account was given in p. 426 of the Army Medical Report for 1866—raised the death-rate under the heading of continued fevers in that city to 2·97 per 1000, or nearly five times the death-rate from the same cause in 1866. At all other stations the mortality from continued fevers was lower than during the preceding year.

Eruptive fevers were more prevalent than in 1866 at the dockyards and arsenals, chiefly from the occurrence of 17 cases of small-pox at Woolwich, and a number of cases of scarlet fever at Woolwich and Sheerness.

In the comparison of the sickness and mortality in the different arms of the service, it should be borne in mind that only those corps are included in the tables, who were serving at home during the whole year; otherwise apparent discrepancies may be observed between these tables and those in the earlier pages of the Report, which include the whole force serving in the United Kingdom. The rates per 1000 of admissions varied from 569 in the Household Cavalry to 1104 in the Depôt Brigade of the Royal Artillery; of deaths, from 4·56 in the Royal Engineers to 15·78 in the Army Hospital Corps; of invalids, from 30·29 in the Depôt Battalions to 2·86 in the Army Hospital Corps.

Compared with 1866, there has been an increase in the admissions in all the arms except the Household Cavalry and Royal Artillery. The mortality has been lower in all the arms except the Foot Guards (in which there has been no change) and the Household Cavalry, Infantry Regiments, and Depôt Battalions, in which there has been an increase. The invaliding has been under the ratio of 1866 in all the arms.

Omitting the Coast Brigade of the Royal Artillery, the Army Hospital Corps, and the Commissariat Staff Corps, which, from being composed of older men or from their small numbers, may be considered exceptional cases, the deaths from tubercular diseases were highest in the Infantry Depot Battalions, being 4·54 per 1000, next in the Depot Brigade of the Royal Artillery, 4·31, and next in the Household Cavalry, 4·08. The highest rate of invaliding from the same diseases was 8·14 in the Foot Guards, and 7·60 in the Infantry Depot Battalions per 1000.

The mortality from diseases of the circulatory system in the different arms of the service, shows some noteworthy variations. The highest was 4·02 per 1000 in the Coast Brigade of the Royal Artillery, and the lowest was ·81 per 1000 in the Household Cavalry. In the Cavalry it was 1·30, and in the Royal Artillery 1·15, in the Foot Guards 1.45, infantry regiments 1·36, and in the Infantry Depot Battalions 1·28 per 1000. The Infantry Depot Battalions show the highest amount of invaliding from this class of disease—namely, 4·47 per 1000—and cavalry regiments stand next, showing 4·15 per 1000, and the Military Train gives the lowest rate, or ·76 per 1000. The question as to the action of the infantry soldier's knapsack, accoutrements, and dress, in the production of diseases of the heart and large vessels has latterly become one of very considerable interest. We believe that careful compilation and comparison of the tables showing the different classes of diseases in each arm of the service in the annual reports of the Army Medical Department, would afford very important and suggestive information on this subject. For this task, however, we have unfortunately neither time nor space, so must content ourselves by giving a necessarily hasty summary from the tables alluded to, from 1859 till 1867, showing the highest millesimal ratio of mortality and invahding in each year from diseases of the circulatory system.

Year.	Corps.	Highest Death-rate per 1000.	Corps.	Highest In-validing-rate per 1000.
1859...	Infantry Depot battalions	1·17	Not given	—
1860...	Do. and regiments (equal)	·99	Military Train	3·02
1861...	Cavalry Depots	·91	Cavalry Depots	15·45
1862...	Coast Brigade R. Artillery	2·92	Infantry Depot Battalions	7·64
1863...	Military Train and Foot Guards (equal)	1·71	Infantry Depot Battalions and regiments (equal) ...	5·42
1864...	Coast Brigade R. Artillery	2·78	Infantry regiments ...	6·65
1865...	do. do. do.	4·69	do. do. do.	7·29
1866...	Military Train	2·11	Depot Brigade R. Artillery	8·44
1867...	Coast Brigade R. Artillery	4·02	Infantry Depot Battalions	4·47

From the above it appears that, so far as mortality is concerned during the nine years, the Infantry Corps—namely, Depôt Battalions, Line Regiments, and Foot Guards—show the highest death-rate only three times—namely, 1859, 1860, and 1863; in the latter year the mortality in the Foot Guards was equalled by that in the Military Train; it is also remarkable that in these years the death-rate is relatively low. On the other hand, the Coast Brigade Royal Artillery shows the greatest mortality during four years out of the nine—namely, 1862, 1864, 1865, and 1867, the death-rate also being relatively high. The Cavalry Depots and the Military Train occupy the highest place in the other two years—namely, 1861 and 1866. In the column showing the rates of invaliding, the Infantry Corps stand highest in five out of the eight years for which the information is given—namely, 1862, 1863, 1864, 1865, and 1867, the other three years, 1860, 1861, and 1866, being divided respectively among the Military Train, Cavalry Depots, and the Depot Brigade of the Royal Artillery. From the fact of the highest rate of mortality being found in the Coast Brigade Royal Artillery, in which knapsacks are not worn, but of

which the men are generally of more advanced age, many of them having for years performed mounted duty, all having had to make great and frequent muscular exertion in gun drill and practice, and having, as a rule, seen a good deal of tropical service, may we not fairly acquit the knapsack of some of the gravest of the charges brought against it? On the other hand, from the greater frequency of invaliding in Infantry Corps from diseases of the circulatory system, may we not continue to regard the infantry knapsack and accoutrements with very grave suspicion as powerful predisposing causes of inefficiency? It should, at the same time, be borne in mind that a considerable proportion of the invaliding from diseases of the circulatory system in infantry regiments arises from varicose veins.

(*To be continued.*)

BRODIE—KEATE—LISTON.

"Leave out a wrinkle or a pimple, and I will not pay you a farthing," was the expression of the great Protector when Lely was about to paint his portrait. The likeness of Robert Keate in the last number of this journal would have satisfied Cromwell himself. It is a thoroughly graphic representation, drawn by the hand of a master. I shall be rejoiced if my sketches or recollections bring forth other such sketches. They are most interesting, and are certainly instructive. Whatever might have been the real cause of Keate's want of success in life, he himself always attributed it to his connexion with the Royal Family. Indeed, he was so bitter against them that his expressions could not be repeated. I still regret that Keate's papers were not forwarded to me, for, with all its faults, autobiography has some charms which belong to no other species of writing. At some other time I intend to speak of the autobiography of Brodie, and shall not now enlarge upon that subject. But, as "Berks" has referred to Brodie and Keate in connexion with the charter of the Royal College of Surgeons, I may say that Brodie was on terms of the greatest friendship with Sir James Graham, who, at the time of the passing of the charter, was Home Secretary. It was pretty generally known that in all matters relating to our Profession Brodie was consulted by the Government. I have no doubt he was the real framer of the charter. I have reasons for believing this, independent of the close connexion which existed between Brodie and Graham. Keate, I think, had nothing whatever to do with it; but Brodie had so high an estimation of Lawrence, that it is more than probable he was consulted respecting it. The charter was well meant, and, I believe, was intended by its originators as only an *instalment* of reform. Be this as it may, the time is not far distant when some important modifications must be made in it. Brodie also had some hand in the framing of Sir J. Graham's memorable Reform Bill—nay, was it not Brodie's Bill? Brodie, it was known, had, shortly before the appearance of that Bill, written an article on Medical Reform in the *Quarterly*. The principles enunciated in that article were embodied in the Bill. Graham's mode of handling the subject of Medical reform in the House of Commons was most offensive. He spoke of the interests of many thousands of men of education and position with ribald levity. His conduct raised a storm of indignation in our ranks, and the Bill was eventually withdrawn. With respect to Liston, I cannot allow that he was an "adventurer" or a "blunderer." If any one has a right to speak authoritatively on this matter, it is myself. I was his pupil for five years, during which time I was rarely a day out of his society either within the Hospital or elsewhere. I had his fullest confidence. Moreover, I had reported his lectures and all the Hospital cases which were published in a Medical journal at the time, and were subsequently transferred to the pages of his "Operative Surgery." I question much whether Liston, considering his extensive practice as an operator, made so many mistakes as any one of his contemporaries. His real weakness was his love of approbation and display. Those who recollect the crowds of students from all the London Hospitals and Practitioners from all quarters which thronged the theatre of the "North London Hospital" on his "field-days," may perhaps think that there was some excuse for him on that point. Liston for some years after his settling in London was really a needy man. He had, moreover, to contend with a majority of his colleagues, who lost no opportunity of worrying and depreciating him. I shall discuss this subject more in detail on a future occasion. I am, glad, however, to have this opportunity of referring to the two most prominent instances in his career in which he laid himself open to censure, and, I think, justly so. After a lapse of upwards of thirty years, the Profession will look upon these cases without passion or prejudice. It was not so at the time, however. He was then "gibbeted" and reviled by his enemies and censured by his friends. In the summer of 1836 a poor girl of the name of Sarah Thomas applied for relief at the Hospital. She was suffering from a formidable tumour of the upper jaw. It protruded from the mouth, prevented her swallowing except when she threw her head back, and, indeed, threatened her life. A likeness of this poor girl is to be seen in the "Operative Surgery." She had been declared incurable at most of the Hospitals in London, but hearing of the "wonders" done by Liston, she applied to him. He at once determined to amputate the entire jaw, and this he did in a manner and with a success that astonished every one. He was lauded by the press, and his fame as an operator was of the highest. The result of this operation determined Liston to remain in London. He had seriously contemplated migrating to New York, and had consulted several persons on the matter. The Hospital, immediately after this operation, was crowded by persons hopelessly afflicted, who came from all parts to be operated upon. Amongst them was a young farmer who had a large tumour of the upper jaw, the result of a blow from a cricket-ball. The tumour was not so large as that of Sarah Thomas, but it was rapidly increasing in size. The man was most anxious for its removal. At that time, when Liston had finished his Hospital duties, I was in the habit of almost daily accompanying him in his carriage on his round of visits. He said on this occasion, "I do not like the character of the tumour in that young man's jaw. I am fearful it is malignant; at all events, it is a very different kind of tumour from that of the girl Thomas. I do not think I shall operate." Eventually, however, he was prevailed upon to do so; his wish to display his power and skill with the knife overcame his better judgment. The operation in this case afforded a striking contrast to that in the last. Instead of being completed without a single drawback in ten minutes, the man was nearly half an hour upon the table. We could soon perceive that the tumour had involved the neighbouring bones, and had implicated the base of the skull. The formidable bone-nippers were applied again and again. The tumour appeared to have been entirely removed; the man was borne to his bed in a fainting state, and died twenty-four hours after. The tumour proved to be malignant, and had involved the base of the skull, part of which had been torn away. I never saw Liston agitated as he was that day. On our road home, he asked me whether I noticed his agitation. I said I certainly did. He declared that he had never before lost his presence of mind, but he fairly owned on this occasion he was not so cool or so guarded as he should have been. Bitter were the attacks made on Liston on account of this operation; but it was after all "a nine days' wonder." Now came a difficulty. It was absolutely necessary that the case should be published, more particularly as the other had been blazoned abroad—been made the subject of a "leading article," and illustrated by a portrait. What was to be done? Eventually it was decided to place it amongst the ordinary Hospital reports with an unattractive title. And there it did appear, headed "Case of Albuminous Sarcoma of the Upper Jaw." The other case in which Liston made a grave mistake was that of a boy who was admitted into the Hospital with a swelling in the neck over the carotid. When Liston was going round the ward, his House-Surgeon, Mr. Wallis—who afterwards settled in Hull, and lectured at the Hull School of Medicine—said, "The tumour pulsates, sir, and I can detect a bruit in it." "Pooh!" said Liston; "whoever heard of an aneurism in a boy so young?" and, putting his hand into his right waistcoat pocket, he took out a knife, and made a deep incision into the tumour. Out leaped the arterial blood, and the boy fell upon the floor. The wound was stitched up, and the patient put to bed, the artery being subsequently tied, but without any good result. On examination, it was found that an abscess had existed, and had ulcerated into the carotid. It is strange that Liston never would admit that he had committed an error in this case. He contended that his diagnosis was correct; but all were satisfied that the treatment was wrong. For years, however, Liston seemed occasionally haunted by this case, and

brought it before the Medico-Chirurgical Society a long time after its occurrence. He had obtained particulars of some similar cases, and these, with the original, formed the subject of his paper. Even then he would not admit his error. These are the only two cases I can call to mind in which he was open to serious blame. I could detail very many in which he displayed a marvellous acumen in diagnosis as well as wonderful skill with the knife.

It is true that, for the first two or three years of his residence in London, he "ran down" most of the leading Surgeons, and, in some instances, used unjustifiable language when referring to them. But those who were behind the scenes made allowances for him. He was under an influence which he could not well resist; still it was remarkable that a man of his mature age and high position could have lowered himself to what was generally considered an undignified and most offensive course of action. He gradually, however, altered his conduct, and could speak well, as he often did, of those who were his "enemies." He only once, I think, attended and spoke at a public meeting of the Professiou. It was held at the Crown and Anchor in the Strand, on the occasion of the rejection of a student of University College by the Examiners at Apothecaries' Hall. Liston was on the platform, and was loudly called for. "Jontlemen," said he, "the system does not seem to work well, and requires reform." J. F. C.

REVIEWS.

Untersuchungen über die pathologisch-anatomischen Veränderungen der Organe beim Abdominaltyphus. Von Dr. Carl Ernst Emil Hoffmann, Professor der Medicin in Basel. Leipzig: F. C. W. Vogel. 1869.

Researches on the Pathological Anatomy of Typhoid (Enteric) Fever. By C. E. E. Hoffmann, M.D., Professor of Medicine in the University of Bâle. 9 plates. Pp. 402.

An extensive epidemic outbreak of typhoid fever at Bâle in the years 1865-67 has given rise to several most valuable contributions to our knowledge on this disease. The clinical, or more especially the therapeutical, part of the observations made on more than 1300 cases treated in the Hospital has already been laid before the Profession by Professor Liebermeister in several excellent papers in vols. iii. and iv. of the *Deutsches Archiv für klinische Medicin*, and in a separate little work in which the Professor, conjointly with Dr. Hagenbach, relates the results of the cold-water treatment of typhoid fever. We now receeive another instalment of the investigations carried out by the staff of the Bâle Hospital, and in the volume before us Professor Hoffmann presents a summary of the observations made in the post-mortem room.

From the abstract which the author gives of the history of the epidemic we will mention that the outbreak began in June, 1865, and that from that time until the end of 1867 between 3100 and 3500 cases, with a mortality of 517 cases, occurred in a population of about 47,500. 250 cases form the subject-matter of the work before us, and a short summary of each case, arranged in the order in which the cases occurred, is given before the author proceeds to the consideration of the changes which he found in the different groups of organs. Of these, first in importance stands the digestive canal, and the specific changes occurring there are here described in all their varieties. Of more rare occurrence, we would call attention to the description of the small grey tubercles which are now and then found on the outside of the intestine, underneath or in the serous membrane, on places corresponding to the affected patches. These typhoid tubercles must not be confounded with true tubercle, from which they differ also in their microscopical characters. They consist of cells resembling lymph cells, which are embedded in a finely granular material with but scanty fibres. Professor Hoffmann thinks these tubercles are formed by proliferating cells having migrated from their place of origin in the lymphatic apparatus into the neighbouring tissues. In very rare cases, of which two are here related, these tubercles do not only appear on the outside of the affected patches, but are spread over a greater part of the peritoneum, and are found even in more distant places, as in the pleura and pericardium.

On the mucous membrane of the stomach and the duodenum only catarrh, but no specific affection takes place according to Professor Hoffmann. Another point which has hitherto been surrounded with some doubt is the question whether mucous membrane and villi are regenerated on the scars of the ulcerated patches. The author answers in the negative.

In the tongue the author discovered degenerative changes of the muscular fibres, and to these he principally attributes the difficulty of movement of that organ so frequently observed. Out of sixty cases, Zenker's waxy degeneration was found in thirteen, and granular degeneratiou in thirty-four. The salivary glands, as well as the pancreas, presented in a great number of cases slight changes, referable to swelling of the interlobular tissue and to eulargement and proliferation of the gland cells.

Of alterations found in the liver, Professor Hoffmann first describes those more frequently met with, consisting in enlargement and multiplication of the cells, and then the more rare occurrence of the small grey tubercles first pointed out by Friedreich and by Wagner. He considers them as collections of lymph cells migrated from the system of the portal vein.

In explanatiou of some of the derangements of the functions of the nervous system which are of a longer duration, Professor Hoffmann has been able to detect anatomical changes in the brain substance. Ganglion cells were seen filled with dark granules, and some of them which had entirely lost their sharp outline could only be recognised by the accumulation of such dark granules. In several cases nerve fibres were found in a state of fatty degeneration, and not unfrequently the capillaries of the brain presented accumulations of granular matter.

One of the most exhaustive parts of the book is the chapter on the changes found in the muscles, and as this question is imbued with particular interest at the present time, some controversy having lately been raised about the significance of what Zenker has called "waxy degeneration," we will quote the conclusions at which the author, after submitting the objections raised by Waldeyer, Weber, and Erb to a careful consideration, has arrived, confirming in the main points Zenker's views:—

"1. A great part of the skeleton-muscles becomes affected in typhoid fever. For the most part they only undergo *granular degeneration*; in some parts of them *waxy degeneration* is frequently found.

"2. The *waxy* degeneration consists in a *coagulation* of the contents of the muscle which takes place during life, and by which these contents are transformed into a substance appearing under the microscope transparent like glass, slightly opalescent and shining, very fragile, and occurring sometimes in larger homogeneous, cylindrical pieces, sometimes more in lumps.

"3. This coagulation is favoured by the excessive derangement of nutrition dependent upon the increased temperature, and on the function of the muscles themselves." [In this latter circumstance, the author thinks, might be found an explanation why those changes occur chiefly in the adductors of the thighs, in the abdominal, and in the other respiratory muscles, including the diaphragm, these muscles being in activity even during the height of the fever.]

"4. The waxy degeneration leads to the destruction of the affected primitive fibres."—P. 351.

Next follows a full account of the regenerative process in the muscles, to which also Zenker first called attention. These investigations on the muscles are illustrated by a number of drawings on three plates, and six other plates represent macroscopical and microscopical changes observed in other organs. A short *résumé* of the whole pathological process of typhoid fever concludes the work, which, from the large material on which it is based, gives an almost complete account of all anatomical changes found in typhoid fever, and which, in all its parts, may be regarded as a model of careful investigation and painstaking industry. All propositions are supported by reports of the cases, of which ninety-three are given in full. Thus an enormous amount of material and of original observation has been collected, and we have no doubt the book will become a standard work for reference on the pathology of typhoid fever. The manner in which the book has been brought out, and especially the execution of the plates, reflects very great credit on the publisher.

Lady-Doctors.—The Medical Profession can decidedly no longer be considered in France as the exclusive appanage of the masculine sex. Among the students who passed the most brilliant examinations at the Faculty of Medicine there were three ladies—one French, one Russian, and one American. This last exhibited proofs of a solid knowledge in anatomy and dissections, pathology, and operations.—*Gaz. des Hôp.*, Aug. 21.

FOREIGN CORRESPONDENCE.

FRANCE.

LETTERS FROM THE SOUTH OF FRANCE.—No. VI. HYERES.

Dr. Shuttleworth, the well-known English naturalist, who spent several winters at Hyères, gives me, in a German-written letter, some information about this place. As Dr. Shuttleworth is a man of high scientific reputation, I feel bound to publish part of his letter:—

"As to the climate of Hyères, I prefer it to that of Cannes and all other stations of the Mediterranean coast. Hyères enjoys the advantage of being about four kilomètres away from the sea. In consequence, it is near enough to have the full sea breeze, and far enough not to be troubled either by the noise or by very sudden changes of temperature. Besides, Hyères has not, like the other stations, any snow-mountains in its neighbourhood. It is said that Hyères suffers more from *mistral* than Cannes, etc. This is possible; but I aver that in Cannes I have suffered much from cold north-east and north-west winds.(a) Living is not cheap at Hyères, but certainly not dearer than at Cannes. Lodgings are decidedly cheaper at Hyères. I myself inhabit a first-floor in the best position, with a large verandah, four rooms towards the south, free view over the sea, large high rooms, seven rooms and cellar, furniture, and every necessary. For all this I pay 2700 fr. yearly.(b) There is no want in this place of single villas, houses of every kind, and separate *étages*, and almost all have a free view towards the south. I know all these stations—St. Remo, Mentone, Nice, Cannes—but I prefer Hyères, as well on account of climate as on account of the manner of living. The element of fashionable life does not exist in Hyères, and almost all people who are here for the winter have come for the sake of their health. There are several publications about Hyères. Whether they are more impartial than those about Cannes, etc., I am unable to say. Probably they are not. If you arrive at Hyères in the beginning of October, you will find plenty of available lodgings. You must take care, however, to avoid the west-end of Hyères (Boulevard des Hespérides et Iles d'Or), this being most exposed to *mistral*. Rue Impérial, Place des Palmiers, and the east side, are most recommendable."

GENERAL CORRESPONDENCE.

VACCINATION PAST AND PRESENT.

Letter from Mr. William H. Day.

[To the Editor of the Medical Times and Gazette.]

Sir,—The Vaccination Act seems likely to become soon the question of the day, as the prejudice, formerly existing almost entirely among the lower orders (whose intelligence our statesmen have lately vied with each other in extolling), is rapidly extending among the better educated. It strikes me that your observation, that "the stringency of the Act with regard to time is likely to prove a serious nuisance, both to the Medical Profession and the public," is most important and true. Twenty years' experience has taught me that there are certain seasons when vaccination can be much more successfully practised than at other times, and that, whereas during the prevalence of a small-pox epidemic, vaccine lymph, however ancient, is available to produce excellent vesicles, at other times it is difficult to get a good vesicle with the freshest ichor. Norwich is periodically flooded with threatening letters from the Sanitary Inspector, and fines, and an actual imprisonment, have resulted from prosecuting offenders against the Act, and the penalties are duly placarded over the city. The natural consequence of these periodical threatenings and field-days before the magistrates is a rush to the Practitioners, and, under so pressing a demand, ichor is occasionally resorted to that would probably, under less urgent circumstances, be passed by as not sufficiently active for the purpose. Nothing is more likely to bring odium upon vaccination than this, and I believe that vaccination was more prophylactic and less injurious when it was voluntary and could be practised at any period than now it is compulsory and has to be performed within so limited a time as three months from the birth.

I am, &c.

Norwich, August 21. William H. Day.

ERYSIPELAS AFTER VACCINATION.

Letter from Mr. J. Harmar Smith.

[To the Editor of the Medical Times and Gazette.]

Sir,—A case occurred under my own observation many years ago confirmatory of the judgment of Dr. Ballard, expressed in the letter which you published on Saturday, that it by no means follows in cases in which erysipelas succeeds vaccination that it is the fault of the vaccinifer. In this instance, which occurred in Sheffield when I was public vaccinator there, the child was a year old, stout, and florid, and was vaccinated on August 12, 1850. The vaccination was successful, and there was nothing peculiar about the case, until on the ninth day I noticed that the areola was larger and more inflamed than usual. When I saw the child again, on the day but one after, there was phlegmonous erysipelas extending to the elbow. The inflammation then rapidly spread till it had covered the greater part of the body, and the patient died on August 30, or the eighteenth day of vaccination. Several other children were vaccinated successfully at the same time, with the same lancet and from the same child, but the disease in each of them was perfectly normal and uncomplicated.

I saw no other case of erysipelas following vaccination, but the late Mr. Reedall, then in extensive private practice in Sheffield, afterwards told me that he had several cases of erysipelas following vaccination about the same time as mine (all of which, however, recovered), from which I inferred at the time that there was present what has been called "an epidemic constitution of the atmosphere."

There is a case of erysipelas after vaccination quoted in the *Medical Times and Gazette* of July 20, 1861, from the *Gazette Hebdomadaire*, as having been related at the Société de Chirurgie. The remarks cited by you from the discussion which followed are, I think, worth reproducing at the present time:—"M. Robert and various other members expressed their opinion that the chances of consecutive inflammatory accidents would be diminished if much larger intervals were left between the punctures than is generally the case. M. Giraldès, agreeing in this precept, still thought that more importance should be attached to the condition of the health of vaccinated infants; for in the Children's Hospital, the inmates of which manifest great morbid aptitudes, phlegmonous erysipelas is not rare, even after the most carefully executed vaccinations."

I may mention, in connexion with the case which I have related, that whilst I was a public vaccinator to the Sheffield Union I vaccinated, on a rough estimate, about 10,000 children; but the above-mentioned was the only case in which I had reason to believe that erysipelas or any other disease resulted from the vaccination. I am, &c.

J. Harmar Smith, M.R.C.S., L.S.A.

Blackheath, August 20.

MR. NUNNELEY AND THE ANTISEPTIC TREATMENT.

Letter from Professor Lister.

[To the Editor of the Medical Times and Gazette.]

Sir,—Mr. Nunneley's recent attack (a) seems to me little calculated to impede the progress of the antiseptic treatment; nor do I feel called upon to point out in how many respects he has misapprehended my published views. That he should dogmatically oppose a treatment which he so little understands, and which by his own admission he has never tried, is a matter of small moment. But I was grieved to find him stating that his colleagues who had once adopted the system were now abandoning it as untrustworthy. It was therefore with much pleasure that I received a very different account of the matter from Mr. Teale, in a letter which, with his permission, I now request you to publish. I am, &c. Joseph Lister.

Glasgow, August 24.

(a) I think that for most invalids in the South east winds are much more to be feared than *mistral*. *Mistral*, at least, brings no clouds, and is not very cold.—*Translator.*

(b) At Cannes I had an *étage* of three small rooms and a kitchen, with very little sun, for 1200 fr. yearly, and this was said to be cheap. I have decided now to spend the next winter at Hyères.—*Translator.*

(a) See the *Medical Times and Gazette*, August 7, 1869.

Sir,—May I call your attention to the attack upon "antiseptic treatment" in Mr. Nunneley's Surgical Address, in which he quotes the experience of his colleagues as unfavourable to it? I think it due to yourself to inform you that Mr. Nunneley was in no sense justified in making such a statement; that we still use, and have as much confidence as ever in, antiseptic treatment; and that we hope shortly, in some way or other, to have Mr. Nunneley's misstatement corrected. Any want of success in our practice may fairly be attributed to imperfections in carrying out your rules.

Yours truly,

20, Park-row, Leeds, August 11. T. Pridgin Teale.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, June 8, 1869.

C. H. Moore, F.R.C.S., Treasurer, in the chair.

Mr. Alfred Poland read a paper on

FUSIFORM AND TUBULAR ANEURISM OF THE SUBCLAVIAN ARTERY, AND ITS TREATMENT BY COMPRESSION.

The main object of this communication was to offer some remarks upon subclavian aneurism and wounds and lesions of the subclavian artery, as suggested by an interesting case coming under the author's notice and care at Guy's Hospital. The patient was a man, aged 44, a bricklayer's labourer, who was admitted into Guy's Hospital on October 7, 1868. He had formerly been employed in the gas works, and latterly had been in the habit of carrying a hod of bricks upon his shoulder. For the last two years he had suffered from occasional pain in the right arm, which gradually increased. He attributed this to an injury to the fingers which he had received about that time. During the last month the pain had become so severe that he was forced to give up work. On applying for advice to Dr. David Johnson, of the Old Kent-road, there was discovered for the first time a pulsating tumour above the right clavicle. It was considered to be aneurismal, and the patient was recommended to apply for admission into the Hospital. The patient, on admission, appeared to be fairly nourished, although naturally thin, and his general health was good. His expression was somewhat anxious. In the supra-clavicular region on the right side there was a pulsating tumour, fusiform in shape, passing downwards and outwards, and meeting the clavicle at an angle of forty-five degrees. It was more than one inch in length, and nearly half an inch in breadth at its widest part, and was very much like a large filbert. Above it diminished gradually to the size of a large goose quill, and after remaining for a quarter of an inch of that size it seemed to curve downwards and inwards, becoming lost under the muscles. The lower or distal end did not seem to diminish so rapidly, and the pulsations of the artery could be felt between the tumour and the clavicle, as also very distinctly below that bone. The tumour was almost subcutaneous, and the pulsations in it very strong; and the expansion, which was uniform, was considerable during each beat. By pressure on the artery above the tumour, the pulsation in the latter was readily stopped, and the swelling became quite soft and flaccid, and easily emptied, so that it almost entirely disappeared. No pulsation could be felt in the radial or ulnar arteries, nor in any artery of the right arm as far up as the axillary to within a short distance below the clavicle. There was no other tumour or swelling in any part of the course of the vessels, and the axilla was quite free from any induration or glandular enlargement. The right arm was weak, but he could perform easy motion with it. The circumference of the limb, both over the biceps and in the forearm, was less than that of the opposite side. There was also evidence of deficient nutrition in the nails of the fingers of the right hand, which were ill-developed and desquamating. He complained of pain down the radial border of the forearm and in the index finger, and occasionally this pain extended upwards to the acromial process. There was numbness in the fingers and hand generally, but there did not seem to be any impairment of actual sensation. The arm was always cold, and had to be wrapped up in flannels. There was no œdema, and no obstruction in the venous system. It was found that, in consequence of the high position of the first rib in the neck and the comparatively superficial abnormal course of the artery, pressure on the vessel could be made without trouble and without causing pain. Consequently it was agreed to make digital pressure on the cardiac side of the tumour, in the hope of effecting a cure. This was accordingly carried out almost uninterruptedly for ninety-six hours, and then discontinued, in consequence of the discoloration and tenderness of the skin at the site of pressure, and unwillingness on the part of the patient to undergo any further treatment. The tumour, however, had become undoubtedly much smaller and harder, but still pulsated, although this pulsation could be controlled by the merest pressure. The man left the Hospital, and in the course of a month showed himself again, when the tumour had lost all pulsation, had become hard and somewhat smaller. This patient attended at Dr. Johnson's residence regularly for several months, and was carefully watched by him. The tumour gradually disappeared, and the whole track of the artery seemed converted into a fibrous cord; but there could be traced a very large artery running transversely across the posterior triangle of the neck immediately above the site of the former tumour. It seemed to emerge from under the sterno-mastoid muscle, and was lost under the trapezius. The author drew attention to the following conditions, and these were illustrated by references to cases and quotations from well-known writers on aneurism: — 1. The remarkable deviation from the normal course of the right subclavian artery in the third part of its course; 2. The peculiar character of the aneurism, as being of the fusiform or tubular variety of aneurism by dilatation, and where all the coats are uniformly distended; 3. The treatment adopted—viz., indirect digital compression on the cardiac side of the aneurism, leading to a successful issue. The paper is accompanied with the details of three unpublished cases of subclavian aneurism. 1. A case of subclavian aneurism cured by direct pressure, by Mr. F. M. Corner, Surgeon to the Poplar Hospital; 2. Notes of a case of subclavian aneurism for which amputation at the shoulder-joint was performed with success, by Professor Spence, of Edinburgh; 3. A case of aneurism by dilatation of the subclavian artery, by Dr. Robert Adams, of Dublin, with some further notes on Mr. O'Reilly's case of ligature of the subclavian artery for subclavian aneurism. The paper concludes with an elaborate statistical analysis of 115 cases of subclavian aneurism, of which the following table gives a general summary of the cases. These are arranged according to the treatment pursued. The cases are placed under one heading only—viz., under the treatment last adopted, although many of them had previously been subjected to one of the other forms.

Summary of Cases according to Treatment.

	Successful.	Died.	Total.
Cases in which no particular treatment was adopted, and specimens undescribed, and not having been the subject of any operation	3 cases 4 unknown	24 deaths 5 specimens	36
Medical and Valsalva treatment	7	4	11
Hypodermic injection	1 relieved	...	1
Compression	4	...	4
Injection into sac	1	2	3
Acupressure	...	1	1
Manipulation	2	2	4
Galvano-puncture	1	...	1
Attempt at operation	1	6	7
Ligature of third portion of subclavian	6	10	16
Ligature of first portion	...	9	9
Ligature of carotid	...	1	1
Ligature of innominate	...	12	12
Ligature of innominate, and carotid, and vertebral	1	...	1
Ligature of first portion of subclavian and carotid	...	2	2
Ligature of subclavian, carotid, and vertebral	...	1	1
Distal or Brasdor's operation, ligature of axillary	...	4	4
Amputation at shoulder-joint	1	...	1
Total	33	83	116

Mr. Holmes rose to inquire what should be done with the large portion of Mr. Poland's communication that had not been read to the meeting. The whole paper was, in fact, an elaborate work on subclavian aneurism and on wounds of the subclavian artery; and such a work the Society could neither read nor discuss. Was it understood that the thanks of the Society were to be voted for the paper as a whole, or only for the portion that had been read; and should Mr. Poland be asked to put the rest into such a form that it could be brought before a future meeting?

The President replied that the Council had received the paper as a whole, and had submitted it as a whole to the Society.

A Fellow asked Mr. Poland whether any pressure was exerted by the pad of the instrument that had been exhibited.

Mr. Poland regretted the absence of Mr. Corner, who

could better have replied to the question. He believed that Mr. Corner had applied slight pressure by the pad; direct pressure had been tried at St. Thomas's.

Mr. Savory thought the description hardly justified the application of the word fusiform to the aneurism. He could hardly conceive that a fusiform aneurism could be so quickly cured by the deposition of coagula.

Mr. Holmes had previously spoken on a point of order only. He fully recognised the entire value of the communication. He considered the case to be one of a small ordinary aneurism undergoing spontaneous cure.

Mr. Heath had listened with interest to Mr. Poland's practical deductions for the treatment of such cases—*quieta non movere*, and amputation.

Mr. Poland very briefly replied, and said that his principal object was to show that in such cases we were dealing with diseased arterial coats.

MEDICAL NEWS.

University Intelligence.—University of London.—The following are lists of the Candidates who have passed the recent Honours Examinations:—

First M.B. Examination.

examination for honours.

Anatomy.

First Class.—Ernest Alfred Elkington (Exhibition and Gold Medal), Queen's College, Birmingham; Henry Edward Southee (Gold Medal), Guy's Hospital; Ebenezer Rust Edger, B.A., University College, and Thomas Crawford Hayes, B.A. Dubl., King's College, equal.

Second Class.—James Barry Ball, University College; Thomas Jones, Guy's Hospital.

Physiology, Histology, and Comparative Anatomy.

First Class.—Alfred Henry Carter, University College.

Organic Chemistry, and Materia Medica and Pharmaceutical Chemistry.

First Class.—Henry Edward Southee (Exhibition and Gold Medal), Guy's Hospital; Thomas Jones (Gold Medal), Guy's Hospital; Francis Warner,* King's College; Joseph Theodore Ingoldby, Guy's Hospital; Ernest Alfred Elkington, Queen's College, Birmingham.

Second Class.—Thomas Crawford Hayes, King's College; William Barnett Burn, St. Bartholomew's Hospital, and William Ward Carr, University College, equal.

* Worthy of a Gold Medal.

First B.Sc. and Preliminary Scientific (M.B.) Examinations.

examinations for honours.—first b.a. and first b.sc. conjointly.

Mathematics and Mechanical Philosophy.

First Class.—Thos. Oliver Harding, First B.Sc. (Exhibition), University College; Robert William Genese,† First B.A., Liverpool Institute.

Second Class.—John William Lord, First B.A., University College.

first b.sc. and preliminary m.b. conjointly.

Botany.

First Class.—Marcus Manuel Hartog, First B.Sc. and Prel. Sci. (Exhibition), University College; Edward Bibbins Aveling,† First B.Sc., University College; Peter Thomas Duncan, Prel. Sci., University College.

Second Class.—Edward Albert Schafer, Prel. Sci., University College; Gerald Bomford, Prel. Sci., King's College; George Fredk. Rossiter, Prel. Sci., Private tuition; Herbert Taylor, Prel. Sci., St. Bartholomew's Hospital; Thomas Eastes, Prel. Sci., Guy's Hospital; Ebenezer Geer Russell; Prel. Sci., Guy's Hospital.

Third Class.—Henry Colgate, Prel. Sci., University College; George Thomas Bettany, Prel. Sci., Guy's Hospital; Chas. William Harvey, Prel. Sci., University College.

Zoology.

First Class.—Edward Albert Schafer, Prel. Sci. (Exhibition), University College; Edwd. Bibbins Aveling,† First B.Sc., University College.

Second Class.—Ebenezer Geer Russell, Prel. Sci., Guy's Hospital; Walter Benoni Houghton, Prel. Sci., University College; Andrew Duncan, Prel. Sci., King's College, and Edwd. Markham Skerritt, Prel. Sci., University College (equal).

Chemistry and Natural Philosophy.

First Class.—H. Septimus Bott, First B.Sc. and Prel. Sci. (Exhibition), Owens College; Robert Routledge, First B.Sc., Owens College; Frank Clowes, First B.Sc., R. Coll. of Chemistry and Pr. st.

Second Class.—Walter Benoni Houghton, Prel. Sci., University College.

Third Class.—Ebenezer Geer Russell, Prel. Sci., Guy's Hospital, and Edwd. George Whittle, Prel. Sci., University College (equal); Jno. William Elwes, First B.Sc., King's College; Charles Firth, Prel. Sci., Norfolk and Norwich Hospital.

† Obtained the number of marks qualifying for the Exhibition.

Apothecaries' Hall.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, August 19, 1869:—

Baddeley, William, Whalley, Lancashire.
Mickle, William Julius, Puckridge, Herts.
Nell, Richard Frederick, Warwick.
Snell, Enoch, Leeds.
Warburton, Edmund Samuel, Betley, Crewe.
Wilson, George, Claverton-street, Pimlico.
Wing, Charles Edward, Bury St. Edmund's.
Wood, Richard, Malden-road, N.W.

As an Assistant in compounding and dispensing medicines:—

Bird, George William James, Birmingham.

The following gentlemen also, on the same day, passed their First Professional Examination:—

Harvey, Christopher, Westminster Hospital.
Hill, Thomas, St. Bartholomew's Hospital.

APPOINTMENT.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Hope, William, M.B., M.R.C.P. Lond.—Physician-Accoucheur to the Out-patients of Queen Charlotte's Lying-in Hospital, Marylebone-road, *vice* Dr. Parson, resigned.

NAVAL AND MILITARY APPOINTMENTS.

Admiralty.—The following appointment has been made:—T. R. Warren, Surgeon, to the *Gladiator*.

War Office.—The following appointments have been made:—54th Foot: Staff Assistant-Surgeon William Henry Bant Clapp, M.D., to be Assistant-Surgeon, *vice* John Alexander Lamb, appointed to the Staff. 86th Foot: Staff Surgeon Henry Titterton, M.D., to be Surgeon, *vice* Chamney Graves Irwin, M.B., appointed to the staff. Medical Department: Surgeon Chamney Graves Irwin, M.B., from the 86th Foot, to be Staff Surgeon, *vice* Henry Titterton, M.D., appointed to the 86th Foot; Assistant-Surgeon John Alexander Lamb, from the 54th Foot, to be Staff Assistant-Surgeon, *vice* William Henry Bant Clapp, M.D., appointed to the 54th Foot.

BIRTHS.

Farquhar.—On August 22, at Rubishaw-terrace, Aberdeen, the wife of Surgeon-Major T. Farquhar, M.D., Bengal Medical Service, of a daughter.

Fowler.—On July 13, at St. Helena, the wife of Charles H. Fowler, Colonial Surgeon, of a son.

Gwynn.—On August 12, at Folkestone, the wife of Edmund Gwynn, M.D., of 5, Belgrave-terrace, Upper Holloway, prematurely of a son, who only survived his birth a few minutes.

Harrison.—On August 17, at Walsall, the wife of A. J. Harrison, M.B. Lond., of a daughter.

Hewlett.—On August 23, at Brook-cottage, Sunninghill, the wife of Thomas Gillham Hewlett, Surgeon, Bombay Army, of a son.

Lynes.—On August 23, at 9, Priory-row, Coventry, the wife of Edward Lynes, M.D., of a daughter.

Murray.—On August 17, at the Curragh Camp, Ireland, the wife of Wm. Sim Murray, M.B., Surgeon 66th Regiment, of a son.

Murray.—On August 18, at 17, Green-street, Grosvenor-square, the wife of Gustavus C. P. Murray, M.D., of a son.

Newham.—On August 23, at Western Cottage, Winslow, Bucks, the wife of Dr. Newham, of a son.

Paterson.—On August 21, at Plumstead, the wife of Dr. H. F. Paterson, F.R.C.S.E., Royal Artillery, of a son.

MARRIAGES.

Brown—Solomon.—On June 22, at Sea Point, Cape Town, Cape of Good Hope, John Brown, M.D. Aberd., L.R.C.S. Edin., District Surgeon, and Justice of the Peace for the district of Fraserburg, to Mary Matilda, daughter of Henry Solomon, Esq., Sea Point.

Corbett—Prothea.—On July 17, at Trinity Church, Bangalore, William Henry, second son of the late Richmond Corbett, M.D., of Cork, Ireland, to Alicia Emily, second daughter of the late Captain C. W. Prother, Bombay Rifles.

Duke—Williams.—On August 21, at the parish church, Hemingford Abbotts, Herbert Renny, second son of Richard Duke, Esq., of Blackheath, Kent, to Little, youngest daughter of the late C. W. Williams, M.D., of Hemingford Abbotts, Hunts.

James—Matheson.—On June 2, at St. Kilda, Melbourne, Edwin Matthews James, M.R.C.S.E., L.S.A. (Honorary Surgeon to the Melbourne Hospital), son of the late Rev. W. J. James, incumbent of Chive, Salop, to Annie Margaret, eldest daughter of John Matheson, Esq.

Owen—Gibney.—On August 19, at Tor parish church, Torquay, Alfred Lloyd Owen, B.A., M.B. Trin. Coll. Dub., of York, youngest son of the late J. Owen, Esq., of Woolwich, to Sylvia Caroline, third daughter of W. Gibney, M.D., of Torquay, and late Senior Physician to the Cheltenham General Hospital.

Scott—Abraham.—On August 24, at Roslyn-hill Chapel, Hampstead, David Scott, M.D., 16, Murray-street, Camden-square, N.W., to Emma Louisa, daughter of Henry R. Abraham, Esq., of Mountfield House, Harrow-road, W.

DEATHS.

Archer, Edmond, M.D., M.R.C.P., F.R.C.S., of King's Lynn, Norfolk, at 21, Hilldrop-crescent, N., on August 12.

Atkinson, Julia, the beloved wife of John P. Atkinson, M.D., at Bampton, Oxon, on August 21, aged 28.

Belcher, Minnie, fourth daughter of Henry Belcher, M.D., at 10, Pavilion-parade, Brighton, on August 4, aged 4 years.

Bradford, William Jocelyn, M.B., of 17, Tyndall-place, Islington, at Killowen Point, county of Down, on August 14.

Hobson, Benjamin Stephen, eldest son of Dr. Hobson, formerly of China, at Inyati, South Africa, on April 15.

Julius, Ellen Hannah, the wife of Frederick G. Julius, Esq., M.D., at the Old Palace, Richmond, Surrey, on August 21.

Lee, John, Surgeon, eldest son of John Lee, M.D., of Asbbourne, Derbyshire, at 61, Talbot-road, Westbourne-park, of heart disease, on August 20, aged 37.

Robertson, Mary, widow of the late Dr. James Robertson, M.D., at 30, Cathcart-road, South Kensington, on August 6, aged 69.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

Boomin Union.—Medical Officer for the Second District of the Union. Candidates must be legally qualified and registered. Applications and testimonials to P. J. Wallis, Esq., Clerk to the Union, on or before September 3.

Bootle Hospital and Dispensary.—House-Surgeon; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to W. S. Brice, Esq., Richmond-vale, Bootle, near Liverpool.

Bournemouth General Dispensary.—Resident Surgeon. Candidates must be registered, and must possess a qualification in Medicine as well as Surgery. Testimonials, diplomas, etc., to be sent, under seal, to the President of the Bournemouth Dispensary on or before September 9.

Brighton and Hove Lying-in Institution.—Resident House-Surgeon; must be a Member of one of the Royal Colleges of Surgeons of Great Britain or Ireland, or L.R.C.P.L. or L.S.A. Applications and testimonials to the Chairman of the Committee of Management on or before September 2, election on September 9.

Eastbourne Union.—Medical Officer and Public Vaccinator for the First District. Candidates must be duly qualified and registered. Applications and testimonials to W. Barber, Esq., Clerk, Willingdon, Hurstgreen, on or before September 2, election on September 3.

Great Northern Hospital.—House-Surgeon. Applications and testimonials to G. Reid, Esq., Secretary, at the Hospital, Caledonian-road, N., on or before September 7.

Guildford Union.—Medical Officer for the Albury District. Candidates must have the qualifications required by Poor-law Board. Applications and testimonials to W. H. Smallpeice, Esq., Clerk, Guildford, on or before September 3, election the next day at twelve o'clock, when candidates are requested to attend.

Kingsbridge Union.—Medical Officer and Public Vaccinator for the Stokenham District. Candidates must be legally qualified. Applications and testimonials to W. Jarvis, Esq., Clerk, Kingsbridge, on or before September 3, election on September 11.

Metropolitan Free Hospital.—Assistant-Physician; must be M.R.C.P. Applications and testimonials to the Secretary on or before the 31st inst.

Royal General Dispensary.—Physician. Candidates to send applications and testimonials to John Faulkner, Esq., at the institution, 25, Bartholomew-close, and to attend the meeting on September 2, at 1 o'clock p.m.

Royal Maternity Charity, 31, Finsbury-square.—Physician for the Eastern Districts of London. Candidates must be F. or M.R.C.P.L., and will be required to reside in the appointed district. Applications and testimonials to the Secretary on or before the 28th inst.

Tower Hamlets Dispensary.—Resident Medical Officer; must be L.S.A., and be registered. Candidates to attend personally at the election, at 7 o'clock p.m., on September 6.

Warneford Hospital, Leamington Priors.—House-Surgeon; must be M.R.C.S. Lond., Edin., or Dublin, and L.S.A. or L.R.C.P.L. Applications and testimonials to the Secretary.

Worksop Dispensary, Nottinghamshire.—House-Surgeon; must be legally qualified, and be unmarried. Applications and testimonials to G. Fisher, Esq., on or before August 31. The duties will commence on November 1.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Bicester Union.—Mr. F. W. Parsons has resigned the Islip District; area 14,092; population 3502; salary £58 per annum.

Christchurch Union.—The Western District is vacant; area 16,515; population 6115; salary £55 per annum. Also the Workhouse; salary £15 per annum.

Melksham Union.—Mr. Edward Shorland has resigned the Fourth District; salary £40 per annum.

Stockton Union.—Dr. Frederick Dale has resigned the Yarm District; area 21,003; population 3742; salary £45 per annum.

Tiverton Union.—Mr. E. C. Ashford has resigned the Tiverton East District; salary £85 per annum; also the Workhouse; salary £30 per annum.

APPOINTMENTS.

Bramley Union.—William Antcy, M.R.C.S.E., L.S.A., to the Wortley District.

Ellesmere Union.—David Haire, L.R.C.P. and S. Edin., to the Overton District.

Fylde Union.—John D. Walker, L.R.C.S. Edin., L.R.C.P. Edin., to the Kirkham District.

Gower Union.—Charles H. Eade, M.R.C.S., L.R.C.P. Edin., to the Eastern District.

Hay Union.—Charles S. Clouston, M.B. Edin., M.C. Edin., to the Radnorshire District.

Hemel Hempstead Union.—Robert R. Merry, L.R.C.P., M.R.C.S.E., to the Box Moor District.

Plomesgate Union.—Thomas L. Place, M.R.C.S.E., L.S.A., to the Orford District.

Dr. Barnes's Lectures on Obstetric Operations.—We are glad to hear that these lectures, which commanded so much attention when they first appeared in our columns, will shortly be published in a volume, with corrections and additions by Dr. Barnes, and some new illustrations.

Dr. Gedge, of Bury St. Edmund's, has been appointed Superintendent of the Medical Staff in Sir S. Baker's expedition to Lake Nyanza.

We understand that Mr. Jonathan Hutchinson has been elected to the editorship of the *British Medical Journal*.

Glasgow and St. Andrews Universities.—Dr. Neil Arnott has bestowed the munificent donation of £1000 on each of the Universities of Glasgow and St. Andrews, for the endowment of scholarships in connexion with experimental physics or natural philosophy. Dr. Arnott had previously given a similar donation to the Universities of Aberdeen and Edinburgh. He also lately placed at the disposal of the Senate of the University of London the sum of £2000, to found a scientific scholarship in that University. Mrs. Arnott some time ago gave £2000 for scholarships in natural philosophy to two ladies' colleges in London.

"Honorary" Medical Services.—The Governors of the Royal General Dispensary, having experienced considerable difficulty in procuring the services of a sufficient Medical staff under the "honorary" system, have adopted the paying principle. It has been determined to reduce the staff to two Physicians and two Surgeons, and to pay an honorarium of £40 per annum to each. We hear of several Hospitals and Dispensaries in which it has been found impossible to procure the services of "honorary" Physicians, and the offices consequently remain vacant; and in one of the suburban Dispensaries, extending over a large and populous neighbourhood, three district Medical officers have been required for a long time, and cannot be obtained. The offer of a suitable honorarium would probably procure the required service in all these cases.

Promotion of Deputy-Inspectors of Hospitals, etc.—At the Court at Osborne, on the 7th inst., the following memorial from the Lords Commissioners of the Admiralty was read:—"Whereas we have had under our consideration the rule laid down by your Majesty's Order in Council of May 13, 1859, respecting the qualifications required for the promotion of Deputy Inspectors-General of Hospitals and Fleets to the rank of Inspectors-General of Hospitals and Fleets, which is in our opinion not sufficiently stringent, as it admits of the promotion of Deputy-Inspectors without any service as such, either in a Hospital or fleet; and whereas we consider that service in a foreign Hospital or fleet is essential as a qualification for the promotion of such officers: We humbly beg that your Majesty will be graciously pleased, by your Order in Council, to direct that for the future no Deputy Inspector-General of Hospitals and Fleets shall be promoted to the rank of Inspector-General of Hospitals and Fleets unless he shall have served five years as a Deputy-Inspector, during three years of which period he shall have been in charge of a foreign Hospital or of a fleet or squadron." Her Majesty, having taken the said memorial into consideration, was pleased, by and with the advice of her Privy Council, to approve of what is therein proposed; and the Right Honourable the Lords Commissioners of the Admiralty are to give the necessary directions herein accordingly.

The Medical Club.—This Club, begun in 1866, has been established now for some months at No. 9, Spring-gardens. Amongst other means of bringing the members together, a monthly dinner is held at the club-house, the object of the management being to promote intercourse and friendly feeling in the Profession. On Wednesday evening the last dinner of the present season was given, Dr. Lory Marsh in the chair. The chairman took occasion to refer to the history of the club, which he has been mainly instrumental in founding, showing how it had gradually increased until at present it numbers about 700 members. He pointed out that whilst the most ostensible purpose of the club was to be a place of reunion and social fellowship for the Profession, there was another and still more important use which it was hoped that it would subserve. He trusted that it would, by assisting to unite the voice of Medical men, make that voice more clearly and practically heard by the public, and especially in the Councils of the State; so that, in future, questions of sanitary importance may not be settled by legislation until they have been fully discussed and a scientific judgment formed upon them by those who are best qualified to draw sound conclusions on such subjects. This aim we believe to be a very legitimate and excellent one, and we are glad that the Medical Club keeps it in view. There can be no doubt that at a time when such matters as vaccination, health of towns, a new Medical Act, etc., are being brought forward, it is highly necessary that we should have the opinion of the skilled and experienced, and any institution which helps to elicit the expression of that opinion deserves to be supported and encouraged.

PRESENTATION.—At Fraserburg, Cape of Good Hope, Dr. John Brown, Government Surgeon, and Justice of the Peace for the district of Fraserburg, was, on the occasion of his marriage, presented by his friends in the village with a handsome silver centre piece, as a mark of the regard and esteem he has gained during his residence of five years amongst them.

THE SUEZ CANAL.—In his annual report on the sanitary condition of the population concerned in this undertaking, M. Aubert-Roche states that this is most satisfactory, the mortality, except in the year of the cholera, having been maintained as low as 1 per cent, while in France it is 2·40 per cent. He points out the great increase of European population that is taking place. In 1859 the population of the isthmus amounted only to 150 persons, of whom only 25 were Europeans. Last year there were 34,258 individuals, of whom 16,010 were Europeans, and 18,248 *indigènes*, and, at the present time, there are 42,400 inhabitants, of whom 22,823 are Europeans. During his ten years of Medical inspection public health has been constantly improving; but this has been brought about by a great sacrifice of Medical officers, for of 11 *chefs de service* who have taken part in the enterprise only 5 survive.—*Union Méd.*, Aug. 17.

PEENASH.—The affection termed "Peenash," or maggots in the nose, is not unfrequently seen at Joudpoor. As a rule, persons so afflicted will be found to have suffered from syphilitic ulceration. In some instances, however, the primary condition is scrofulous inflammation, or other affection of the nasal mucous membrane. In the advanced stages, the disease is one of the most disgusting and loathsome coming under observation. There is constant discharge of offensive pus, and occasional epistaxis, while the bridge of the nose gradually becomes depressed. There is also much suffering from the movement of the maggots in the ethmoid cells. These cases terminate sometimes rapidly by fatal meningitis; at others the patient dies apparently worn out by suffering and debility. This latter result most frequently occurs where syphilitic cachexia is also present. The worms, which may be seen constantly crawling from the nostrils, are exactly similar to those observed in superficial ulcers, and are doubtless the products of the larvæ of the common fly. The latter, with its well-known pertinacity, will attack any exposed parts, whether nose, ears, or eyes, from which an animal discharge issues. And when the dirty habits, and almost insensibility to flies, of the lower order of natives are recollected, we can readily imagine how the larvæ are deposited within the nostrils. We have all doubtless seen natives walking about with inflamed eyes, not even troubling themselves to brush the flies away, which swarm round the eyelids. This is especially the case with children, who not unfrequently suffer from Peenash. Similarly, I have occasionally met with maggots in the ear, after otitis and perforation of the tympanum. "Peenash" is, indeed, exactly the affection so frequently seen in the nose of the camel. The piece of wood passing through the nostrils, to which the driving string is attached, excites inflammation; discharge ensues, and flies are attracted. The best treatment both for camels and human beings is injection with black wash, and, in the case of the latter, good living and tonics. Unless the disease is very far advanced, it is readily cured by these means.—*Marwar, the Land of Death, by W. J. Moore, of the Political Agency, Joudpoor.*

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

N.—In Brodie's autobiography.

Mr. Macnamara.—Received with thanks.

Inquirer.—Dr. Heslop's pamphlet on "The Realities of Medical Attendance on the Sick Children of the Poor in Large Towns" is published by Longmans. It is an able and instructive production.

A QUESTION TO US ALL.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—At the risk of being mistaken, I shall excogitate the case of Smith (tried lately before Chief Justice Bovill), as one of a kick on the female's external generative organs. I only know it from the *Pall-mall Gazette* report of a few lines. I would ask, in reference to it, whether the legal, the Medical, or the public mind most demands instruction in what is termed State Medicine. We have in Smith's trial a proof that ignorance in State Medicine is not the appanage of a Medical witness *ex necessitate rei*, which seems to be the opinion of certain members of our Profession for whom I have much, if not the highest respect, and of certain lawyers, editors, or anonymous journalists, for whom I have none, since I know of no claim that the first have when known to pronounce upon the subject of our Profession's ability or information, general or technical, nor why their opinion of us in State Medicine should have the slightest weight with us; and the latter, as anonymous, clearly not entitled to notice at all, whatever be the number of "columns" they can put in motion for or against us.

It seems that in Smith's case the woman had a wound in the labium that "would contain an egg," and withal the plea of an injury caused by a fall down a stair got free play, and an acquittal was the result. Medical witnesses are told that they appear as advocates, not as witnesses. I don't doubt it; it is too true. But whatever be the causes that lead to them doing so on occasion, I venture to say no Medical man would or could have appeared as an advocate of the opinion that a wound, such as in the victim in this case, was caused by a fall down stairs. That demands legal development of the buccinator muscle.

The whole subject of our relations to State Medicine calls for investigation, but assuredly it is rarely the fault of Medical men when failures of justice arise. Whoever be to blame, it is not they. I have studied our cases in Medico-legal evidence in comparison with those of other nations, and maintain that the ordinary English Medical man in criminal trials knows his work better than any other professional man in his country similarly called on. If a reader wishes to see a model report in a Medico-legal case, let him turn to that of the "Waterloo-bridge murder" remains. That was written by a gentleman, an ordinary member of the Profession, manifestly by a man of talents, these by no means common, quite an unknown man to the Profession in general, yet well enough known in London. I venture to state that in all Europe no better or more thorough specimen of a "report" could be got, and yet we are told that only certain specially educated and trained men can write "reports." I might quote Casper, of Berlin, on this case. The chief upholder of the opposite belief could not have written the Waterloo report for his life, even if he had had the anatomical knowledge. I claim that Mr. Painter is not a marvellous exception, and he himself, I presume, would be the first to allow that, splendid as his report was, it was not an exceptional exercise.

By all means, say I, let us see to putting evidence completely before the Bench, but do so properly. Remedy our defect as it ought to be. Let it be an understood duty that each man on entering the Profession knows he may be called on to give Medical evidence. Erect a separate class, alone expected to give evidence, and what would be the result? Those at present who take no interest in Medico-legal questions, or who cannot, have their consciences at once salved. Those of us, like Mr. Painter, who do, are cut out and relegated to an inferior rank, if, indeed, of any rank at all. Permit me to state that, however valuable University or watering-place retirement may be for criticism, it by no means follows that the same is equally conducive to practical life. I would fain see our chief advisers on State Medicine to-day put in charge of a case of infanticide, and then——

I am, &c. L. A.

Non-restraint.—Dr. Gardner Hill is wrong in supposing that there is no answer to the statements made in his letters to the *Standard*. We shall show him next week that there is a full and sufficient answer, and one that will do justice to the memory of a good and great man.

Queen's College, Birmingham.—A governor of the college has issued an address to the patrons and friends of the institution. He insists that the college has been reduced to its present low condition in consequence of its not embracing all branches of literature, science, and art; that it is necessary for the welfare of the institution that it should embrace all these branches. The "governor" dwells upon the necessity of a better system of management, and urges the propriety of calling in the aid of Mr. Sands Cox, who was very long a most efficient member of the Council. He also advocates the admission of the representatives of the press to the meetings of the governors.

CARMICHAEL PRIZES, MOTTOES, AND ENVELOPES.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Assuming that it is your province, as a Medical journalist, to expose flagrant abuses relating especially to such an important matter as the adjudication of prizes, I take the liberty of directing your attention to the following, to which I trust you will give publicity. If Dr. Mapother had not stated in his preface "that he studiously endeavoured to keep the authorship of his essay unknown," I should not have troubled you with this communication, but he blazons forth his name in the story of the widow's son (page 77) as plainly as if he had written it in full; the history is far better known in Dublin than the particulars of Mr. Carmichael's will. Besides this, he constantly tells his three colleagues, the adjudicators, that he lives in Dublin (p. 155), that of this city; our country (p. 42) extended to us; from these parts of the United Kingdom (p. 198), the Queen's University in this country (p. 9); a leader in Dublin (p. 45), Dublin people (p. 46), in Dublin (p. 52); death-rates in Dublin, Fitzwilliam's-square, Townsend-street (p. 103); through the streets of Dublin at present a fellow stealthily sells obscene prints, etc. (p. 109); in Ireland, however (p. 111); Surgical Society (p. 183); that (p. 127) in Dublin Hospitals have been blamed; in Dublin similar frauds exist, etc. (p. 134); prostitution is marked by great effrontery in Dublin (p. 145); from the poorhouses in Dublin (p. 153); the most popular of which issues from the Dublin press (p. 150); that of the College of Surgeons (p. 160); analogous bodies in Dublin (p. 162); under the visitation of the Royal College of Surgeons, Ireland, examiners adopted (p. 199); the College of Surgeons frequently, as if the Dublin College were the only College of Surgeons. But hear this *placebo* to his own college and to his three colleagues, the adjudicators (p. 199):—"To avoid repetition it seemed most suitable that any remarks on the management of corporate bodies should be made specially of one, and that which it was most natural to select was the Irish College of Surgeons. Many of its rules which could only be talked of in terms of praise, are not commented upon, and some others are censured" (I fail to find the censure), "but it must not be interpreted from such criticisms that disrespect is intended." In speaking of the importance of anatomy, Dr. Mapother says—"It is a common thing for those who get into practice by the tonting and toadying plan to decry the demonstrator or teacher of anatomy. The examples of the Hunters, Baillie, Cooper, Brodie, Colles, Crampton, Cussack, Adams, Hargrave, Power, Mayne, and many others might be readily adduced to abash such detractors." Out of this list of Irishmen whose names were never heard of out of Dublin as anatomists, three, Messrs. Adams, Colles, and Hargrave, were Dr. Mapother's colleagues on the Council, and one of these, Mr. Hargrave, was an adjudicator (p. 147). You will surely agree with me that after such disclosures, mottoes and sealed envelopes are useless?

29, Beaufort-street, Chelsea, Aug. 10. I am, &c. EDWARDS CRISP.

Beray Defence Fund.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The Committee will be obliged by your insertion of the following list of subscriptions:—Amount acknowledged, £33 2s.; Dr. Chowne, £1 1s.; N. H. Clifton, Esq. (second donation), £1 1s.; Dr. Head (second donation), £1 1s. The list will close on September 8. Further subscriptions will be gladly received by H. Wooleott, Esq., Treasurer, Charing-cross Hospital, or by Yours, &c. E. Sandwell, L.R.C.P.E., M.R.C.S.,
August 25. Hon. Sec.

The *Ere Impériale* of Tarbes relates that a military Surgeon of the Camp of Lannemezan was nearly falling a victim last week to the vindictive spite of a soldier, who, having feigned illness, had been dismissed from the Hospital by the Medical attendant on the discovery of the deception. The man soon after sought out the Surgeon, and, finding him in a tent, stabbed him violently in the stomach with a carpenter's compass. The assailant was immediately arrested. The wound is not dangerous.

St. George's Hospital.—Sir Everard Home, Bart., filled the office of "Master" of the Royal College of Surgeons in 1813, and "President" in 1821; his *opus magnum* on Comparative Anatomy is generally considered to have been the production of his brother-in-law, John Hunter.

Dr. McS. (Liverpool).—The name of Lobel is familiar to all botanists; from it a genus of plants received the appellation of "Lobelia." The portrait of Matthias Lobel, who died in 1615, is scarce.

L.S.A., Islington.—Yes, the gentleman who at the time mentioned by you filled the President's chair at the College of Surgeons is a Licentiate of the Society of Apothecaries. Professor Owen, F.R.S., is also a licentiate, but not the other gentleman mentioned.

A Pupil, Manchester.—There will be an examination in arts, etc., at the Hall in September, at the College in December; if you pass the former, you could commence your professional studies the following October. Consult our "Students' Number."

H. S.—You will find some account of it in Nightingale's "London and Middlesex," vol. iii., p. 538, where it is also stated that Edmund Phillips had £40 4s. 8d. for embalming the body of Thomas Sutton, the founder of the Charterhouse.

R. M. B. Coll.—The late Mr. Behnes, the eminent sculptor, executed a very good bust of Mr. Propert.

COMMUNICATIONS have been received from—

Rev. T. H. Cole; Mr. Newell Martin; Mr. Macnamara; Mr. J. H. Smith; Mr. W. H. Day; Mr. Bellamy; Dr. B. W. Richardson; Dr. Day; Mr. Samuel Oldham; Dr. Churchill; Mr. Jonathan Hutchinson; Mr. John Chatto; Mr. J. F. Clarke; Mr. Bacot; Dr. Whitby; Dr. J. A. Grant; Dr. Paterson; Dr. Lynes; Mr. J. B. Holloway; Dr. John Brown; Professor Listea; Dr. Hope; Ignotus; Dr. Stirling; Mr. Bewley; Mr. James; Mr. Bryant; Mr. Sanowell; Messrs. E. B. Treat and Co.

BOOKS RECEIVED—

Report of the Tewkesbury Rural Hospital—Carroll on Hygiene—Gouley on External Perineal Urethrotomy—New York Medical Journal, August—Realities of Medical Attendance on the Sick Children of the Poor, by Dr. Heslop—Gamgee on Fresh-meat Preservation—Journal of the Gynæcological Society of Boston, July and August—British Journal of Dental Science, April—Howard's Plain Rules for the Restoration of Persons apparently Dead from Drowning.

NEWSPAPERS RECEIVED—

L'Union Médicale—Gazette Hebdomadaire—Gazette des Hôpitaux—New York Medical Gazette—Tribune Médicale—The Yorkshire Post—Medical Press and Circular.

VITAL STATISTICS OF LONDON.

Week ending Saturday, August 21, 1869.

BIRTHS.

Births of Boys, 1065; Girls, 1069; Total, 2134.
Average of 10 corresponding weeks, 1859-68, 1856·8.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	764	763	1527
Average of the ten years 1858-67	682·1	648·6	1330·7
Average corrected to increased population	...	...	1464
Deaths of people above 90	...	...	...

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-cough.	Typhus.	Diarrhœa.	Cholera.
West	463388	...	2	8	...	8	5	40	...
North	618210	2	4	21	3	14	10	56	...
Central	378058	...	3	26	...	8	4	29	...
East	571158	...	8	50	...	17	9	49	...
South	773175	3	4	27	2	13	7	90	...
Total	2803989	5	21	132	5	60	35	264	...

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	30·163 in.
Mean temperature	58·7
Highest point of thermometer	75·1
Lowest point of thermometer	46·2
Mean dew-point temperature	50·4
General direction of wind	Variable.
Whole amount of rain in the week	0·01

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, August 21, 1869, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the year 1869.	Persons to an Acre. (1869.)	Births Registered during the week ending Aug. 21.	Deaths. Corrected Average Weekly Number.	Deaths. Registered during the week ending Aug. 21.	Temperature of Air (Fahr.) Highest during the Week.	Temperature of Air (Fahr.) Lowest during the Week.	Temperature of Air (Fahr.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3170754	40·7	2134	1462	1527	75·1	46·2	58·7	0·01	1
Bristol (City)	169423	36·1	141	76	*91	73·1	41·4	57·8	0·01	1
Birmingham (Boro')	360846	46·1	277	175	133	74·7	46·1	58·6	0·00	0
Liverpool (Boro')	509052	99·7	393	295	303	68·0	52·2	58·1	0·05	5
Manchester (City)	370892	82·7	255	210	*203	...	...	...	...	...
Salford (Borough)	119350	23·1	105	60	67	73·5	44·9	57·6	0·05	5
Sheffield (Borough)	239752	10·5	162	126	113	73·8	47·0	58·9	0·00	0
Bradford (Borough)	138522	21·0	109	71	66	69·5	49·0	57·9	0·00	0
Leeds (Borough)	253110	11·7	152	129	132	72·0	50·0	58·7	0·02	2
Hull (Borough)	126682	35·6	111	59	58	75·0	38·0	55·8	0·03	3
Nwestl-on-Tyne, do.	130503	24·5	74	69	62	...	...	...	...	...
Edinburgh (City)	178002	40·2	105	86	94	74·7	43·0	58·1	0·10	10
Glasgow (City)	458937	90·6	312	268	201	71·1	37·7	57·3	0·01	1
Dublin (City, etc.†)	320762	32·9	158	158	109	74·5	38·3	57·9	0·02	2
Total of 14 large Towns	6546587	35·5	4428	3244	3159	75·1	37·7	58·0	0·03	3
Paris (City)	1889842	...	...	...	814 Week ending Aug. 14.	...	...	...	...	...
Vienna (City)	(1863) 560000	...	...	...	295	...	...	Week ending Aug. 14. (60·1)	...	...

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 30·163 in. The barometrical reading increased from 30·06 in. at the beginning of the week to 30·22 in. on Tuesday, August 17. The general direction of the wind was variable.

Note.—The population of Cities and Boroughs in 1869 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous.

* The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.
† Inclusive of some suburbs.

APPOINTMENTS FOR THE WEEK.

August 28. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 1½ p.m.

30. Monday.

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 1½ p.m.; St. Peter's Hospital for Stone, 2½ p.m.

31. Tuesday.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.

September 1. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1¼ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.

2. Thursday.

Operations at St. George's, 1 p.m. Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

3. Friday.

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

ORIGINAL LECTURES.

CLINICAL LECTURE ON PNEUMONIA,

DELIVERED AT WESTMINSTER HOSPITAL,

By OCTAVIUS STURGES, M.D.,

Assistant-Physician to the Hospital.

THERE is a woman in Tillard Ward who was admitted under my care, by the kindness of Dr. Radcliffe, with all the physical signs of consolidation of the left lung. From the history of the case it would appear that the solidification was of recent origin, and it endured but for a short time after her admission —the lung, in fact, was passing through that stage which is described as hepatisation; and, on the subsidence of this, resolution took place, and gradual recovery, or at least gradual return to the same state of health as the patient had enjoyed previous to the attack. The case deserves notice if only from its furnishing, in a very marked and characteristic manner, many of those physical signs which you read descriptions of in books, but which it is unnecessary to say that books can never teach. Here was a typical case of pneumonia, and, although not coming under observation until consolidation was established, it exhibited in a very complete way the physical signs proper to that stage, as well as those which later announce that resolution is taking place.

But when we speak of this woman as exemplifying a certain altered condition of lung, are we justified thence in ascribing to her a certain disease? In applying to this case, or to any other, the word "pneumonia," we signify more than the mere sounds we have been able to elicit from the chest or the mere physical state of lung which those sounds indicate. We signify our own theory deduced from those sounds—our own explanation of the meaning of the consolidation, and of the way in which it has been brought about. You infer that the lung is solid, and you thence conclude that it is inflamed. How? I leave out of the case, of course, mistakes that may arise from an error in physical diagnosis. Assuming the lung to be actually hepatised, how do you conclude thence that it is inflamed?

Now, you may say, if you please, that hepatisation, solidification of the lung, is a sufficient proof of its inflammation, be its accompaniments what they may; but, observe, the mere use of this word adds nothing to our information. If it can be shown, as it surely can, that the lung becomes solid in all sorts of ways, and with every variety of symptoms, its becoming so in each particular case must have a cause of its own. The mere fact of its being solid, taken by itself, is a proof of nothing, or at least of no particular thing. You will grant, then, that there must be some objective signs to guide us apart from these physical indications. Pneumonia must then have a certain history; it must answer to a certain clinical description; the physical changes in the lung must give rise to corresponding changes in the man or the woman who is the subject of them.

And accordingly, as you are aware, the outward features of the disease have their description in the books, no less than the auscultatory signs. We are told that fever runs high, that the skin is hot, the pulse frequent, that rigors occur, and delirium is not uncommon. Now, if we apply this description to the patient I am speaking of, we shall find most of these things wanting. The pulse was never frequent, the skin was never hot, there was nothing of what used to be called high fever—nothing, in fact, in her general symptoms that the woman *ought* to have had in order to fulfil the *rôle* of pneumonia. Yet we all said that she had that disease from the circumstances that one lung was solid and the sputa bloody. And I would venture to say that had you to describe pneumonia from your own observation of it in the wards here in London, you would never, by ever so long an experience, extract such a definition for it as the one you find in the books. You would say these physical signs occur in association with all sorts of symptoms. You find the definition, however, in the books, and so you strive to bring every case where the physical signs correspond into some sort of general parallelism with the printed description. More than this, when you meet with an instance in which these physical signs—crepitation and tubular respiration and the like—occur in connexion with this fever and rigors and the rest, you regard it as a typical instance of what pneumonia ought to be, while the others are "latent," or "consecutive," or "congestive." Such is, in fact, the teaching of the schools, insomuch that we have all a notion of this model pneumonia, though after a time we get accustomed to the disappointment of finding it seldom true to its model, and while still retaining a lively faith that a lung hepatised is a lung inflamed; we learn by habit to associate that state with a great variety of constitutional symptoms.

Thus the word pneumonia is made to refer exclusively to the condition of the lung, not at all to the condition of the patient. Nevertheless, as being an inflammation, it is thought to be appropriately manifested by symptoms of fever, which is the outward and visible sign of inflammation. We prefer to see it, therefore, with this accompaniment. As a fact, however, it occurs with all sorts of accompaniments, and this fever, etc., often fail to make their appearance when most we want them to complete the ideal we have regarding the disease. This is to be regretted. Attribute it to the asthenic type which inflammation takes in London at the present day, to "a change of type in disease;" only remember that engorgement of the lung going on to hepatisation signifies inflammation, and the various ways in which that inflammation shows itself must be described by suitable adjectives, of which here is no lack, such as latent, consecutive, and the like.

Such, I take it, is a fair description of the view held with regard to pneumonia. It is objectionable, I venture to think, on two grounds. 1st. Because it forces into relationship a number of cases differing in their antecedents, and likely to differ in their sequel, and where certain physical conditions, though grossly they may be similar, can by no probable supposition be regarded as arising from a common cause. 2nd. That having thus done violence to all clinical notions of grouping, it fastens upon this protean disease a name which implies inflammation. It thus at one and the same time misses the only thing that makes names useful in disease, and hits upon the very thing which makes them dangerous and delusive. It throws together a number of subjects alike only in respect of one of their symptoms, and to that symptom, which it mistakes for the disease itself, it attaches a metaphorical expression of no precise meaning. Is it wise to fetter ourselves under the tyranny of names, and of such names? Nor is this all, for although, as I have said, pneumonia is usually named chiefly from its physical signs, observers are by no means agreed as to what these signs should be. Some will regard the minute crackling crepitus, which has been so often described, as pathognomonic of vesicular inflammation, insomuch that when the lung passes from that condition back again to health, as it often does, they will speak of the case as one in which pneumonia has been arrested, and even ascribe the arrest to some drug they may have been giving. Others, again, while admitting that pneumonia is to be recognised by its proper sounds, will be so anxious to find that proof of it wherever the general symptoms remind them of inflammation in the chest that they will torture almost any sounds into those they want to hear, in order to make their case complete, or they will say that the inflammation is deep-seated, and beyond the reach of the ear.

Were it a question of mere names, it would be time to find fault with this word "pneumonia" when other terms in nosology had been amended—when, for instance, some scientific nomenclature of skin diseases had been attempted. Pneumonia is a better selected word, perhaps, than sycosis or ichthyosis; but to compare a skin disease to the inside of a fig or the scales of a fish, though fanciful enough, at least serves the purpose of bringing like cases together. And so might pneumonia, if we only came to a common understanding as to what we meant by it. If we said it is minute crepitation along with rusty sputum, or it is consolidation of the lung preceded by such and such symptoms, or it is a term in morbid anatomy, meaning that the air-cells are filled with a certain amorphous granular material, we should have a word then, either for the ward or the post-mortem room, which would have its use. Now we say pneumonia is all these things or any of them, or even worse and more hopelessly we say—some say —there is a *tout ensemble* about pneumonia which can deceive no intelligent Practitioner. And what is the result? With great respect for those you will differ, I think one result is the expenditure of a great deal of useless labour in the endeavour, by the accumulation of a large number of cases, to arrive at some conclusion as to the best mode of treating a disease which has never been properly identified. If pneumonia were ever so rigidly defined, it would be difficult enough by this method to obtain a result which should take account of differences of age, of sex, of constitution, of climate, of the extent of lung involved, and, eliminating all these, should determine the precise influence not of treatment in its largest sense, but of giving or withholding beef-tea or certain drugs—difficult enough then; but when at the outset no pains are taken to select cases

—when, as in Dr. Bennett's tables, we are not even told what physical signs were present in each, and only learn enough of the whole to be certain that they comprise every degree of illness—it is practically impossible.

The clinical features of pneumonia, then, being so various, how much should we gain or lose by abandoning that word altogether, and all its associations along with it, and speaking instead of pulmonary hyperæmia? Such a name would at all events express as much as is common to all pneumonias, and would bring them all under one point of view. It would, moreover, involve no theory, and commit us to no more than the bare facts. From a mechanical hindrance to the flow of the blood, or from its own altered constitution, the pulmonary circulation becomes embarrassed, and hyperæmia is the immediate result, this is the first step. Whither that hyperæmia will tend—whether it will lead to a definite rupture or terminate in an exudation of one kind or another—will in each case depend, we may well suppose, upon the degree and nature of the impressing cause. Yet, since we are unable accurately to estimate these conditions, we must be content with observing how in one class of cases hyperæmia is apt to have one result, and in another another—how, for instance, rupture is associated with that stress laid upon the pulmonary circulation in valvular heart disease, and a more general exudation (though still not without real hæmorrhage) with that laid upon it by the presence of poisoned blood. Such is the rule, yet it is not without exceptions. There are instances where heart disease leads to hepatisation, and instances where blood disease produces profuse hæmoptysis. We thus see at the bottom of both these phenomena a common cause at work; we have then to learn from clinical experience in what manner that cause may be expected to develope itself, what particular issue is the most probable in individual cases.

A patient, like this old woman, after long ailing with cough and bronchorrhœa, shall at length be compelled by increasing dyspnœa to abandon the occupation she has for a length of time followed with difficulty. Another, after an hour's exposure to wet or cold, shall thereupon be seized with rigors and stitch and breathlessness. A third, after a similar exposure, shall have profuse hæmoptysis. Local hyperæmia is a common feature in these three cases, and it is shown in each by certain physical signs you are all familiar with. The stress laid upon the lungs in each case will probably, so experience teaches, be relieved in as many ways. It is likely to remain stationary in the first, and to go on to solidification in the second. Likely, yet we can by no means identify those cases that will and those that will not follow this course. There is no pathognomonic sign by which we can predict that the congestion in one instance is the first step towards consolidation, and in the other not.

If we might make a mere diagrammatic description of the matter, which, like all diagrams, should express in the rudest way the rough outline and general shape of what is meant, it would be this:—The lungs become blood-laden owing to some fault in the pulmonary circulation. When thus affected, the issue of this stasis will vary according to the amount of pressure to which the blood is subjected, the greatest amount producing rupture, the next greatest fibrinous exudation, and the last serous infiltration. Any of these results may accrue either from an impediment of a mechanical kind or from a fault of the blood itself. Experience shows, however, that in valvular obstruction and hypertrophy of the heart rupture is more common, and in disease of the blood exudation is more common.

Nevertheless, as both these results flow from a precisely similar cause, the one may take the place of the other—valvular disease may give rise to fibrinous exudation and consolidation, blood disease may give rise to rupture and hæmoptysis. Thus, in 1865 a man was admitted into St. George's Hospital with profuse hæmoptysis, of which, in the event, he died. This bleeding was wholly apart from tuberculisation or any material obstruction. The kidneys, however, were in an advanced stage of granular degeneration—had nearly dwindled away, in fact—and the unpurified blood, thus delayed in the pulmonary vessels, at last ruptured them. The extreme result occurred, instead of the more usual one of fibrinous exudation. Similarly there is a woman now in Tillard Ward with hæmoptysis and albuminuria, in whom the hæmorrhage would appear to depend upon the kidney disease. On the other hand, I might quote numerous instances of hepatisation from heart disease, apart from any hæmorrhage whatever.

Now, you will perhaps say these results, after all, any and all of them, are purely exceptional. Consolidation of the lung is not so conspicuously connected with kidney disease; hæmorrhage is not so frequent in valvular disease as, according to this showing, it would be; on the contrary, people with the extremest valvular obstruction, and people with the extremest degeneration of the kidneys, go on to their death without either one or the other. It is partly an answer to this to make the still wider statement that we can never say beforehand what organ of the body shall first suffer from the secondary effects of any disease. We can only speak of a tendency, and suggest a *modus operandi*: the precise issue will always depend upon the individual, and upon many external accidents quite beyond calculation. It is a more special answer that those changes which tend, as we suppose, to pulmonary hyperæmia, are the work of time, and, as they progress, the system accommodates itself to them.

I would only add that this mode of accounting for the various circumstances under which congestion and consolidation are wont to occur in the lungs must not be pushed too far. No merely mechanical explanation can touch those cases of consolidation which are strictly circumscribed and surrounded by perfectly healthy lung. It is here, if anywhere, that the term inflammation may be justly applied. It is, as I have said, a word of uncertain meaning; it may be used here to denote a process whose causation is equally uncertain, a process in which one small spot becomes a centre of attraction and change, and exhibits in turn hyperæmia, consolidation, and purulent infiltration. For the rest it is best to use terms which shall express *a state* only, and include no theory as to its cause or origin.

And there is, I think, apart from this question of pneumonia, a lesson of far wider application suggested by these considerations. It concerns the danger of mistaking for a real knowledge of disease our too ready christening of certain prominent symptoms. In our eagerness to give names to morbid states, to anticipate others in arriving at a diagnosis, we are apt, especially at the outset of the study of Medicine, to exaggerate the importance of one or more isolated signs of disease, and to look upon these as constituting the disease itself, and supplying an expression for it. By-and-by, when it appears that this expression does not in fact include the whole truth, we venture a little further. Still clinging to the name which our first limited view has suggested, we regard those additional phenomena in the light of complications contradicting, or at least confusing, the others. It is not in this spirit or by the use of such language that we can ever hope to arrive at adequate conceptions of disease.

Nosological terms carry a certain importance, and the accumulation of a number of them upon one individual may seem to imply a certain accuracy, but unless we can discover the mutual relation of symptoms and point to their common source we miss the real object of our search, which must surely be that which lies beneath all such phenomena and indicates their real harmony.

ORIGINAL COMMUNICATIONS.

ON DISEASES OF THE JOINTS CONNECTED WITH PROGRESSIVE LOCOMOTOR ATAXY.

By BENJAMIN BALL,
Professeur-Agrégé at the Paris Faculty of Medicine.

[*Continued from page* 124.]

Case 16.—*Locomotor Ataxy—Arthropathy of the Metacarpo-Phalangeal Articulation of the Left Ring Finger.*

F., aged 47, entered the Hospital of "Incurables" in December, 1868, suffering from locomotor ataxy of a paraplegic form, progressing upwards, the origin of which dates as far back as eleven years. At this date, patient suffered from darting pains accompanied by derangement in the functions of the bladder and of the organs of vision. In 1859 his gait began to get very unsteady. Two seasons passed at the waters of Aix (Savoy) appear to have brought about a decided amelioration; but in 1862 the pains, which had completely disappeared, set up again in a more intense form than ever, and the ataxy invaded the upper limbs together with the muscles of the vertebral column. On admission to the Hospital, the following was his condition:—He was unable to stand. On being raised up by the shoulders, his legs remained inert, and when he attempted to move them, they went in every possible direction. On his eyes being closed, he was unable to distinguish the posture given to his lower limbs;

the same applied to his hands. On being pricked with pins there was a slight sensation of pain, though he was unconscious, when slightly touched, of anything being in contact with his body. He appreciated the difference in the temperature of bodies applied to the surface; there was intermittent strabismus, and from time to time the right eye became, as it were, lost in the internal angle; absence of diplopia; he was much emaciated and extremely pale; could not say that he ever had had syphilis, though he had been treated for this disease; had for long been exposed to cold and damp, and had experienced sundry attacks of subacute rheumatism; has been guilty of excesses with women early in life, but has never had seminal losses. It was in the month of April, 1867, that he suddenly remarked, on waking in the morning, a considerable swelling of the metacarpo-phalangeal articulation of the left ring-finger; the finger increased rapidly in thickness, and yet there was absence both of pain and redness. Fluctuation being perceived, Dr. Paul Horteloup was induced to plunge a trocar into the swelling; this puncture was made in July, 1867, and gave egress to a considerable quantity of pus, which continued to escape from the wound for several days. After the small operation fever set in attended with acute pain; he even avers that he was so ill on this occasion as to make him despair of recovery; nevertheless, at the end of a few weeks all immediate danger had disappeared. The suppuration was very considerable, and the Surgeon extracted from the wound several small fragments of bone; the pains then became less severe, and now they no longer exist.

The following is the present condition of the diseased hand: —It is very much emaciated, with tapering of those portions corresponding to the thumb, the index, and the middle finger; but the ring finger and its metacarpus are prodigiously swollen, resembling elephantiasis, offering a marked contrast with the graceful form of the other fingers, and more especially with the little one, which, owing to the contracted state of the tendon of the flexor muscle, has become atrophied and bent in the form of a hook. The ring finger itself is slightly curved, as regards its last two phalanges, which, however, are a little mobile and capable of flexion at the will of the patient. The length of this finger has become diminished, and at present it scarcely reaches to the level of the articulation of the last two phalanges of the medius. The swelling involves chiefly the first phalanx, which is more than three times its ordinary dimensions, though the second phalanx is also affected, but in a less degree. Condition of third phalanx is normal. The enlargement extends in the direction of the fourth and fifth metacarpal bones on the back as well as on the palmar aspect of the hand, at which latter it stands out in bold relief. The skin is livid and pierced with numerous fistulous openings, whence flows some matter, sero-purulent in its character. Auscultation and percussion of the chest fail to reveal any indication of pulmonary tuberculisation. He does not cough habitually, nor does he expectorate, though, about once a week, he has an obstinate paroxysm of coughing, often very considerable, and which from time to time produces a veritable suffocation without being followed by expectoration. This lasts several minutes, and the patient immediately becomes tranquil (laryngo-bronchial symptom of ataxy). Sometimes also the heart becomes suddenly affected, characterised by palpitations and spasms very painful, but lasting a very short time. There is neither *bruit de souffle* nor any other sign of lesion of the organ (cardiac symptom of ataxy).

Remarks.—It is evident that this curious observation differs in some respects from the type of the disease we have just described. The presence of pus in the diseased articulation is a fact which we have never yet had occasion to notice, but, notwithstanding this, there cannot be a doubt that we have here to do with a case of spinal arthropathy. Besides, it must not be forgotten that we are engaged in the consideration of an affection hitherto little known, and the description of which is necessarily incomplete from a want of a sufficient number of facts to serve as a basis. It is probable that by-and-by we shall be compelled to recognise the existence of two or three different types of spinal arthropathy, offering in several points of view a difference in their evolution, although the starting-point from which they take their origin may be always the same.

Case 17.—*Locomotor Ataxy—Laryngo-bronchial Symptoms—Thoracic Neuralgia—Commencement of Arthropathy of the Head of the Fifth Metacarpus (left).*

This patient is the second of those of whom M. Second-Féréol has spoken in his paper on the laryngo-bronchial symptoms of ataxy. His disease, the origin of which dates further back than sixteen years, is in a very advanced state, and has invaded the upper extremities. There is, besides incontinence of urine, a beginning of genuine paralysis of the lower extremities, certain disorders of muscles leading to the supposition of the existence of spinal epilepsy, thoracic neuralgia of a very unusual form, and a spasmodic cough, frequent in its recurrence, with little or no expectoration, and without any important stethoscopic indications.

Some two or three months ago the head of the fifth metacarpus (left) was observed to become abnormally developed; the patient suffered no pain in the part, and his attention to the increase in its volume was first directed to it by Dr. Féréol. When the fingers are bent, and the fist closed, the tumefaction of the bone is not very apparent, but when the fingers are extended the head of the metacarpus is observed very plainly to form a very remarkable prominence on the back of the hand by the side of that of the fourth metacarpal bone, which is considerably smaller, and above the level of the phalanx of the little finger. There is no crackling noise in the joint, which does not seem distended with liquid, and the movements of which are free. Up to this moment the swelling does not seem to have made great progress, nor greatly to inconvenience the patient.

Remarks.—This observation bears much more directly on the general type of our descriptions of the malady in question than does the preceding one. In the last-mentioned patient we observe the occurrence of an indolent swelling of the articulation which follows a regular course without giving rise to general disturbance of the system, and without inconveniencing the sufferer in the least degree, owing no doubt to the smallness of the articulation affected. The case would have been otherwise had the shoulder or the knee-joint been the seat of the tumefaction. We may regard it as an established fact that affections of the joints originating in spinal disorder may attack the small articulations of the body equally with the large. This is a new feature of resemblance between it and rheumatism, and consequently a new cause of error against which it becomes the Practitioner to be on his guard. It is for this reason that we have deemed it necessary to append these observations to our paper.

Case 18.—*Progressive Locomotor Ataxy of the Hip-joint.*

Dr. Siredey has brought under our notice a case of locomotor ataxy accompanied by an affection of the hip-joint. Later we shall publish this case *in extenso*; at present we simply mention the fact.

The cases related in the foregoing observations are evidently insufficient to enable us to give a complete description of the affection which forms the subject of our study, but we can now specify its leading features, especially in a clinical point of view.

I. Symptoms—Progress—Duration—Termination.

It is generally towards the end of the first period of locomotor ataxy, and at the beginning of the second, that the affections of the joints make their appearance. The disease, characterised by darting pains up to this point, begins now to manifest itself by incoordination in the movements. It is at this moment that we see for the first time disorders of the joints. This, however, is not always the case, for in the more serious cases—those, for example, where the local lesions have appeared in their most intense form—the disease of the joints is developed at a period when the locomotor ataxy is very far advanced.(a)

The onset in all the cases observed up to the present moment has been sudden, and without premonitory symptoms, and, according to Dr. Charcot, there is almost always absence of fever, of redness, and of pain. Such is also the result of our own observations. But as every general rule has its exceptions, we also find it here, for in two cases, at least,(b) we have observed a pretty sharp reaction during the first period of the malady. Besides, it must be borne in mind that in persons labouring under locomotor ataxy there is acceleration of the pulse, independent of all febrile movement.(c) The observer who happens not to take notice of this peculiarity might easily be led into error.

A general swelling of the entire member usually signalises the commencement of the malady. The tumefaction is always more marked at a point corresponding with the level of the diseased joint, and is due to a considerable effusion into the synovial cavity. The neighbouring parts are invariably the seat of a puffiness which does not resemble ordinary œdema,

(a) Obs. 2, 3, 12. (b) Obs. 2, 11.

(c) Obs. This fact was noticed for the first time by M. Charcot, who observed it among ataxic patients of the Salpêtrière. It is alluded to several times in the observations which we have recorded.

for instead of yielding under pressure of the finger it offers a certain resistance to it. This condition does not continue long, and the member soon returns to its normal dimensions. It is, however, at a point corresponding with the level of the articulation attacked that the pathological phenomena are longest in making their disappearance—indeed, we often see that they leave behind them permanent alterations of the extremities of the bones which enter into the formation of the joints.

The lesions inflicted on the hard parts in the neighbourhood of the affected joints are best expressed by the opposing terms hypertrophy and atrophy. It is especially when the affection attacks the knee-joint that it assumes the double form implied in these two terms. While the volume of the bones, as well as the transverse diameter of the patella, undergoes a manifest increase in size—while the femur and the tibia become the seat of voluminous abnormal development,(d) the articular extremities become rapidly atrophied, as is shown in their partial dislocations and their preternatural mobility.(e) It is otherwise as regards the shoulder; here atrophy seems the predominating lesion, for in the three observations which we possess the head of the humerus has presented an evident loss of substance. This lesion, discovered after death in one of the cases, was manifested in the two others by an irreducible dislocation and partial destruction of the articular surfaces. Whatever the seat of these phenomena may be, we observe that they pursue a very rapid course; a few days suffice to bring about irreparable disorders in the articulations compromised. In the mildest cases there remain invariably cracking sounds, which are very evident on passive movement of the joint, and which go to prove that there is erosion of the articular surfaces.

It is perhaps interesting to note here that, in a third of the cases (6 in 18), visceral disturbances, associated with locomotor ataxy, and depending apparently on lesion of the sympathetic nerve, exhibit themselves simultaneously with the articular disease. Thus, in two of our patients we observed gastric attacks attended with considerable pain, to which symptoms M. Charcot was the first to direct attention. In two others he found certain phenomena in connexion with the larynx, in reference to which our excellent friend M. Second-Féréol has just published some interesting observations. We must confine ourselves to a simple notice of this coincidence, without seeking to discover in it the relation of cause and effect. Perhaps we shall one day seize the link which unites these two orders of phenomena, for undoubtedly they present a certain degree of relationship.

Do not, however, let us anticipate theoretical considerations, which will fall to be examined by-and-by.

Let us now speak of the seat of the disease, which seems somewhat variable.

The eighteen cases which we have brought together may be localised in the following way:—

The two knees in the same degree	1 case
Right knee (predominance)	5 cases
Left knee	5 „
Right shoulder	3 „
Left shoulder	0 „
Elbow	1 case
Hip-joint	1 „
Metacarpo-phalangeal joints	2 cases

The knee is therefore certainly the seat of predilection. This predisposition doubtless arises from the fatigue which the knee-joint is called upon to undergo in walking, for it is the joint which the patient most generally uses which seems to be the most exposed to this species of arthropathy. In proof of this, it may be noticed that the shoulder has been the seat of the disease in three cases, and that in each case the affection has appeared in the right arm.

This peculiar privilege is owing no doubt to the continual movements to which the right arm is exposed, while the left one, which is generally less employed, becomes less exposed to accidents such as we have described.

The same cannot be said regarding the knees, the movements of which are equal during walking, and consequently these joints must be exposed to disease in an equal degree. It is probably for this reason that the two knees are simultaneously affected in most cases.

We observe almost always a marked predominance of the symptoms on one side; in a single case both knees were the seat of very advanced disorganisation. To sum up, in two cases(f) the malady occupied one single knee-joint. We see from this that nine times out of eleven the two knees have been attacked simultaneously—a very important point to notice, so far as diagnosis is concerned.

We have already observed that the progress and evolution of the disease did not present symptoms absolutely identical as regards the upper and the lower extremities; but no rule can be established with reference to this point until a more considerable number of cases shall have come under our notice. We cannot assign any certain duration to the affection which occupies our attention. Limited to a few weeks in slight cases, it may last for months in those of a more severe kind; sometimes even the morbid process seems to be prolonged indefinitely. Besides, permanent deformities are almost always the consequence.

Affections of the articulations in persons labouring under locomotor ataxy may, however, terminate in recovery, as we have already related certain instances; but in such cases we must always be on the look-out for a relapse.

In the patient who forms the subject of our first observation a fall, a blow on the joint (and we know how very common such accidents are among ataxic patients), sufficed to give rise on the instant to a new series of morbid phenomena after recovery from the first.

(*To be continued.*)

(d) Obs. 2, 3, 5, 12. (e) Obs. 1, 2, *et passim*. (f) Obs. 11, 12.

ON THE CONDITION OF THE SEMINAL SECRETION IN DISEASE.

By M. LIÉGEOIS,
Surgeon of the Hôpital du Midi, Paris.

(*Continued from page* 248.)

Influence of Acute and Chronic Diseases.

We are not rich in our discoveries as concerns acute diseases. Godart alone has touched the question. "I have found," says he, "spermatic filaments in the vesicles of subjects dead from pneumonia, pleurisy, gangrene of the lungs, typhoid fever, Bright's disease, and peritonitis. Of ten individuals who had been ill from pneumonia, variola, pleurisy, and scarlatina, and examined by myself, I have found no change whatever in the spermatic secretion. It is more than probable, therefore, that azoospermia, in consequence of an acute disease, if it exists at all, is only temporary. In persons advanced in age it is otherwise. Of 25 subjects dead from acute diseases in the wards of M. Duplay, spermatozoa were absent in 4—16 per cent. Of 29 examined by M. Dieu, spermatozoa were absent in 13—45 per cent. These observations prove consequently that acute diseases do influence the seminal secretion in old age; and if we add that the men under observation of M. Dieu were for the most part older than those observed by M. Duplay, we may conclude that this influence is the more strongly felt as the individual is more advanced in age.

Authors agree but little as to the influence which chronic diseases exercise upon the composition of the semen, that of phthisis especially. Dr. Davy having examined the liquid taken from the testicles of twelve subjects dead from phthisis, and finding spermatozoa only in a few instances in the vas deferens and the seminal vesicles, but never in the parenchyma of the gland, concludes that chronic diseases, terminating fatally, interrupt the seminal secretion. In Rayer's work of 1842, which resumes the researches made upon phthisis, exists this short phrase:—"The seminal vesicles of subjects dead from this affection contain few or no spermatic filaments." Curling speaks of the testicles of persons dead from pulmonary consumption as being always soft and deprived of elasticity; their parenchyma appears little vascular, pale, and shrunken, the small quantity of fluid which they contain is deprived of spermatic animalculæ. Godart says spermatozoa are absent in individuals who have become consumptive at an age corresponding to the establishment of the spermatic secretion, but they persist if the disease has commenced after puberty. In a patient dead from phthisis at the St. Louis Hospital, and the autopsy practised by M. Gosselin, spermatozoa were found in abundance. I myself have had but once the opportunity to examine the semen of a subject dead from consumption. This was a man, aged 30, who had been brought into my wards by mistake. He died the next day. Cavities in both lungs, and tubercular infiltrations of the different organs, especially the kidneys, were found at the autopsy. The testicles were soft and of small size; the seminal vesicles and the vas deferens contained spermatozoa, not in large quantity, it is true, yet from 10 to 30 under each preparation. They were absent in the seminiferous tubes and the epidydimis. I believe, there-

fore, taking Godart's observations, the one of M. Gosselin and my own, that chronic diseases—in the adult, at least—do not destroy the spermatic secretion, as has been asserted by certain authors.

But here, too, as with acute diseases, it is otherwise with patients advanced in age. M. Duplay's examinations of 26 subjects dead from chronic affections give 10, or 38 per cent., with absence of spermatic filaments. M. Dieu, out of 76 subjects, notes this absence in 28, or 37 per cent.

Comparing the results of the adult with those obtained from persons advanced in years, one might object, and say the azoospermia in these latter is due to their old age. Now, if this were true, we should find the same proportion for acute and chronic diseases. But this, if we question the figures above, does not hold good, for out of 69 old men dead from acute diseases we have 58 per cent. presenting spermatic filaments, whereas in 62 dead from chronic affections a smaller number, only 35 per cent., possess them.

It is evident, therefore, that the longer a disease lasts the more sure is the destruction of the spermatic function in old age, which latter in itself is a predisposing cause. It is thus that we can explain the apparent contradictory results obtained by MM. Duplay and Dieu (results which refer to old men in disease) and my own, which refer to the same class of subjects in health.

Individuals suffering from constitutional syphilis or those of a cancerous diathesis possess semen, says Godart, largely provided with living animalculæ. My own observations as regards the first class of patients agree in every respect with those of that author. I have examined 15 subjects suffering from secondary and tertiary syphilis, and I have found in all spermatozoa continuing motion, whenever the examination was practised one or two hours after ejaculation. I have also had occasion to examine the seminal fluid of a person who had had syphilis twelve years ago, and who had undergone no treatment for the disease. This person had lost six children in succession since his marriage from syphilis; either miscarriage or death had taken place, but each time at a more remote period from the commencement of pregnancy. The wife was free from all disease, and the semen of the man presented no alteration whatever.

I have asked myself if it be possible that the corrosive sublimate introduced into the organism as a cure for constitutional syphilis—either in the form of Van Swieten's solution or hypodermic injections—could exercise any influence upon the vitality of the spermatozoa. But I have never been able to discover under these circumstances either their absence or their loss of motion. These results permit us to say that the testicle is not an emunctory for the bichloride of mercury, for, if it were, and let the quantity be ever so small, it would not fail to destroy the spermatozoa; and as, according to all probability, the mercurial salts are, by the contact of the alkalies of the alimentary canal and the blood, transformed into bichlorides, this remark is applicable to all the preparations of mercury, the metal not excepted (Mialhe).

Influence of Diseases of the Testicle and the Epididymis.

The testicle being the secreting organ of spermatozoa, we can easily understand that the disorganisation of its parenchyma, whatever be the cause, abolishes for ever its functions; and that the seminal fluid of such persons must necessarily be deprived of spermatic filaments. Godart has observed that in these cases the ejaculation is reduced to a few drops of fluid.

The partial disorganisation brought about by cancerous, tuberculous, cystic, or cartilaginous productions is also very often followed by azoospermia. Of three cancerous testicles which I have examined, and where the seminiferous tubes and lobules were crowded from the centre towards the fibrous covering of the gland by the new productions, I could find neither spermatic filaments nor seminal granules. Godart maintains that individuals with only one tuberculous testicle are nevertheless barren. Gosselin has observed the same thing. The absence or presence of spermatozoa can, therefore, serve as a diagnostic character between chronic orchitis and tubercular testicle, for whereas spermatic animalculæ still exist in the former, they will be totally absent in the latter disease.

Godart is furthermore of the opinion that when the affection of the testicle is of a tuberculous nature, sterility precedes the development of the local lesion by a year or more. Mantegazza, not aware of Godart's researches, cites as a remarkable case an individual suffering from softened tubercles of the epididymis of one side in whom he found no spermatozoa in the opposite testicle, which nevertheless was perfectly free from disease. In opposition to the above observations, which have all been gathered from the dead body, I will cite the following:—A man, 28 years old, came to me with a fistulous opening of the left scrotum. The probe introduced here leads to the indurated and deformed epididymis. The affection dates back five or six years. This man, of apparent good constitution, presents none of the signs of pulmonary consumption. His virile faculties have notably diminished since the development of the tumour. His semen—1·50 gramme—contains from five to ten spermatozoa under each preparation. This observation proves that the presence of tubercles in one testicle does not also abolish the spermatic secretion of the opposite side, but it also shows that when this secretion persists it only does so in relatively small limits.

All diseases which cause an obliteration of the epididymis, or of the efferent ducts of both testicles, necessarily prevent the spermatic excretion, and consequently deprive the ejaculated semen of spermatozoa.

M. Gosselin was the first to call attention to the real existence of these obliterations, especially in cases of epididymitis, of which sterility is a consequence. The obliteration is such as to prevent the passage of the thinnest liquids. This, however, does not interfere with the secretion of the semen with all its physiological characters. The semen thus secreted collects and dilates the ducts, in which it remains imprisoned. M. Gosselin has furthermore demonstrated that the spermatic secretions persist even fourteen months, in dogs, after the ligature of the vas deferens; that the obliteration of the epididymis on both sides produces infertility which may only be temporary; that the re-establishment of the spermatic channels may take place after a certain length of time, and with it the return of semen containing spermatozoa.

M. Gosselin has gathered twenty observations, which are divided into two classes. The first class includes fifteen patients. In these the epididymitis dates from a few weeks to a few months, and the induration persists in all. No modification can be noticed in the genital functions, no change in the coloration, the odour, or the habitual elements of the semen except the spermatozoa. The thorough repair of the spermatic functions took place in two—in the one at the end of eight months, after a second epididymitis, the first having occurred six years ago; in the other at the end of six months, also after the appearance of a second epididymitis, the first having been contracted eleven months ago. The remaining thirteen of this class were lost sight of. The first epididymitis in one of these patients dated back thirty years, in another five, and in a third one year. The induration of the cord coincided in each case with the absence of spermatozoa; whereas these elements were present in those patients where the induration had disappeared. The second class includes five subjects with double epididymitis of several years' standing. The disease in one of the patients had been contracted twenty years ago; the induration persisted on one side, but was absent on the other. The semen contained spermatozoa. The epididymitis of the remaining four dated four, five, six, and ten years. The induration persisted, and the spermatic elements were absent in all.

M. Gosselin concludes from these observations that a patient suffering from bilateral epididymitis may possibly regain all the virile powers, those which insure the fecundation of the semen; but may also be followed, because of the prolonged and perhaps definitive absence of spermatozoa, by sterility.

In Gosselin's edition of Curling's "Treatise on Diseases of Testicle" are added five more cases. The spermatozoa reappeared in two of them after an absence of many months. In a third, where the patient could only be followed for three months, the semen contained no spermatozoa. The two remaining patients with bilateral epididymitis, and who had contracted the disease in early youth, have remained barren, their semen is absolutely deprived of spermatic filaments. These men have been several years married, but without issue. The induration of the testicles persists.

M. Duplay has noted the simple obliteration of the spermatic cord, with dilatation of the portion below, six times. The seminal vesicles corresponding to the obliterated epididymis were always void of spermatozoa, whereas they still existed on the healthy side.

(*To be continued.*)

An English chemist has been highly honoured in Germany. The Royal Bavarian Academy of Sciences, of which Baron Liebig is the President, has recently elected Mr. Wanklyn a corresponding member of the Academy, in recognition of his labours in the field of organic chemistry.

POLYPUS ON THE LEFT SIDE OF THE HEART.

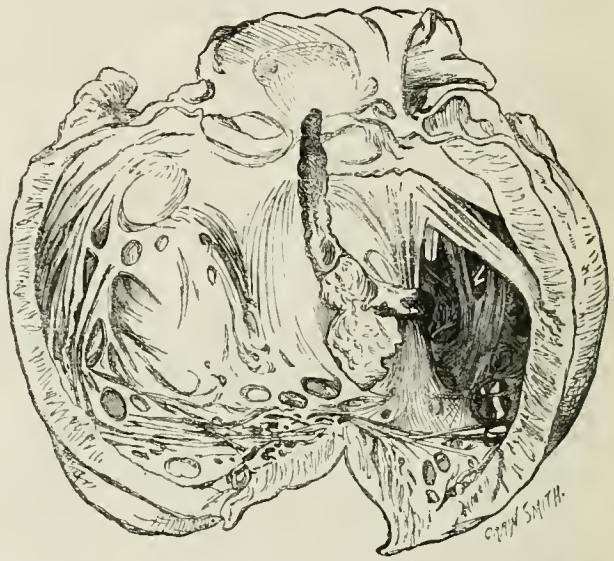
By GEORGE GASKOIN,
Chevalier of the Order of Christ, Surgeon to the British Hospital for Diseases of the Skin.

During thirty years, or nearly so, that I have practised my profession in London, I have found that the cases of sudden death to which I have been hastily summoned, in by far the greater proportion, have been due to disease of the heart or to some obstruction or delay in the passage of the blood through the chest. If we confine the term apoplexy to the consequences of cerebral complication, as now seems generally agreed on, the occurrence of this latter condition is far less frequent by comparison.

As for the heart, the cessation of its functions or their maintenance is regulated in no sure degree by what is anatomically demonstrable in amount or progress of disease. A man can die but once, and death may possibly overtake him at an early stage of his complaint, or it may be considerably delayed, in subjection to a wave of incidence whose character is undefined, though the channels for its passage may be seen, and which may come either soon or late, we know not how or when. In the present condition of our knowledge, we are so far in advance of the ancients that we have seen and touched the nerves which they conjectured to exist. We know the most sudden of all deaths, that from fatty degeneration of the heart, occurs through defective apparatus. The mischief is here at the periphery. When we seek to carry our reasoning beyond the borders of the organ, we soon get entangled in obscurity and left in a maze of doubt. There is found a surer ground for argument in the fact that death will ensue whenever the passage of the blood through the central organ of the circulation is suddenly brought to a stop.

On Saturday, January 16, a little before the hour of midday, I was sent for to the house of a neighbour, and was very prompt in my attendance. In the back kitchen, upon the ground floor, I found a well-grown lad of 17 extended on a bed and motionless. His appearance was anæmic and delicate. His hands and wrists were exposed, and had the same pale line with his face; they retained scarce a particle of warmth. No pulse or action of the heart, no froth of the mouth, no wound of the head or displacement in any of the vertebræ of the neck. The pupils were somewhat dilated. He had been lifted bodily from the scullery, some ten or twelve yards from where he lay, by two women, his fellow-servants. Some five or more minutes previously he had carried coals to the drawing-room, and looked into the front kitchen afterwards, addressing his fellow-servants cheerfully; from thence directly to the scullery, where soon a broken pan was heard to fall, and they found him lying on the floor, faintly groaning, but without convulsion.

In the post-mortem examination, which took place forty-eight hours after death, there was found in the pericardium rather more than the usual amount of fluid of a dark and dirty stain. The heart was somewhat large *in situ*, not contracted, but rather lax; its parts were not disproportionate; its tissue was normal and firm. The heart was cut away from the body within the sac of the pericardium. In removing it the blood poured out from the right auricle exceedingly fluid and thin, being dark and dirty in character, with no coagula whatever. The right side of the heart thus emptied displayed no clot in its cavities nor any in the pulmonary vessels. On opening into the left ventricle, a striking appearance was exhibited: a yellow riband-like band lay slantwise across the ventricle and across the mitral valves, from the apex and ventricular wall stretching upwards to the orifice of the aorta. All blood, from its extreme fluidity, had already escaped from the cavity, if any had been contained therein; nowhere on the left side of the heart was there any other kind of concretion or any coagulum but this. The appearance was as of some strange annelide, so different from what is commonly seen in ordinary concretions or death-clots. If a likeness to antennæ may be admitted, it rendered in some degree conceivable the exaggeration of which Zacutus was guilty in describing a large fly in the heart. Its colour was a dirty yellow, or yellow coarsely mixed with white, and to view it seemed rather dry. The texture was filamentous or thready; its form *in situ* was less round and also less compact than when dissected out and lifted from the heart. Its upper termination was prolonged quite into the aortic orifice, and here it was slender and produced, but rather truncated at the end, as forming a kind of proboscis, which went beyond the entrance of the artery, with no connexion to its valves. In its middle there existed a bulging, which contained about a drachm of spoilt blood. A faint discoloration externally betrayed the existence of this cavity, which was continued above and below, thus forming a species of canal through the greater extent of the concretion; the blood which was contained therein was variously hued and disorganised. The broad and lower end of this body was implanted most firmly into the ventricle and into the columnæ carneæ. The tendinous cords of the mitral were wholly enveloped by it. Only tediously, by aid of the finger, they were one by one dissected out. The fracture was fibrous and jagged, both as regards the mass itself and the parts to which it was attached; no vascular connexion was discovered to the parts on which it had its hold. The heart was otherwise normal. The annexed woodcut, it is hoped, may serve to aid the description, though taken after most of the attachments to the heart were destroyed.



The head, and the lungs, and the abdomen were all of them carefully examined. Beyond a slight degree of hyperæmia there was nothing observable in these parts; the kidneys alone were dark and large, with some slight impairment of their structure. The possibility of albuminuria was suggested. He had been known to pass water frequently.

This lad had been delicate in childhood, and far from robust in later years, but was good at work and play, and had never had fits of any kind, nor was he suffering from diarrhœa. The drains of the scullery were sweet; there was no suspicion of poisoning.

The specimen displayed in the drawing was submitted to Dr. Benj. W. Richardson, to whose experience we owe so much, both by his recent lectures and his writings upon this interesting class of subjects. It was used by him for demonstration to his class in one of his instructive lectures at which I was unable to attend. Two modes were suggested to me by him whereby the fatal crisis might have happened:—The smaller end might have been fixed somewhere in the lining membrane of the auricle, perhaps in its appendage; becoming all at once detached and loosening its hold upon the part, it would be swept in the current of the blood, and so reversed in its current till it blocked up the orifice of the aorta. The absence of any twist in its broad attachment, which might be here spoken of as its root (though under the above point of view the concretion would have begun in the auricle), inclines me to another explanation of the sudden seizure, equally suggested to me by him, from the gliding motion of the plug which this body formed in the ventricle. In this way it is equally possible the aorta might have been occluded. I have found no such case of sudden death from polypus on the left side of the heart in any books that are accessible; in those of the right side there are a few in which such instantaneousness is described(a)—some of these

(a) See the work "Fibrinous Depositions from the Heart." By Dr. B. W. Richardson. 1850.

are in Dr. Richardson's monograph; one I find in the *Transactions of the Pathological Society*, vol. xiii. p. 59, and some, with scanty detail, that are mentioned by early authors. As to form and character of concretion, I have found two other instances only that seem to correspond with this, but not so entirely uncomplicated with other organic change. One of these is a case by Bouillaud(b) of pericarditis with polypus, the patient dying in convulsions; the other is to be found in the work of Testa,(c) and is attributed to a blow some two years previous, with surrounding pleuritic adhesions, the result of repeated inflammations.

To what shall we attribute the catastrophe in the case which is here in question? Not to one single effort of exertion, but rather, as it seems to me, to many continuous efforts, and consequent development of heat. The heart got embarrassed in its action with a quicker return of the blood, like a steamer that is clogged with weeds. As to the polypus itself, was it due to inflammatory action, some roughening or morbid condition in the lining membrane of the heart, to some shred or waif of tissue that was floating in the stream of blood, some mal-assimilated particle, perhaps, of what had been taken in as food thrown inopportunely on the organ and mixing unkindly with its contents? Was its origin recent or remote, or was it the result of the weather, which then, and for some time previous, almost beyond a precedent for winter, was peculiarly warm and moist? Malpighi has insisted much, on the influence the weather has in causing the formation of polypi. What is termed by this author *sal vitæ*—that something in the air which is absorbed, and which furnishes vigour to the blood—anticipates Lavoisier's discovery; it is interchangeable with oxygen. This ingredient in soft warm air would be in minus quantity; the effect would be as of constriction, and cause delay in the blood.

The singularity of the case before us, and the confirmation it has given to ideas I had already entertained and balanced, but which were not yet well fixed in my mind, has made me earnest to publish it. Having practised upon a large scale, and witnessed in the early part of my life very frequent demonstrations of morbid anatomy, led away as I was by current ideas, I used but little discrimination in dealing with fibrinous concretions. Such things when found in the heart, if they served to show anything at all, bore witness to a lingering death. More than once in after years I have left off the task of dissection without being fully satisfied as to what was the cause of decease. Nay, more, I have sat by the bedside and made a close clinical study of all that succession of symptoms, remarkable as they sometimes are, and not always brief in character, which distinguish this eventuality, and yet in making the autopsy with well-informed Physicians we found no sufficient explanation to account for the clinical phenomena. But why should I speak of myself when men who are so followed as Morgagni(d) and Valsalva in the science of pathological anatomy seem to have been blind with the same prejudice, and to have incurred the same fault? In the sixteenth and seventeenth centuries the subject of polypi of the heart and equally of emboli in the vessels had been very thoroughly discussed, at a time when dilatation of the aorta was held to be a paradox, one doubtful specimen known; but when in repeated dissections, so large a moiety of the cases that came under the knife of the anatomist, displayed some kind of concretion or pituita in the chambers of the heart, in proportion as he was well informed, each man of science did his best to neutralise and correct the common error of the multitude, that this was a most frequent disease. The reaction in the days of Morgagni had already reached its due limit, and sometimes overstepped its bounds. A renewed attention to this subject seems one the best signs of our epoch.

HORSES IN THE BELGIAN MINES.—As it has been found that adult horses could not become accustomed to live in mines, the mares are taken down when in foal. The foals undergo considerable modification, their eyes acquiring the power of seeing in the dark, and their hair assuming a kind of velvety appearance, much like the fur of the mole. When by chance they are brought up to the surface, at first they are completely dazzled, but very soon their bounding about and neighings testify to the delight they experience from the change. They seem almost mad with joy.

(b) Bouillaud, "Traité Clinique," obs. 15, 2de catégorie de péricardite. Paris, 1841.

(c) Testa, "Malattie del Cuore," tome iii. p. 212. Firenze, 1823.

(d) Morgagni, "Seats and Causes of Diseases," letter xx., art. 27.

A CASE OF THE HÆMORRHAGIC DIATHESIS,

IN WHICH A SLIGHT FALL CAUSED SANGUINEOUS EFFUSION INTO THE SUBSTANCE OF THE LEFT ANTERIOR LOBE OF THE BRAIN, ATTENDED WITH EPILEPTIC CONVULSIONS—A SECOND FALL SIX MONTHS AFTERWARDS, DURING A FIT—EXTENSIVE EXTRAVASATION OF BLOOD AT BASE—RAPID DEATH—AUTOPSY—REMARKS.

By JOHN WARD COUSINS, M.D. Lond., F.R.C.S. (Exam.),
Surgeon to the Royal Portsmouth Hospital.

W. B., aged 16 years, a pale and unhealthy-looking lad, was subject to attacks of profuse bleeding from early life. The first attack occurred at the age of 10 months. The hæmorrhage was generally nasal, sometimes pulmonary, occasionally intestinal, and then a large amount of blood, more or less altered, escaped with the fæces. Bleeding also frequently took place into the subcutaneous cellular tissue, producing extensive swelling and discoloration of the skin exactly resembling an ordinary bruise. The poor lad often complained of sudden pain in a limb, and then in a few hours the characteristic symptoms became manifest. During the spring of 1864 the patient first came under my care. He was then confined to his bed from extreme exhaustion. The hæmorrhage was frequent and profuse, the legs œdematous, the skin everywhere blanched, and the pulse extremely soft and feeble. On examining the chest, two distinct systolic sounds were present, one loud and blowing audible at the apex, the other soft and prolonged, heard over the centre of the sternum and extending in the direction of the aorta. The perchloride of iron was now persistently administered for many months, and the result was very satisfactory. Soon the tendency to hæmorrhage was partially checked, and the attacks of bleeding occurred less frequently. The lips and conjunctiva indicated a marked improvement in the condition of the blood, the muscular system became firmer, and he gained considerably in weight. During the last three years he has been occasionally under my care, suffering from a return of the hæmorrhage, and he has always derived great benefit from a repetition of the treatment. A few months ago he had an attack of chronic rheumatic inflammation, principally confined to the right knee and elbow. These joints were at first very stiff, swollen, and painful, but these symptoms gradually subsided, leaving behind some permanent enlargement. He was a lad of fair intelligence and cheerful disposition, and, notwithstanding his precarious health, he often assisted his father in his business. On February 7, 1868, he was walking through the town on an errand, when he was accidentally pushed by a passer-by from the pavement into the roadway, and he fell forwards on the ground, striking his forehead over the left eyebrow. He got up, feeling somewhat confused, but soon recovered himself sufficiently to transact his business and return home unassisted, the distance at least of a mile and a half. He then, however, complained of nausea and faintness, and his friends, having heard his statement of the accident, immediately put him to bed. In a few hours he was seized with a severe epileptic attack, and I was immediately requested to see him. He appeared then much confused, very restless, and incessantly rolled his head about the pillow. There was considerable external extravasation of blood over the forehead and left side of the face, and the left eye was completely closed from swelling of the lid. Both pupils were dilated, his tongue was coated with a creamy fur, skin hot, and pulse regular and rapid. He frequently vomited, and uttered piercing cries from pain. The treatment consisted in a calomel purge; the head was shaved, and ice persistently applied. He remained in a very precarious state for ten days, sometimes restless and moaning with pain, and then lapsing into a state of semi-insensibility. The convulsive attacks frequently recurred, and he had as many as twenty in twenty-four hours. At length, however, a marked improvement took place—he became calmer, the febrile symptoms subsided, the vomiting ceased, and the stomach retained simple nourishment. Complete consciousness returned, the frequency of the fits steadily diminished, and the external effusion of blood disappeared by absorption. The sight of the left eye was now found to be completely obscured. After the twenty-first day he had no return of the epileptic attacks, and he appeared so far convalescent that I discontinued my attendance. He never, however, fully regained his natural mental power. His mother informed me that after the accident his mind continued much impaired. He frequently complained of pain and a distressing sensation of

tightness about the head. He manifested a marked change in disposition and great irritability of temper. His memory, which formerly had been very retentive, remained very defective in every respect. He had been a ready reckoner and fond of reading, but now he could scarcely reckon at all, and seemed quite unable to bear any mental effort or fix his mind on anything. On September 24, 1868, he appeared as well as usual, but about 11 p.m. he was suddenly seized with another epileptic fit, and, falling forwards, he struck his forehead on the floor. The convulsive movements continued for a short time, and he rapidly passed into a state of complete insensibility, attended with flushed face, profuse perspiration, and stertor, which soon ended in death.

Autopsy Forty-eight Hours after Death.—Body generally pale; slight ecchymosis on forehead. A moderate amount of effused blood was found under the pericranium, corresponding in situation to the external injury. On removing the skull and dura mater, a thin layer of blood appeared covering the anterior two-thirds of the left hemisphere. The brain was congested throughout, and considerable extravasation was also found at the base and around the upper part of the spinal cord. On section a cavity was discovered in the anterior lobe of the left hemisphere about the size of a small walnut. Its walls were irregular and of a light brownish colour. The cavity was empty, and it did not encroach anywhere upon the surrounding grey matter. The consistence of the white substance immediately around it was much softer than any other portion of the organ. The fornix, corpus callosum, corpora striata, and thalami, were all examined and found healthy. The ventricles were empty and also healthy. The blood generally appeared more fluid than natural, and the heart and lungs were free from any trace of disease.

Remarks.—This case strikingly illustrates the peculiar jeopardy which surrounds the life of a patient labouring under the hæmorrhagic diathesis. The poor lad had repeatedly suffered from pulmonary, intestinal, nasal, and cellular hæmorrhage, but in these various forms of bleeding the great danger to life arose from the exhaustion which follows great loss of blood. It was not the amount, however, but rather the immediate result of the accidental position of the hæmorrhage which produced the fatal termination of the case. The cerebral vessels were not exempt from that inherent brittleness and liability to rupture which pervaded the rest of the vascular system, and the effusion of blood within the cranial cavity was necessarily attended with the peculiar peril which follows every vascular lesion of the cerebral organism. The original accident was a slight one, from which any ordinary person would have escaped with a bruise and perhaps symptoms of transient concussion. A trifling blow on a limb had often been followed by extensive effusion of blood into the subcutaneous and intermuscular tissues; and here a slight fall was sufficient to cause intercranial hæmorrhage and the most alarming cerebral symptoms. The patient early exhibited a marked predisposition to constitutional bleeding, and I have observed, in many cases of diathetic hæmorrhage, that the period of life at which the hæmorrhagic symptoms manifest themselves appears to have a direct relation to the intensity of this peculiar diathetic tendency, and, as a general rule, the most aggravated cases prove to be those in which repeated bleedings have occurred during infantile life. My patient's history exhibited a marked rheumatic tendency. He had suffered from several attacks of subacute rheumatism, and for some months prior to his death the right knee and elbow were swollen and stiff from chronic rheumatic inflammation. Dr. Laycock mentions in his lectures "On Physiognomical Diagnosis"(a) that he has observed a marked relation between the rheumatic and hæmorrhagic diatheses. It is also worthy of remark that a brother has manifested in a less degree a tendency to constitutional bleeding, and that several members of the family have suffered from rheumatic affections. When the case first came under my care, the history as well as the physical signs, and the frequent pulmonary hæmorrhage, led me to the conclusion that my patient had valvular disease of the heart; but as soon as the remarkable improvement in the condition of the blood and general nutrition of the system had been established, the action of the heart and the cardiac sounds appeared, after repeated examinations, to be quite natural again, so that it became very evident that I had made an erroneous diagnosis. The state of the valves after death, as well as the healthy condition of the orifices and substance of the organ, proved beyond doubt that this was the case. The cardiac murmurs must therefore have depended partly upon extreme fluidity of blood, occasioned by a deficiency of albumen, fibrine, and red corpuscles, and partly upon feebleness of the arterial muscular power coincident with the general exhaustion of the system.(b) It is an interesting fact that the symptoms of severe cerebral injury did not appear until at least an hour after the accident in the street. The intercranial effusion of blood was slow, and in this respect it corresponded with the frequent subcutaneous bleedings to which he was so remarkably prone. The early symptoms denoting cerebral disturbances were giddiness, pallor, and sickness; but these were far too indistinct to suggest even the probable seat of the extravasation. The progressive development of the symptoms, however, together with the epileptiform attacks, led me to believe that meningeal hæmorrhage had taken place. The negative aspect of the case appeared also to strengthen my opinion. The absence of hemiplegia proved that the central ganglia and motor tract were still entire; and the fact that all the cranial nerves were uninjured made it evident that the effusion was not at their roots or at the base of the brain. The position of the external injury, and the subcutaneous extravasation of blood over the left side of the head and face, rendered it at least probable that the internal hæmorrhage had a corresponding seat on the left side of the brain. Moreover, the left eye was the seat of intra-ocular hæmorrhage, which produced the temporary loss of sight. My diagnosis as to the existence of meningeal hæmorrhage turned out to be erroneous, for a careful examination of the surface and membranes of the brain failed to discover the smallest trace of bygone effusion in this situation. Besides, the post-mortem appearances clearly prove that the first intercranial extravasation of blood was confined to the white substance of the anterior lobe of the left hemisphere. This case corroborates the statement of Dr. Wilks in his recent lectures on diseases of the nervous system,(c) "that hæmorrhage into the medullary substance is very difficult to diagnose, from the vagueness and obscurity of the attendant symptoms." The presence of headache, restlessness, partial loss of consciousness, and frequent convulsions, together with general febrile disturbance, clearly indicate vascular excitement and nervous irritation, but are far too indefinite to warrant an opinion as to the exact seat of the cerebral lesion. Again, my case appears to confirm Dr. Hughlings-Jackson's hypothesis that there is a "corpus striatum epilepsy." The convulsive attacks were undoubtedly excited by the hæmorrhage in the neighbourhood of the corpus striatum. This body was not actually damaged, but the presence of the clot must have interrupted its supply of blood and retarded the neighbouring circulation, and this was quite enough to disturb its controlling function. Dr. Jackson thinks that the mechanical pressure of the effused blood on the corpus striatum produces a local anæmia, and to this he attributes "the local instability of the nervous tissue, which permits the disorderly expenditure of force."(d) The convulsive attacks passed away gradually, and at the end of the third week the patient was convalescent, for by that time no doubt the size of the clot was considerably diminished, and the cerebral circulation fairly re-established.(e) It is worthy of remark that there was no injury to the faculty of speech. During the week which immediately followed the accident he was incoherent and confused, and only occasionally ejaculated short expressions, as "Oh, my head!" Directly, however, his condition improved and complete consciousness returned, he began to talk again, and his speech appeared not at all impaired. There was, therefore, no apparent aphasia, although there was considerable injury to the surroundings of the corpus striatum. The advocates of Broca's theory could easily explain the absence of this symptom on the ground that no damage was done to the grey matter. The third frontal convolution and the island of Reil were entire, and the injury to the parts around did not cut off these organs from the corpus striatum. The first intercranial effusion of blood was confined to the white substance of the anterior lobe of the left hemisphere, and we have presented to us the changes a clot of blood underwent during the period of 227 days—that is, the time which elapsed from the accident to the fatal termination. The blood had entirely disappeared, the cavity only remaining to mark its original position. The walls were of a light chocolate colour, which probably was the last trace of the colouring matter of the blood. It was irregular in shape and limited to the medullary

(a) See *Medical Times and Gazette*, May 17, 1862.

(b) See Dr. Richardson's lecture, *Medical Times and Gazette*, October 17, 1868.

(c) See *Medical Times and Gazette*, May 9, 1869.

(d) See *Medical Times and Gazette*, August 15, 1868.

(e) The convulsive attacks were, I believe, confined to the right side of the body, but on this point I cannot speak with confidence.

substance, approximating nearest to the grey matter towards the median line, where about half an inch of white substance intervened. An indelible injury was thus produced on the brain—1st, by the absolute severing of many conducting fibres; and 2nd, by the injury of many more around from the mechanical pressure of the clot and the softening process which must have followed the inflammatory excitement in the immediate neighbourhood. The progress of the case exhibits the amount of permanent injury the mental faculties sustained. The patient was convalescent in about three or four weeks, the external extravasations were completely absorbed, and he greatly improved in health and strength; but the cerebral lesion left a permanent mark on his mental powers. His memory was seriously impaired. He often complained of a feeling of confusion, and an inability for all mental exertion. He had been a ready reckoner and fond of reading, but now he was scarcely able to draw up a small business account, and quite incapable of fixing his attention and sustaining the effort of any studious pursuit. This loss of voluntary control over the intellectual faculties appears to me to be a very significant effect of the cerebral injury. Now, if the anterior cerebral lobes are only a part of the machinery for the higher processes of intellect, and if the nerve-force essential to mental life consists of complicated currents transmitted from centre to centre and from convolution to convolution, it follows that the transmission of nerve force must be seriously interrupted by any injury to the conducting fibres of the brain. The grey matter is the special organ of the mind, and special faculties are probably located in special centres; but whenever these centres are in action, there must be a transmission of nerve force from one place to another, especially in the higher intellectual processes, and then the transmission is chiefly confined to the limits of the brain. How much, then, of the ability of sustaining the circles of mental life must depend upon the integrity of the conducting fibres, which constitute an essential part of this obscure but complicated machinery! The injury to the intellectual powers was not the only mental change which followed this lesion of the left anterior cerebral lobe. My patient exhibited a loss of control over the emotional faculties. He manifested great irritability of temper, and his increased emotional susceptibility frequently became apparent by a ready flow of tears. It is a well-established fact that disturbance of this kind attends many forms of cerebral disease. It is often looked upon as a premonitory symptom, and it is the forerunner of diseases depending upon changes in the cerebral vascular system and deficient activity of the nutritive processes. In senile atrophy and the early stages of general paralysis this disturbance is always present, and how marked is the emotional change following extravasation of blood in the substance of the brain in any position? It is an obvious fact that the emotional currents in the normal state pass and repass in endless currents from the brain to the voluntary muscles; but the emotional centres are unknown, and in our present imperfect acquaintance with this interesting subject it appears to me that the emotional faculties more than the other mental powers depend upon a healthy state of the whole cerebral system. The permanent lesion in the left anterior lobe was no doubt the exciting cause of the fatal epileptic fit. Unfortunately, another fall during the attack produced extensive extravasation of blood in parts immediately associated with vital functions. The effusion around the medulla and base compressed the centres of the respiratory system and caused the rapidly fatal termination of the case; for so delicate are the reflex susceptibilities of these parts of the nervous system, that we may affirm, as a general rule, that the nearer the extravasation of blood approaches the medulla oblongata the more rapidly fatal is the issue.

An Italian Municipality and its Doctor.—Parish Doctors are treated scurvily all over the world, and the *Gazetta Medica di Torino* supplies a recent instance. The municipality of Capano Magnano peremptorily dismissed its Medical officer in 1867 for having declared that cholera existed in the commune, for which announcement the municipality said there was not a shadow of excuse. The Doctor, however, brought his case before the tribunal at Busto Arsizo, which condemned the municipality to compensate him and pay all expenses, and the decree was confirmed on an appeal to the Court at Milan. The municipality has thus had to pay for two Doctors instead of one—viz., the one dismissed for about two years of his unexpired contract, and the successor whom they appointed on dismissing him.

REPORTS OF HOSPITAL PRACTICE

IN

MEDICINE AND SURGERY.

THE MOORFIELDS OPHTHALMIC HOSPITAL.

CASE OF TOBACCO AMAUROSIS ENDING IN ABSOLUTE BLINDNESS.

[Communicated by Mr. Hutchinson.]

Slowly Progressive Optic Atrophy in a Smoker who had for many years abstained from stimulants—Disease not arrested by a year's disuse of tobacco—Blindness induced in eighteen months—Trial of the Opium Treatment, with Note as to its Effects.

W. B., aged 50, was a railway clerk, and enjoyed good sight until January, 1867. He then had a severe cold, which lasted some months, after which his sight gradually failed. In May it had become so bad that he could scarcely read. In the beginning of September he consulted Dr. Hughlings-Jackson, who (as he states), after a very careful examination, told him that he had no other disease than atrophy of the optic nerves, and advised him not to smoke. Up to this time he had been smoking freely (two to two and a half ounces a week), and had never thought that it disagreed in any way. On Dr. Jackson's recommendation he left it off at once and entirely. During the next year he did not smoke in the least. He obtained, however, no apparent benefit from his self-denial. The amaurosis steadily advanced, and at the end of twelve months he was quite blind. No other cerebral symptoms were noticed at any time. He had previously enjoyed excellent health, with the exception of a single attack of gout, and for twenty years had never been under Medical care.

W. B. came to me in February, 1869, two years after the commencement of his amaurosis. He was now so nearly blind that he could not count gaslights, although he could just distinguish a window. He was cheerful, and in good health. His pupils were very small, and quite motionless. After use of atropine the pupils dilated moderately. I found the discs of a yellow grey tint, and presenting shelving cups. The central vessels were of normal size, and the minute capillaries were not so entirely absent as is usual. There were no other diseased conditions. His smell, hearing, taste, etc., were almost perfect. He had during the last few months, thinking his case hopeless, resumed his habit of smoking.

Some further points are of interest in this case. For ten years before his failure of sight W. B. had been a pledged teetotaller. He had never at any time been intemperate. He continued his abstinent habits during the whole period of treatment. After he had been some time under Dr. Jackson's treatment, he passed to that of an ophthalmic Surgeon, who tried the opiate treatment for three months. He speaks very strongly as to the misery which this plan caused him. During the three months he scarcely slept at all; visions and subjective phenomena were constantly before him, and at length, in fear that his reason would fail, he insisted on leaving it off. He considers that his nervous system has never since recovered its tone.

W. B. is a remarkably intelligent man; was in former life a great reader. He tells me that since his affliction he has been made acquainted with the particulars of many similar cases. "I have been astonished," he says, "to find that it is not the fast-livers that it takes. It is usually the hard workers and abstemious." He is strongly impressed with the belief that, both in his own case and in that of most others he has seen, smoking was the real cause. I wish to ask especial attention to the fact that the man was smoking heavily whilst taking no kind of alcoholic stimulant. I have met with several cases in which this history was given, and am decidedly of opinion that the injurious influence of tobacco is to some extent counteracted by alcohol.

PARIS HOSPITAL REPORTS.

(*From our Surgical Correspondent.*)

Paris, August 28.

Having observed within the last few weeks three cases of intestinal obstructions for which enterotomy was practised, I propose, in the absence of all other Medical news of interest,

to give you a very short account of them: they may, perhaps, find a place in your valuable Reports of Hospital Practice:—

Case 1.—A man, 60 years old, was received into the Medical wards of M. Chauffart, at the Cochin Hospital, on August 17, 1869, suffering with pains of the abdomen, which had come on suddenly while at work the day previous. The second day after his entry we find the abdomen slightly painful to the touch, and but little distended. The outlines of the stomach and the small intestines are easily recognised; these organs are filled with gas. No fever; the pulse is normal. The patient has always been a healthy man; he has never suffered from either diarrhœa or constipation, and he declares that he had a discharge from the bowels on the day before the attack. Light purgatives gave no relief. Four drops of ol. tiglii administered the following day produced no evacuation. Vomiting of bile and mucus set in the fourth day. Baths and injections were of no avail. The discharge from the stomach has changed to a yellowish matter of a strong fæcal odour. The diagnosis of ileus is no longer doubtful. The patient now passed into the Surgical wards of M. Lefort, of the same Hospital. Forced injections of iced water, by means of the long sound passed as high up into the bowel as possible, ice upon the abdomen, and electricity proved useless. Enterotomy was decided on. Certain that the obstruction had its seat in the small intestines, M. Lefort incised the walls of the abdomen at the upper portion of the left inguinal region. The first inflated portion of small intestine which showed itself at the opening was fixed to the two margins of the wound by means of sutures, and then opened. About a pint of fluid fæcal matter and much gas escaped through the opening, and the patient seemed somewhat relieved. He continued to do well for twenty-four hours, when violent symptoms of peritonitis set in, causing death in twenty-eight hours afterwards (fifty-two hours in all after the operation). At the autopsy it was found that the incision of the bowel had been made near the middle portion of the ileum, and the obstacle, consisting of an intussusception at two different places in the lower portion of the intestinum ileum, was situated twelve inches from the ileo-cæcal valve. Gangrene of the serous coat of the invaginated upper portion had already commenced, the large intestine in all its length was perfectly empty, the abdominal cavity contained sero-purulent fluid, the mesentery was much injected, but the rest of the organs were normal.

Case 2.—A man, 58 years old, entered the Medical wards of M. Millard, at the Lariboisière Hospital, on July 31, for an *embarras gastrique*. The patient had not been to stool for three days. He has been subject to alternate constipation and diarrhœa. Eleven days afterwards M. Verneuil is called into consultation, the diagnosis having changed to *étranglement interne*. Purgatives and ice had produced no evacuation from the bowels; fæcal matter had been vomited. The operation, however, for some reason or other, was deferred until the following day (fifteen days of illness). This delay had brought a great change in the condition of the patient. His countenance was terribly altered; the pulse was very quick, and scarcely perceptible at the wrist; the extremities were cold; the abdomen, of a bluish tint, was very much and uniformly distended. M. Verneuil practised his incision in the left inguinal region, parallel to and about an inch above Poupart's ligament. The upper portion of the sigmoid flexure of the colon showed itself at the opening, and more than a quart of fluid fæcal matter came from the incised bowel. This operation, like the one in the first case, had been made without the aid of chloroform. The patient died in a typhoid state thirty hours afterwards. The autopsy showed a complete absence of peritonitis; the small intestines were perfectly healthy. An ulceration was found at the upper portion of the rectum, about one inch in width, and occupying the entire circumference of this part of the bowel, pronounced a dysenteric (?) ulcer by the Physician in charge. The little finger could scarcely pass by the point of stricture. There also existed a slight twisting of the sigmoid flexure of the colon, one of the causes of intestinal obstruction described by Rokitansky.

Case 3.—A man, 32 years of age, was received into M. Dolbeau's wards in the Beaujon Hospital on June 29, with evident signs of intestinal occlusion. The patient had already vomited fæcal matter for two days previous to his entry into Hospital. The history of the case is as follows:—In the month of May, 1868, the patient was seized with violent abdominal pains from having eaten a pound and a half of cherries, stones and all. He remained constipated for seven days after the accident. The same symptoms again showed themselves in the following November, but this time without any assignable cause. He has suffered from constipation and colic ever since. His sufferings were at times so severe that he was obliged to quit his work for several days. The recent troubles again have their origin in eating cherries. After a fair trial of purgatives without effect, the patient was brought into the Hospital on the twelfth day of the accident. The local symptoms were scarcely in accordance with the long duration of the disease. There was no peritonitis, the abdomen was only tolerably distended, and the meteorism or flatulent distension occupied specially the umbilical region, the point which was also most painful to the touch. An indistinct tumour seemed to exist a little to the right of this portion of the abdomen. After the *douches ascendantes*, eau de Seltz, and ice had been tried in vain, M. Dolbeau decided to operate July 3 (the sixteenth day of the accident). The incision was practised as near as possible over the tumour in the right umbilical region, and fell, luckily, upon the very portion of the ileum where the obstruction existed. Nearly two handfuls of cherry stones and a large quantity of fluid matter came from the opening. The relief which the patient experienced was almost instantaneous. No chloroform had been administered. To-day—fifty-six days after the operation—the patient is in excellent health. He is fatter, and feels better than any time since last year. The terrible headaches which he had been subject to heretofore have entirely disappeared. Judging from the matter which shows itself at the wound, we may conclude that the incision of the ileum is situated very near the cæcum. The patient takes his first solid meal at 10.30 a.m.; the fluid fæcal matter begins to show itself at the opening about 4.30 or 5 p.m.—six hours and a half after eating. He takes dinner at 4.30 p.m., and the matter passes the opening about 1 a.m. This passage invariably produces the sensation of going to stool.

Remarks.—I do not wish to enter into a discussion on the differential diagnosis of the various forms of intestinal occlusion. In Case 1, all which both Medical and Surgical skill could do had been tried. Electricity, which was applied as recommended by M. Duchenne—the negative pole on the rectum and the positive pole upon the abdomen—did certainly arouse the peristaltic movements of the intestines, as could be felt, and as was also proved by the patient's desire to evacuate after each faradisation. The injection of about five pints of water was a tolerable proof that the large intestine was free; but to make the diagnosis of intussusception and its exact seat was impossible. The abdomen was uniformly distended. There was no tumour or local pain by which to guide the knife. As it was, the incision had fallen as near right as possible—that is to say, a few inches above the invagination. M. Lefort remarked at the autopsy that if the cause of the obstruction could have been diagnosticated upon the living, he should have administered opium instead of purgatives, so as to tranquillise the bowels and give the invaginated portion a chance to slough away—the only possible means of a cure, and of which he has had an example in his wards last year. In Case 2, if the operation had been asked for a little earlier before the typhoid state had set in, we might have expected a better result, especially as the Surgeon's knife had fallen upon the very spot—immediately above the stricture—and in a region where enterotomy gives the best results. The meteorism which existed was enormous, and occupied the whole abdomen; there was no local pain or tumour by which to suppose an occlusion of the small intestines, as had been done by the Physician in charge. One of the remedies, which, in these cases, should never be neglected, the *douche ascendante*, by means of the long tube introduced as high up as possible into the large bowel, had not been resorted to. If, I think, this had been attempted in good season, it is more than likely that the result of the case would have altogether changed. Case 3 has come out a very fortunate one. The meteorism which existed, especially at the umbilicus, the local pain, and the tumour in the right umbilical region were sufficient to guide the bistoury. It would be curious to know if the cherry-stones which have passed through the artificial anus are alone of this year's ingestion, or, if it can be possible, that some of them have remained impacted in the bowel from the moment of the first accident (1868), whence date the first symptoms, and ever since which time constipation and colic have persisted.

Several cases of death from sunstroke have been recorded during the week.

The foundation-stone of the new Infirmary at Dumfries is to be laid with Masonic honours on September 16, and arrangements are being made for a grand public procession of local trades, guilds, clubs, etc., upon the occasion.

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Medical Times and Gazette.

SATURDAY, SEPTEMBER 4, 1869.

THE REPORT OF THE ROYAL COMMISSION ON WATER SUPPLY, 1869.

This important report has at length been presented to Parliament and printed, occupies 128 folio pages, and has evidently been prepared with the utmost care. The appendices did not appear till later, and we cannot wonder at the delay when we consider the mass of evidence and the number of reports, tables, and maps which had to be arranged. These shall be noticed in an early issue.

The original commission, dated December 24, 1866, was issued "for the purpose of ascertaining what supply of unpolluted and wholesome water can be obtained by collecting and storing water in the high grounds of England and Wales, either by the aid of natural lakes, or by artificial reservoirs at a sufficient elevation for the supply of the large towns, and to report, firstly, which of such sources are best suited for the supply of the metropolis and its suburbs; and, secondly, how the supply from the remaining sources may be most beneficially distributed among the principal towns."

A new commission, dated April 4, 1867, enlarged this inquiry by the insertion of the following words after the words "large towns" in the above instructions to the Commissioners, "and to inquire into the present water supply of the metropolis, and whether there are other districts, in addition to the high districts of England and Wales, from which a good supply of unpolluted and wholesome water can be obtained." The Commissioners were the Duke of Richmond, K.G., Sir John Thwaites, Colonel Harness, C.B., Alderman Sir Benjamin Phillips, Mr. Thomas E. Harrison, C.E., and Mr. Prestwich, F.R.S. They chose as their secretary Mr. W. Pole, F.R.S., and his great geological knowledge appears to have been very valuable to them.

The report, which bears date June 9, 1869, is divided into six parts, several of which are subdivided into sections.

Part I. discusses "the practicability of obtaining large supplies of water from the mountainous districts of England and Wales." Five engineering projects for the attainment of this object were laid before the Commissioners. Four of these are schemes for the supply of the metropolis, the fifth, that of Mr. Dale, being applicable solely to towns in Lancashire and Yorkshire. Mr. Bateman's well-known plan for collecting and storing the water from the sources of the Severn, and conducting it by an artificial conduit to London, is taken first, and is discussed in great detail, evidence both for and against it being freely quoted. The plan of Messrs. Hemans and Hassard comes next, in which it is proposed to bring the waters of the Cumberland and Westmoreland lakes, Thirlmere, Ulleswater, and Haweswater to London, by a conduit 270 miles in length. This conduit would have to pass through a tunnel seven and a quarter miles in length under Kirkstone Pass, and this appears to be the chief engineering difficulty in the scheme. Mr. Hamilton Fulton's plan is similar in many respects to that of Mr. Bateman, but he proposes to utilise the sources of the Wye in Mid-Wales, instead of going to the sources of the Severn. His reasons for this preference are very cogent, and entitle the scheme to a much more attentive consideration than it has yet received. One of the most forcible arguments against Mr. Bateman's scheme is that the impounding of its sources would interfere very materially with the navigation of the important river Severn, and although this objection does not apply to the lake scheme, another of even greater gravity has been urged against it. It is said, with much apparent justice, that the large and rapidly increasing manufacturing towns of the north of England have a prior claim upon the watershed of the lake district, and that at no very distant time this watershed will be essential to them. Without expressing an opinion on the validity of these arguments, it is evident that they must receive the fullest answer before either of the two great schemes can be adopted. It is certainly a great initial point in favour of Mr. Fulton's scheme that neither of these objections appears to apply to it. The navigation of the Wye is utterly insignificant, and the proposed line of his conduit does not pass through any very large manufacturing districts except that of Birmingham, which could easily be supplied with water either from the same or from other sources.

Mr. Remington's proposal to bring the water of the Derbyshire hills to London is open to a variety of objections, and the Commissioners had therefore practically to examine three plausible schemes only for the supply of London by gravitation. Their attention appears to have been chiefly confined to that of Mr. Bateman, but they state that many of their remarks upon it are equally applicable to Messrs. Hemans and Hassard's plan, to which, moreover, they devote a short separate criticism.

The opinion which the Commissioners have formed in regard to Mr. Bateman's great plan, which they seem to take as typical, may be said, in few words, to be entirely unfavourable. They think that his estimate of the rainfall is too high, and, as a necessary consequence, that his proposed supply is insufficient. They doubt his estimates of expense; they doubt whether pumping would not still be necessary to some extent, and they specify a number of dangers and difficulties to which not only this, but any single supply for a town like London would, in their opinion, be liable. Possible interruptions of the supply from wilful damage (such as might arise from foreign occupation), from frost, from accidents to the reservoirs, or from unusually prolonged droughts, are all insisted on, and the fearful catastrophe that would follow the bursting of one of the enormous reservoirs is painted in strong colours. These questions belong to civil engineers rather than to Medical men or chemists, and to them we must leave them. But we must remark that, in spite of the arguments of the Commissioners, we feel no doubt that all difficulties might be overcome, and an abundant supply of pure water brought to London at no ruinous cost, if it were clearly seen that a new supply was necessary. There is the real turning-point of the question. The Commissioners believe that the basin of the Thames is capable of yielding water as good in quality and as abundant as a town could require, and they are therefore naturally disposed to look narrowly at the difficulties and disadvantages to which any scheme for a new and distant supply must in the nature of things be liable.

The quality of the Welsh and Cumberland waters was properly made the subject of a very careful inquiry by the Commission. Mr. Pole was instructed to examine the districts and to collect samples of the water, and these samples were entrusted to Drs. Frankland and Odling for analysis. The reports of all

three are given in appendices, which we shall notice shortly; but the main features of the analyses are already well known, Dr. Frankland having described them on several occasions. The water contains very little solid matter—not more than three or four grains per gallon—and is very soft, the hardness being seldom greater than one or two degrees. The organic matter is small, and there are no traces of noxious impurities, so far as chemistry can detect them.

Two objections, however, have been raised against the quality of the waters, which are regarded as serious by the Commissioners. One is the liability to coloration by peat during heavy rains. Peaty waters are yellowish in colour, and in bad cases have a slightly bitter taste. There is no great harm in this, perhaps, but it is objectionable as tending to render the water unsightly and unpleasant. Dr. Frankland and Mr. Bateman, however, are of opinion that such waters become decolorised by the precipitation of the peat when the water is exposed for any length of time to the atmosphere. The second objection is more serious. The hard water of London has no action on lead, the carbonic acid of the water being a complete protection; but soft water—*some* soft water at any rate—acts strongly upon it. But the waters in question, soft as they are, appear to be in almost all cases without action on the metal. Drs. Frankland and Odling do not anticipate any danger from this source, and the former has ascertained, at any rate in one instance, that the safety is due to the presence of a minute trace of phosphate of lime in the water, which entirely prevents the action.

Part II., "On Sources of Supply other than the Mountainous Districts of England and Wales," considers the various schemes for supplying London with water from the Thames or its tributaries, from the Lea, from the chalk and oolite beds in the Thames basin, and from other sources. It is wound up by some very interesting remarks on the sources and springs in the Thames basin.

Part III. is devoted to the "Present Water Supply of the Metropolis." There is nothing in it very new or striking.

Part IV., "On the Supply of Water available from the Basin of the Thames," is the most important portion of the report. It is divided into two sections, one of which considers the quantity, and the other the quality, of the supply so obtainable. The evidence in regard to the quantity of water which may be obtained from the Thames basin, appears to us perfectly satisfactory. The London companies are at present authorised to draw 110,000,000 gallons a day from the Thames above Teddington, and it appears certain that this quantity might be drawn off daily without interfering with the utility of the stream; equally probable is the opinion expressed by the Commissioners that this supply might be doubled by the construction of storage reservoirs for the storm water. Adding 50,000,000 gallons drawn from the Lea basin, and 30,000,000 which might be obtained from the great chalk beds, we have a total of 300,000,000 gallons a day, which would provide for a population of 10,000,000. The great uniformity in the flow of the Thames, due to the vast reservoirs in the porous beds of the valley, and the convenience which such a natural storage affords for water supply, are clearly pointed out in the report.

The conclusions of the Commissioners on the quality of the supply obtainable from the Thames basin are far less satisfactory than those in regard to its quantity. One cannot help considering it a most unfortunate circumstance that a commission which was to deal with questions involving nice points in chemistry and pathology should not have included a single chemist or Physician. That the Commissioners have sometimes been puzzled with the mass of contradictory evidence laid before them by chemists and Medical men, and that, in spite of their utmost endeavours, they have failed in some cases to understand the true bearings of that evidence, cannot be attributed as blame to them. It is only wonderful that they have not made more mistakes, for they must necessarily have been as ill-qualified to judge of such subtle questions as that of the origin of nitrogen in water or the zymotic theory of disease as a commission consisting entirely of Medical men would be to judge of disputed points in civil engineering. It is clear that they did not even understand the analyses which were reported to them, for we find, at page 92, that they have made the figures by which Dr. Frankland expresses "parts of previous sewage contamination" stand for "parts of nitrates," by the simple process of converting the comma into a decimal point! It will be seen that this is not a mere printer's error, for no chemist could possibly have assumed that the amount of *nitrates* in water was known, it being, of course, impossible to say what base or bases the nitric acid was combined with.

The question of hardness is first discussed. We pass it by, because we believe it to be very little importance. The hardness or softness of water is more a question of convenience than of health; but the next section, "On the Organic Impurities and Contamination of the Thames Water," deals with vital questions, and calls for a few remarks. After indicating very briefly the nature of the impurities to be dreaded, the reporters hasten on to the usual "beneficial provision of Nature"—the well-known and universally admitted oxidising power of running water. This evidently comforts them very much, and, having, both here and in previous sections, insisted largely on the perfect filtration which most of the drainage and sewage water undergoes before it reaches the river, "except on occasions of large and sudden floods," their minds appear to be at rest in regard to Thames water.

These questions have been so recently discussed in these pages that we may dismiss them briefly now, more especially as we do not find a word in the report to induce us to modify the opinions we have before expressed. The excreta of men and animals are, we know, thrown by tons into the Thames. Such excreta are always nasty, and are sometimes poisonous. We ask for *absolute proof* that they are removed or destroyed, and we know well that no such proof is forthcoming. The Commissioners seem to have overlooked the fact that, even assuming that all noxious matters are absent from a river water during dry weather, the first heavy rain will most certainly load it with filth of all kinds, the washings of fields, yards, and pigstyes, if not the actual excreta of human beings, in a perfectly unfiltered and unoxidised condition. And it is just this storm-water—this surplus, which it is proposed to collect in reservoirs and supply for the use of London!

Parts V. and VI. deal with subjects with which we have no immediate concern, and we may therefore take our leave of the report for the present. But the question is too important to sleep long, and the stores of material collected with such patience and arranged with such skill by the Commission will surely bear fruit at last. There is no harm in a little delay; for, dissatisfied as we are with the existing state of things, we recognise too clearly the immaturity of our present knowledge and the difficulties which beset the question to be anxious to hurry forward its solution.

LIFE ASSURANCE.

We have received the following statement from a well-known Physician with reference to the reckless competition of insurance offices:—

"About fourteen years ago," he says, "just as I was attaining something like a position of security so far as Professional income was concerned, I received a visit from a respectable solicitor whose acquaintance I had made at an amateur musical society, accompanied by a gentleman whose name was that of a well-known West-end firm of agents and men of business. 'We are going to establish a new life insurance office,' they said, 'and we want you to be one of the directors.' 'A thousand thanks!' I answered; 'I shall be happy to be your Medical adviser and examiner, but I have no pretension to be a director. You want a City man with knowledge of business.' 'Oh! never mind,' was the answer; 'we'll find that for you. The Medical appointments are filled up; you must be a

director.' 'But,' I said, 'I have no money.' 'We are sure you have enough,' they answered. 'But then,' I said, 'is there room for a new life office? There are dozens in existence, and I can't see the room for more.' 'That is just what you don't know, and we do,' they replied. 'The business of life insurance is just in its infancy, and is capable of indefinite extension. We have an entirely new principle, which will bring all the business to our office.' 'And your principle is ——?' 'Listen: all business depends on the activity of our agents; those offices do most whose agents are most active, and the whole question is how to secure this activity. For this purpose we propose to give to our agents an annual payment of —— per cent. out of the premiums in each insurance so long as they continue to be paid.' Although I declined as firmly as I could, my visitors would not take 'No' for an answer, and made me promise to think the matter over; and, to assist me in this process of cogitation, I was favoured with a visit from Mr. Agent, by himself, in the course of a few days; and I confess I was astonished at the audacity and importunity with which he proposed to put the savings and family fortunes of provident insurers under the control of such a person as myself, destitute of business experience and of accumulated property, and whose only recommendation was a respectable name. Equally unpleasantly was I impressed with the 'hand-to-mouth' theory which Mr. Agent seemed to entertain as to the conditions of stability. His principle was—Force a business, get a large annual income by wholesale bribery of agents, trust to Providence to keep you afloat, and, if any harm comes, sell your business to another office. Fairly driven, however, by importunity, I attended one meeting of intending shareholders of the new office at some rooms near Pall-mall, where I had the honour of meeting a gentleman now distinguished as an oculist, who, I fancy, was brought there as unwillingly as I myself was, for he looked as cheerful as a sheep on his way to the butcher's, and so did some others. Here there was a grand discussion as to the name of the proposed office; and, after very much consideration (for, as some one said, the name was 'everything'), a name was fixed upon—simple, vast, familiar, with an air of easy grandeur and supremacy about it; for, be it observed, these were pronounced to be the qualities requisite in the name. When the name was provisionally settled, the attorney began to talk of offices, and very nearly succeeded, in an offhand way, in inducing the persons present to authorise him to engage rooms for that purpose which happened luckily to be disengaged in a well-known 'Place.' The 'oculist,' however, was too keen-sighted for this, and reminded the attorney that this would be a premature movement under present circumstances. *Sic me servavit Apollo.* I attended no more meetings, and intimated my disinclination to go on in the matter, but I know very well that an office bearing the imposing name fixed upon at the above meeting was set up, for I used to see the name on a handsome wire blind in Pall-mall; Mr. Agent, of course, was manager; the Medical staff was composed of two personal friends of the attorney. The name of the office appears during three years in the annual list of life offices published in Churchill's *Medical Directory*: during this time it migrated from Pall-mall to a more eastern vicinity, but after these three years it vanished, having, I suppose, undergone amalgamation and absorption by a larger one, established, let us hope, on some better 'principle.'

"The thing has been brought to my mind by the fate of the unfortunate Albert Life Office, and I should like to have the opportunity of giving a little plain advice in this matter to the younger readers of the *Medical Times and Gazette*. Life insurance, like vaccination, is far too valuable to be permitted to suffer through the mistakes of those who promote it.

"If a man is to provide for hereafter, he must save now. If he saves, he ought to be able to enjoy the sum of his savings at least; and if that money so saved can be lent or invested judiciously, he ought to enjoy the profits arising from the investment.

"Life insurance is only a particular method of saving, and subject to the rules that apply to saving in general. What would be extravagant and unthrifty in a private man must be equally so in a number of men who club their savings through the mechanism of a life office. The wealth of the office can but consist in the accumulation of annual savings and of the profits which come from investing or lending them. There is no particular magic in an office; it can't create money, but can only let it accumulate.

"The young man who insures his life for £1000 is apt to look on himself as being worth £1000. He forgets that he has to make up that money and more by annual payments before he dies. Of course he wishes to live long if he can; but if he do, he must pay not only for the £1000 that is to come to his own estate at his death, but for that which comes to his neighbour who died young, *plus* the expenses of the office with its rooms, directors, secretaries, etc., etc.

"It may be a benefit, or it may not, that his savings are entirely out of his power—that he cannot touch them or use them. Now, generally speaking, the moment a man begins to save, the best use he can make of his money is to improve his own business; to buy another horse, which will enable him to cover more ground in a day; to pay all his bills punctually, and so to enhance his credit; to invest, if possible, in Government securities or in land. We may say generally of persons who have come to grief in their old age, that some have done so because unable to save, others who have saved most frugally have placed out their money most foolishly; they have worked like horses and invested like asses. Be it observed that most investments—say, in railways, mines, water and other companies, or the like—consist in the lending money to other people to enable them to carry on business, of the profits of which they give a share for the use of the money; and that if their prudence and probity fail, away go the savings of the honest investor. The most honest man may make a rash investment; but what woe results if the money so invested be the provision for the fatherless children and widow!

"The sum of it is that life assurance is a mode of saving which removes the savings from the control of the owner; that it is necessarily an expensive mode, because security must be paid for; that it cannot, usually, be modified to suit circumstances, but must go on in a lean year as well as in a fat one; that the professional income out of which the savings are taken in the shape of annual premium will be sure to decay or cease as life advances; that the lapse of the payments entails the loss of all previous savings; and that tables are calculated to take certain profits out of each insurer's savings, else the business of the office could not go on. If a large portion of the annual premiums is squandered, and if the balance is rashly invested, a life office can no more save up than a private man could if he gave heavy fees to flunkies and gossips for bringing business.

"On the other hand, I think life assurance is an imperative duty on every young Medical man, at the least to recoup the expenses of his education in case of early death. The sum assured should be moderate; the office to be chosen should be one that gives the option of receiving the sum assured at 60, or at death if earlier, or which will buy the policy at a fair valuation—one with substantial business men on the directory, not mere dummies who rely entirely on their manager—and with *un*limited liability of the proprietary. If offices would cease their unwholesome competition and extravagant bribery, so much the better for the assured."

THE WEEK.

TOPICS OF THE DAY.

THE charity-agony column of the *Times* suggests a solution of the "sick poor" dilemma which we would offer to the consideration of aggrieved ratepayers. With the exception of three or four of the old endowed Hospitals, every Hospital in London is in debt, and several of them have beds and wards which they are not able to keep open. There is no doubt that, rightly or wrongly, the public have far greater confidence in the standard of management of the sick which prevails in general Hospitals than that which obtains in the workhouse infirmaries. The spasmodic legislation and the proposed extravagant outlay for new buildings, that lately roused the resistance of ratepayers, were nevertheless the result of a wide-spread dissatisfaction with workhouse-infirmary management which recent events have not tended to lessen. Now it seems but reasonable, at least in reference to the poorer districts, before the lower class of ratepayers are highly taxed for the erection of large infirmary buildings, that the existing local resources for the gratuitous treatment of disease should be exhausted. As we have said, most of the London Hospitals are in debt, and many have accommodation for patients whom they cannot afford to receive. Surely it would be far better that the beds of these Hospitals should be occupied with paupers to be paid for by the parochial rates, than that they should be empty or supported at the temporary expense of much-confiding tradespeople. If the acute cases of disease were drafted off to the

general Hospitals, the necessity, in many instances, for a new workhouse infirmary would be avoided, whilst the public mind would be quieted on the score of treatment. Take the district of Islington, for instance. We believe that, after purchasing a large piece of ground for the erection of a new infirmary, the guardians have been advised by the Poor-law Board not to proceed at present further in the business. However, there is no doubt that accommodation, other than afforded by the present workhouse infirmary, will before long have to be provided. Now there is one Hospital in Islington—the Great Northern—of which the committee is constantly advertising that it requires funds to enable it to utilise the wards it possesses; and not far beyond the outskirts of the parish there are two large Hospitals—the Royal Free and University College—which are as constantly appealing for money to keep them afloat. Why should not acute cases of Medical and Surgical disease be sent to these Hospitals by the in-door and out-door Poor-law Medical officers to be fairly paid for by the parish? Many advantages would accrue. In the first place, it would be far cheaper for the ratepayers; in the next place it would be a generally admitted benefit to the sick poor; in the third place it would supply a succession of valuable cases to the Hospitals, which can now only be, in some cases, secured by the encouragement of a costly and unsatisfactory out-patient department; and, lastly, it would diminish the burdens of the established Hospitals, and tend to diminish those contradictions in terms and satires on modern "benevolence"—charities in debt.

In reference to the very interesting report on the new anæsthetic, chloral, by Dr. Richardson, which we publish this week, we would direct attention to the observation that when chloroform in a sufficient quantity is injected subcutaneously, it seems, like chloral, to produce a narcotism which lasts many hours, and does not appear to be succeeded by any stage of excitement analogous to that which follows the narcotism of chloroform inhalation. The observation, if confirmed, is of great interest, as it illustrates a law which has not, of late years at least, received a due amount of attention—that the physiological action of a substance may be modified by the mode in which it is introduced into the animal body.

Our distinguished *confrère*, Dr. B. W. Richardson, F.R.S., has recently been elected, and received his diploma, as Honorary Member of the Physiologico-Medical and Statistical Society of Milan.

Zymotic diseases are still taking an unusual number of victims from amongst the population of London. During the last week the whole number of deaths from this class of diseases was 573; 493 being the corrected average. Amongst these were 143 deaths from scarlet fever, and 87 from whooping-cough. The prevalence of scarlet fever has inspired a Mr. Frederick Smith to write a pamphlet on its prevention,(a) which he has been kind enough to forward to us. The writer—who, we presume, is not a Medical man—has furnished some useful advice to parents, nurses, local authorities, and public schoolmasters. One point on which he insists is that, on the breaking out of scarlatina in any of our great public schools, the head master should hold a conference with the Medical men attending the school, and with such other eminent Medical men as he may think fit to associate with them, to decide on the best mode of preventing the disease spreading, etc. To such a proposal there can be no objection. For the rest the author has a great esteem for carbolic acid, recommends the innuction plan proposed by Dr. Budd to prevent the scattering of germs from the skin, and his pamphlet is generally calculated to impress a wholesome dread of infection, whilst it lays down a good many rules calculated to diminish risks. He fixes twenty-five days from the first appearance of the rash as the minimum period for segregation. If desquamation means danger, however, this is certainly too short a time.

(a) "Scarlet Fever, otherwise called Scarlatina, and its Prevention." By Frederick Smith, Esq., Malvern. Printed by H. Cross.

The case of "Robert J. Jordan, M.D., of 44, Weymouth-street, Portland-place, and of Berners-street, and of Alexander Miller, his servant," which lately came before the magistrate at Marlborough-street, broke down on account of the non-appearance of the prosecutor, one Edward Wallace. The *Times* newspaper, however, published the information which was read by Mr. Knox, and which, as it is a curiosity, we reproduce. Mr. Knox expressed the deepest regret that he was obliged to discharge the prisoners—a regret which all who read the following will share:—

"The information and complaint of Edward Wallace, of the Salutation Inn, Barton-street, Westminster, taken this 23rd day of August, in the year of our Lord 1869, before the undersigned, one of the magistrates of the police-courts of the metropolis, sitting at the police-court, Marlborough-street, in the county of Middlesex, and within the metropolitan police district, who upon his oath saith:—'On or about June 10 last I called at 44, Weymouth-street, Portland-place, and there saw a short, stout man, whose name is unknown to me, and represented to that person that I was in ill-health, and told him my case. I showed him a little book which I had with me then, and now produce. He gave me an empty bottle, and told me to bring some of my urine in it the following day. He also gave me the letter which I now produce, marked No. 1, and which is signed 'Robert J. Jordan, M.D.,' and on his demand I paid him 11s. I called at the same place the next day, about June 11, with the bottle filled, and saw the same man. He said the doctor had not come, we had better go to his house, and he called a cab, and we went to 19, Berners-street, Oxford-street. The stout man introduced me there to a person he called Dr. Jordan, and the two men had some conversation aside together, and the little stout man left. Dr. Jordan immediately commenced talking to me about money matters, and asked me who my bankers were, and other questions of that description. I told Dr. Jordan I had no banker, but if he cured me I would give him £20, the fee mentioned in his book, at the same time showing him the little book I now produce. Dr. Jordan told me to go and get the £20. I did so, and took it to him. I gave him full particulars of my name and address in Buenos Ayres, and how money was remitted to and from this country; then he told me he had examined my urine, and it was very weak. He took me into another room, and said 'Look here.' There were all sorts of dreadful figures, showing all kinds of diseases, round the room. He showed me a book containing the names of different people, noblemen, officers, and others, and stated that some of them had paid him £5000, and others less. He then left the room and brought back a wineglass with something in it, and told me to drink it and walk about, which I did. He then said, 'Can you give me £1000?' I said, 'No.' He said, 'What can you give? Will you give £80 in a bill at a week, and £500 in five months?' I felt quite stupefied and quite unnerved, either with the drink he gave me or some other cause, and very different from when I went into the house. Jordan wrote out the two bills of exchange. I signed both bills, and hardly knew what I did. Jordan wrote something else in the shape of a letter, and made me write part between lines and sign it. I was very frightened. I told him I was going back to Buenos Ayres in two months, and promised to call again in a week and take up the £80 bill. Jordan gave me two parcels of what he stated were medicines, and said he would give me directions, but he gave me none, but afterwards I received the two papers produced, marked 2 and 3, in an envelope. I have never opened the parcels, and have taken none of the medicine. For several days after I left Jordan I did not know what I was doing; I felt very stupefied and nervous. (Signed) Edward Wallace.' 'Sworn before me, the day and year first mentioned, at the police-court aforesaid. (Signed) A. A. Knox.'"

The daily papers have contained a notice of a case which, unless contradicted, reflects gravely upon the Coroner for the district round Tonbridge. A correspondent of the *Times* states that the dead body of a man respectably dressed was lately discovered in a barn near Tonbridge. The deceased man was unknown in the district; but, without any Medical examination or inquest, two days after the discovery, the coroner granted an order for the burial. Such a story seems almost incredible.

We would add a voice to the party who desire to diminish the number of military murders by withdrawing the service ammunition habitually carried by soldiers. All students of

criminal psychology know that the impulse to commit crime is unmistakably favoured by the power. Deeds of violence have wonderfully diminished amongst the upper classes of society since people left off wearing small swords. The indignity which Colonel North and Sir John Pakington urge such a reform would inflict on the soldier might be endured by the army for the saving of several lives per annum.

Dr. Maudsley is appointed to deliver the Gulstonian Lectures next year at the Royal College of Physicians.

The vacancy caused by the retirement of Mr. Blizard Curling from the Surgeoncy to the London Hospital is advertised. The appointment is to be filled up at the meeting of the Quarterly Court of Governors on Tuesday, the 7th inst.

THE HARVARD AND OXFORD BOAT RACE.

The victory of the Oxford crew over their gallant antagonists from America is due doubtless to many causes, but, above all, to their better style and "form;" and these words, being translated into matter-of-fact language, mean that the Oxford men could breathe better than the Harvards. It is with man as with a steam-engine. If a spurt is to be put on, the fire must be poked up, there must be a good draught of air, and free vent for the smoke. If during violent muscular exertion there be not a good supply of oxygen, the combination of it with carbon, which is the source of force, is checked; and the same imperfect mechanism that interferes with the indraught of oxygen checks also the outgoing of the stifling and oppressive smoke known as carbonic acid, whilst at the same time the heart, which pumps, cannot do its work unless there be free passage through the lungs. Now the action of the Oxford men allowed for the freest breathing possible under the circumstances. Sitting in good form, giving the widest possible play to the muscles of inspiration, they could inflate their lungs well as they bent forward, empty them gradually as they raised themselves in pulling, and enjoy a moment of repose as they bent forward for the next stroke. The Harvard men sat in worse form; in pulling they swayed their bodies too far backwards, and, instead of the calm forward movement of the Oxford men. Their style was jerking, spasmodic, and hurried, compared with the slower and more powerful stroke of the Oxonians—a jerk which interfered with the act of inspiration, and which took away that short but precious repose which their adversaries enjoyed between their strokes. How precious that almost inappreciable interval of rest is between the two successive acts is shown by the distress which ensues when the heart is deprived of it by imperfection of the aortic valves. This, of course, was aggravated by the more rapid stroke. The act of Mr. Burnham, the American coxswain, in splashing water into his friends' faces, was judicious; it is an effective mode of getting a deeper, fuller breath, but it is no substitute for good form. Nothing could be more gentlemanly than the demeanour of the Harvard men, but they affected a secresy about their proceedings, would not let their weight be known, brought their own black cook to prepare all their food, and drank far more freely of water than is usual here. It is a pity that they refused English teaching, although, consciously or not, they drifted in the course of practice into a far more English style than they started with.

ST. MARY'S HOSPITAL.

The election of Aural Surgeon took place on Tuesday last. There were only two candidates admitted by the Weekly Board, Dr. Peter Allen, F.R.C.S. Ed., and Mr. A. Gardiner Brown, M.R.C.S. Although at this season of the year very many governors were absent, 55, however, voted, with the result of placing Dr. Allen at the head of the poll by the very decisive majority of 47, the numbers being for the above-named gentleman 51, and for Mr. Brown 4.

ST. BARTHOLOMEW'S HOSPITAL.

Dr. Charles Mayo, one of the House-Physicians of St. Bartholomew's Hospital, who has lately been active in calling attention to the abuses of the out-patient department of that institution, was on Thursday last suspended from the duties of his office until the 14th inst., when a meeting of the House Committee will take place. We are informed that the weekly number of new Medical cases of all kinds treated as out-patients at Guy's Hospital amounts to no less than 200, about ninety of these being seen by the Assistant-Physicians, and ninety by the Junior House-Physician, who has no ward work, the remainder being casualties, who are seen by the Senior House-Physician. At St. Thomas's, where there are no House-Physicians, the number of out-patient letters given weekly is about 150, all the cases being seen by the Assistant-Physicians, with the help of some senior students. At St. Bartholomew's, however, the weekly number is often as high as 2000, of whom only 150, according to the rules of the Hospital, are to be seen by the Assistant-Physicians, the remaining mass being divided between the two House-Physicians on duty, who have also the care of the wards. During the past few weeks, however, the House-Physicians, apparently with the view of bringing the matter more forcibly to the knowledge of the governors, have transferred a larger share of their work to the Assistant-Physicians.

"HÆRET LATERI ARUNDO."

The practical exclusion of the members of the Indian Medical Service from the benefits lately conferred upon all other classes of officers in the civil or military employ of the Government of India, has been forcibly brought to our notice by a correspondent who has forwarded to us an article on the subject, extracted from the *Pioneer* of July 28, in the hope that the information therein contained might have an effect upon intending candidates for the Indian Medical Service, and convince the Government of India that there was a serious flaw in the terms of their contracts with Medical officers.

Our correspondent informs us that it has been ruled that the Medical charge of a regiment is not an "appointment," and that a Medical officer in military employ shall, when he goes on furlough, be considered as "unemployed," drawing, therefore, half the "unemployed" pay of his rank instead of half the pay of his regimental appointment, while any other officer going home from the same regiment would be entitled to half his actual pay. The difference, for instance, to an Assistant-Surgeon of less than five years' service coming home on six months' furlough from Medical charge of a regiment, if, under the rules at present in force, he should be weak enough to do so—would be, that his pay at home would be £14 6s. instead of £22 10s. per month, and he would lose his regimental appointment in the bargain, his only consolation being that, on his return to India, he may have the prospect of remaining for some time on the undesirable "unemployed" list until a vacancy occurs in an appointment similar to that which he had previously held. Our contemporary the *Pioneer* observes that—

"It is certainly very difficult to divine why the Government should have seen fit to deprive the Medical services, military and civil, of the greatest boon secured by the furlough rules of the past year; and under any circumstances the devotion of a certain section of Government servants as special victims to hardship ought to have been accompanied by the publication of the most cogent and clearest of reasons, so as to mollify, if not preclude, that widespread discontent and angry feeling which has, we are assured, arisen. We have not heard the subject discussed from the point of view taken by those in authority, and therefore lie under a disability in treating the question *quoad* its necessity; but there is abundant evidence to assure us that there are very few Medical officers who do not feel it a real hardship to be turned out of their appointments when proceeding on furlough; and it is equally certain that not one of them agrees in the assumption that every regimental charge and every civil Surgeoncy is equally desirable or equally valuable."

There is an antiphrasis, we believe, in the use of the term "unemployed" as applied to Medical officers, which may be amusing to those at whose expense the joke is not made, but which is far from amusing to the unfortunate subjects of it. An "unemployed" Medical officer is a Medical officer who has not a distinct and separate charge of a regiment or civil station; he may be attached for duty at a depot or general Hospital, and have his time and faculties very actively employed, but not in the non-natural sense in which that word is used in governmental language. We have actually heard, for instance, that Drs. Cunningham and Lewis, who were lately selected, on account of their special acquirements, to undertake a series of investigations into the origin and nature of cholera, were for some time after their arrival in India considered as *unemployed*, and paid accordingly!

It is not, however, in the Indian Medical Service only that anomalies exist. Nearer home we have frequently heard grumblings, both loud and deep, at the harshness and injustice of the rule which places upon half-pay the Medical officer in the British service who has not succeeded on the expiration of six months' sick leave in regaining, to a sufficient extent to enable him to return to duty at home or abroad, the health shattered by tropical service, while his military comrade in the same regiment can have two years' leave on Medical certificate before being placed on half-pay. We have frequently, but in vain, asked ourselves and others what is there in the name and nature of Medical officers that should subject them to such harassing anomalies, which appear to us utterly unreasonable and unjustifiable, and until they are satisfactorily explained or entirely removed we shall suspect, and shall hold ourselves bound to express the suspicion, that in hailing with approval such reforms and amendments as have latterly been introduced into the relations between Government and the public Medical services, our vigilance over the interests of our Professional brethren may have been lulled into silence by the concessions of half measures.

Warnings similar to that given by our Indian correspondent have been already uttered, and possibly not without effect, as we observe that at the late examination for that service, for forty vacancies there were only forty candidates, and that "forty save one" passed. Had the terms offered not been open to some very serious objections, it is hardly likely that in the present closed state of the British Medical Service there should have been so little competition for vacancies in the Indian. And we should certainly advise future intending candidates for that service to satisfy themselves, before signing the bonds of servitude, that there shall be no gross inequalities between the terms on which they are engaged and those extended to other officers, as respects furlough and privileges of the same kind.

FROM ABROAD.—ACTION OF THE SENSITIVE NERVES IN DEGLUTITION—THE LATE EPIDEMIC OF TYPHUS FEVER IN BRUSSELS—DISCUSSION ON VACCINATION.

At the last meeting of the Académie des Sciences, our learned countryman Dr. Augustus Waller and M. Prévost made a preliminary communication relating to an experimental investigation which they have been engaged in on the action of the sensitive nerves in the reflex phenomena of deglutition. They have arrived at the following conclusions:—1. The glossopharyngeal, in the rabbit, exerts no effect on the reflex functions of deglutition. 2. The trifacial, supplying the velum palati, is the principal sensitive nerve influencing these. After dividing one of these nerves, deglutition can be no longer induced by exciting the corresponding half of the velum. 3. The superior laryngeal contributes to these functions by animating the mucous membrane covering the epiglottis, the arytenoepiglottic folds, the upper edges of the laryngeal aperture, and especially that covering the cornicula. 4. The recurrent nerve also contributes to these functions, probably by the branches which it sends to the upper portion of the œsophagus. Electrical stimulation of this nerve has often induced rhythmical movements of deglutition, and an arrest of the diaphragm in expiration; but these phenomena are neither so distinct nor so constant as when they are induced by stimulation of the superior laryngeal. The authors add that in the dog the electrical excitement of the superior laryngeal has sometimes produced cough—a phenomenon that has also been met with in the cat. It has never given rise to vomiting, which, on the other hand, is easily induced by stimulating the central extremity of the vagus.

In a recent number of the *Presse Médicale Belge*, Professor Van den Corput drew attention to the causes of the severe epidemic of typhoid fever which prevailed at Brussels during the early months of the present year. He states that both in its general diffusion and the high elevation of the localities it chiefly affected, as well as in its subsequent complete cessation after abundant rains in summer, it affords great confirmation to Pettenkofer's views. The subterraneous level of water had sunk to such a degree, in consequence of the prolonged heats of 1868, and building operations going on near the river, that Brussels might be considered, in fact, as placed on a half dried-up subterranean bog, which gave forth emanations that were very evident to the sense of smell. The quantity of rain that fell during 1866 was 797·48 mm., and this diminished to 665·95 in 1867 and 533·17 in 1868. The condition of the sewers and drinking water supplies no explanation of the epidemic at all approaching in probability to this one, and he thinks that the authorities are wrong in confining their attention to this portion of the subject, although he admits that a bad condition of sewage may aggravate the condition to which he chiefly attributes the prevalence of typhoid. This was the sudden depression of the level of the subterraneous sheet of water in a soil impregnated with organic detritus. It is obvious that if this view be correct, the capabilities of preventive Medicine will be much more limited than they are at present supposed to be.

Alluding to the interminable discussion on vaccination at the Académie de Médecine, which still drags on week after week, each speaker being freely allowed his hour or two, M. Latour, of the *Union Médicale*, observes it has come exactly to resemble the proceeding of an assize-court. The unfortunate accused is the Jennerian vaccination labouring under the most damaging accusations. The public prosecutor is the ardent and fiery M. Depaul, while M. Guérin constitutes a brave advocate in defence. Witness after witness is called in before the President of the Academy, acting as judge, while the learned body itself listens and attends to all as a jury who will have to pronounce a decision should do. However, notwithstanding all M. Depaul's skilful vehemence, he says that the crimes charged against the Jennerian vaccination become less and less evident, and as the debates proceed the accusation of syphilitic inoculation falls to the ground, while it is still proved to be in the enjoyment of all its pristine power. M. Latour observes that M. Depaul's wisest course will be to withdraw from the prosecution on these two points, if his self-pride will allow him. At all events he is certain that the only result that can be arrived at by a further discussion, and the one that all the recent speeches point to, is the one he long since recommended—that the two modes of vaccination should be allowed to pursue their course side by side.

POPULATION OF THE UNITED STATES.—According to the official documents recently issued at Washington, this amounted at the end of 1867 to 36,743,198, geographically distributed as follows:—

	White.	Coloured.	Total.
Six New England States	3,480,397	30,701	3,511,098
Five Central States	9,072,647	352,469	9,425,116
Thirteen Southern States	6,764,928	3,884,532	10,649,460
Thirteen Western States	12,356,081	311,493	12,667,574
Eight Territories and Federal District	435,774	54,176	489,950
Total	32,109,827	4,633,371	36,743,198
Population in 1860	26,975,575	4,469,505	31,445,080
Increase in seven years ...	5,134,252	163,866	5,298,118

—*Journal de Statistique*, July.

THE CHARLESWORTH AND GARDINER HILL CONTROVERSY.

ON THE ORIGINATION OF THE NON-RESTRAINT SYSTEM IN LUNATIC ASYLUMS—DR. RICHARDSON'S JUDGMENT IN THE "MEDICAL HISTORY OF ENGLAND."

THE controversy as to the originator of the system of non-restraint in lunacy has been revived by the publication of Sir James Clark's memoir of Dr. Conolly, and, if we may judge by the communications which have reached us, is still pregnant with the greatest warmth and interest. Some remarks by Mr. Gardiner Hill in a letter to the *Standard* have elicited the following communication from a well-known contributor, in which the writer, after stating that Mr. Gardiner Hill describes himself in the Medical Directory as "author and originator of the non-restraint system of treatment in lunacy," and then admits in a letter to the *Standard* that "the non-restraint system is due jointly to myself, the late Dr. Conolly, the late Dr. Pritchard, of Northampton, and Mr. M. Gaskell, one of the Lunacy Commissioners," proceeds thus:—

"Dr. Charlesworth's labours for the abolition of restraint commenced in 1819, almost before Mr. Hill had left the nursery, and his merits and fame as a zealous advocate and successful promoter of the cause had been well established before Mr. Hill had emerged from his apprenticeship. None but those who have studied the history of this subject can form a conception now of the benighted ignorance and the deadly prejudices which during that time prevailed in the public mind with regard to the treatment of the insane, and of the cruelties and brutalities to which the patients in asylums were exposed at the hands of the officers and servants, notwithstanding the periodical inspections by governors of the institutions. It was only in 1815, just four years before Dr. Charlesworth commenced his philanthropic career in the reform of this system at Lincoln, that an investigation into the state and management of the York institution before a Parliamentary committee revealed abominations and outrages which curdled the blood of the nation, and which satisfied Dr. Charlesworth and all thinking men that the very first requisite for any practical reform was to admit the public eye within the walls of the asylum. Then there lay before him the task of moulding the leading gentry of his own county into willing co-operators and patrons, of rooting out the brutal notions of keepers, and educating them to humane views and practices, of bringing about new structural arrangements in the Lincoln Asylum and its grounds (of course at a vast additional expense), so as to admit of the separation and classification of patients, before he could secure a chance for the accomplishment of his grand design of abolishing physical restraint in the treatment of the insane, and of substituting moral control in its place. The whole of these objects were achieved by his assiduity and zeal before 1829, and that, too, with such success that in that year Sir Andrew Halliday, in an official report, described the Lincoln Asylum as 'an establishment which, under the superintendence of Dr. Charlesworth and a board of intelligent governors, may be considered as one of the best-conducted establishments of the kind in Europe. The arrangements for classification and treatment, moral as well as Medical, are most complete; and, upon the whole, this asylum does honour not only to the county of Lincoln, but to the whole empire.'

"The development of Dr. Charlesworth's plans exposed him in their successive stages to virulent opposition from governors, and even from other visiting Physicians, as well as from a portion of the local press. In 1829 the sacrifice of the life of a lunatic was anonymously and unblushingly charged against him in consequence of his having then induced the board to order that the strait-waistcoat should be discontinued except under the special written order of the Physician for the month, and that an attendant should continue in the room all night whenever its use during the night should be so ordered. And in 1830 the board were so far influenced by a party of adherents to the old system that they for some time kept in office a House-Surgeon to whom that order was obnoxious, apparently for no other purpose than to browbeat and insult Dr. Charlesworth, and to force him to retire from his labours for the amelioration of the asylum. He, however, persevered in his noble work. One instrument of restraint after another was superseded in 1831 and 1832. In 1833 the governors avowed that their unceasing object was to dispense with or improve the instruments of restraint as much as possible. A system of night-watching was established, and a further diminution of restraint and destruction of instruments took place; and in 1834 a considerable interval occurred, during which there was not a single patient under restraint in the institution.

"And now, when Dr. Charlesworth's ultimate aim was all but perfected, when prejudice and opposition had been overcome; when the chief physical difficulties and obstacles arising from the original defects of the building had been removed, and successive governors and House-Surgeons had become thoroughly indoctrinated with Dr. Charlesworth's principles and imbued with his spirit, Mr. Gardiner Hill was elected to the office of House-Surgeon; this took place in 1835. He discharged the duties of his office not only to the entire satisfaction of Dr. Charlesworth, but even beyond his expectations. Dr. Charlesworth accordingly, with his characteristic generosity, praised Mr. Hill in his reports of 1837 and 1838 for his 'bold conception,' and his belief that it would be possible to dispense with the employment of any instrument of restraint whatever. And according to Mr. Hill's own representation in his letter of August 13, Dr. Charlesworth in 1850, in answer to a speech of Dr. Conolly's proposing his health and Mr. Hill's at a dinner in Hull, declared that 'the real honour of first introducing the system (of non-restraint) was due to Mr. Hill.' But this statement is somewhat at variance with a report of a contemporary now before us. Dr. Conolly, according to that report, neither proposed the health of Mr. Hill at all, nor did he speak of the system of non-restraint. He confined his tribute to 'the labours of Dr. Charlesworth in having promulgated the system of dispensing with unnecessary restraint.' It is, however, out of the after-dinner compliment represented by Mr. Hill to have been bestowed on him by Dr. Charlesworth that Mr. Hill, who, whilst he strives to depreciate his eulogiser Dr. Charlesworth, evidently delights *laudari a laudato viro*, strains to snap a verdict from Dr. Charlesworth, in order that he may oust Dr. Charlesworth himself from the honour which the world had long before awarded to him, and that he may instal himself in Dr. Charlesworth's place.

"His next movement, we presume, will aim at displacing the statue erected in the Asylum at Lincoln in honour of Dr. Charlesworth, and at supplanting it by a statue in his own honour. And as he will have it that the non-restraint system is a 'discovery' and that he is the discoverer, who knows but that his statue may hereafter be inscribed like that of the greatest of all discoverers,

> "'Sibi gratulentur mortales
> Talem tantumque extitisse
> Humani generis decus!'

"Mr. Hill's real credit in the matter consists in this: that, by adopting the principles and practice which Dr. Charlesworth originated, and which continued until his death, for the gradual diminution and ultimate removal of restraint in the treatment of lunatics, Mr. Hill succeeded, under Dr. Charlesworth's superintendence, in knocking off the last fetter, but he did not originate the principles which had caused the removal of many previous instruments, and which led, logically and directly, though gradually, to the removal of the rest. The honour of originating both the principles and the practice belongs to Dr. Charlesworth in due order after the enlightened and courageous Pinel.

"After all, however, 'the bold conception' and 'the belief,' which were expressed by Mr. Hill in 1837, and which raised those sanguine hopes so generously reported at the time by Dr. Charlesworth as to the final success of Mr. Hill's experiments, were not quite justified by the result; for Mr. Hill had to record in his own official journal in 1840 that he had directed a lunatic to be placed under restraint; that, the patient being held by two nurses, the belt was put on; that the wrist-locks were then resorted to; and that the patient was at length thrown down and overpowered. Alas for Mr. Hill's 'bold conception and belief!'

"Mr. Hill ought to be proud of being, in any capacity however subordinate, associated with the name of Dr. Charlesworth. To the latter, as an early pioneer in this philanthropic movement, is justly due the foremost merit. Mr. Hill having taken up the cause late in the day, when nothing was left for him to do but to carry out the principles originated by his superior in the institution, who had made the task a comparatively easy one, must be content with the praise of fidelity and zeal in the discharge of his humbler duty, and with the consciousness of the utility of his work, according to his own statement. Dr. Charlesworth did not grudge to him, although he came in as a labourer in the twelfth hour, the same reward which the public had bestowed on himself. Surely, then, Mr. Hill ought not to

reverse the parable as he does, by grudging that reward to Dr. Charlesworth, who had borne during the previous eleven hours the heat and burden of the day. The spirit of anything like injustice towards Dr. Charlesworth inevitably impairs the credit which Mr. Hill earned at the Lincoln Asylum. For his own sake, therefore, we would commend to him Joubert's beautiful reflection :—'Heureux ceux qui ont une lyre dans le cœur, et dans l'esprit une musique qu'exécutent leurs actions. Leur vie entière aura été une harmonie conforme aux normes éternels.'"

DR. RICHARDSON'S VIEW OF MR. GARDINER HILL'S CLAIMS.

We are reminded by another contributor, who writes with equal warmth on the other side, that Dr. Richardson, in the "Medical History of England," published in the *Medical Times and Gazette* for 1864, vol. ii., had gone thoroughly into the question, and given his verdict in the following words, which we reproduce as fully as space will permit. After describing the condition of the lunatic asylum before Mr. Hill's appointment, he says :—

"The disorderly patients were placed in the back galleries on the north side of the building, and they had only the use of a court-yard. They were subjected to the most strict system of restraint, but the methods of restraint adopted varied somewhat from those common at that time to asylums in general. Most of the modifications in the way of restraint had been introduced on the suggestion of Dr. Charlesworth, and were simply these. The strait-waistcoat had been laid aside, and in place of it iron handcuffs were used, attached to leathern belts going round the body. The reason for this change was not based on the idea that the restraint of the handcuffs was less than that of the waistcoat, but on the circumstance that a patient had been found dead, apparently strangled by one of the waistcoats. The handcuffs, consequently, were thought to be safer and equally effectual. A second modification consisted in the use of what were called the 'boot hobbles' of Dr. Charlesworth. To explain what this invention was, it is necessary to state that previously to the invention the legs of the patients at night were confined to the foot-board of their tub bedsteads by means of iron leg-locks. The 'boot hobbles' of Dr. Charlesworth were boots made of bed-tick and leather, and were locked by the soles to the foot of the bedstead. The reason for the adoption of these boots was to avoid the great chafing and the irritation of skin produced by the iron fillet or lock; it was not intended that the patients should not be restrained, but that they should be well restrained, without suffering injury. The idea, as far as it went, was humane, but very unsuccessful in its working. The boots did not hold the patients so securely as the 'leg-lock,' and the chafing was so great that abrasion of skin and even abscess followed their employment. Handcuffs and chains were also used at night for confining the upper limbs, and every patient who exhibited violence, or who was insensible to the ordinary calls of nature, was bedded on straw.

"From all I can learn from reports of English asylums prior to 1835, these systems of restraint were universal. The picture we see at Lincoln had nevertheless this one redeeming quality, that it aimed to be more merciful in its details. The evidence is satisfactory to the effect that the Physician to the Asylum who invented the 'boot hobbles,' Dr. Charlesworth, was awake to the fact that from the rudeness of restraint injury was often inflicted on life and limb, and it is due to him to say that he tried to alleviate the suffering arising from what he, and all others with him, considered a necessary evil. But Dr. Charlesworth went no further than this: he had no word against restraint *per se*, but disputed the methods by which it was carried out.

"We come then to the year 1835, and to Mr. Hill's election. A significant fact followed him into office. After he was comfortably installed there arrived at the Asylum "an order" of handcuffs from Birmingham: four dozen "wrist-locks" for the use of the institution. During his first year Mr. Hill, naturally, to a large extent accepted things as they were, but not without distrust and disgust. A patient whose wrists had been rendered sore by the handcuffs had a *penchant* for eating his poultices; and this excited Mr. Hill's feeling against restraint altogether. He began therefore gradually to feel his way towards removing it, once and for all, and he soon commenced to discover that success was certain in its course.

"It is commonly assumed—I know not on what data—that the non-restraint method came into existence in the Asylum at a single step—as though some one had said openly and tersely, Every fetter shall be at once removed. There is no ground whatever for such an assumption. The facts are clear, on the reports of the Asylum, that Mr. Hill went to work leisurely, and, as we may say, case by case, in removing the manacles from the patients under his care. But true it is also that as he progressed he was astounded to see how readily the restraint system succumbed when its gradual removal was put to the test. In a very few months restraint became the exception instead of the rule, and in March, 1837, the very last case in which restraint was resorted to was entered upon the books of the City of Lincoln Asylum. It is most interesting to note from the reports the course of the facts. The following short table will give at a glance the correct data :—

				Per cent.
"In 1829 there were under restraint in the Asylum				54·16
1830	,,	,,	,,	58·69
1831	,,	,,	,,	57·14
1832	,,	,,	,,	67·90
1833	,,	,,	,,	50·57
1834	,,	,,	,,	41·28
1835 from Jan. to July	,,	,,	,,	35·18
1835 from July to Decem.	,,	,,	,,	20·37
1836	,,	,,	,,	10·48
1837	,,	,,	,,	1·53
1838	,,	,,	,,	·00

"The success of the system of non-restraint, so clear, so sharp, so decisive, was not accomplished without considerable and obstinate opposition. The attendants in the Asylum were the first who raised their voices against the innovation. . . . .

"Not until Dr. Pritchard followed out the plan at Northampton, and Dr. Conolly afterwards placed it on the most extended basis of proof at Hanwell, was its soundness, not less than its humanity, placed beyond dispute.

"In the actual working out of his design Mr. Hill was fortunate and unfortunate in the circumstance that he was supported by the steady friendship and sympathy of Dr. Charlesworth. He was fortunate in having in Dr. Charlesworth one on whom he could rely whenever he made a new and untried experiment. He was unfortunate in that from the very fact of having such powerful aid an excuse was afterwards found for trying to deprive him of the credit which his success had rendered unusually valuable, and for endeavouring to divide his dearly-bought honours with his senior officer and former friend. On this attempt there arose some years ago a paper war signalised by two peculiar traits—a rancour against Mr. Hill which it is hard to see surpassed, and a quiet, staid, unassuming defence, on his part, which it would be difficult to imitate. Looking over all the documentary evidence that is procurable, with the determination to be the simple and faithful historian, I must say that a more pitiable spectacle than the endeavour to rob Mr. Hill of the value and respect due to his labours was never before witnessed in such a controversy. The evidence is conclusive that for years Dr. Charlesworth himself gave to Mr. Hill the full credit of the introduction of the non-restraint system, and what is more, he lived and died without leaving a line claiming the introduction. For this and for his support rendered to Mr. Hill we may thank him heartily, and, indeed, he might have placed himself, by the merest touch of generosity, in one of the most enviable positions in the history of Physic. Had he, when his injudicious friends claimed for him that which he never did—had he then and there possessed the courage to repeat the words he once used at a meeting of the Provincial Medical Association at Hull—had he said what was just true, that he was the first and earnest abettor of a system which he did not invent, it would have been the happiness of the commentator to have placed him in the first rank of those men who have been made great by their own resignation of imputed fame and their sacrifice of self to the dictates of conscience. Unfortunately Dr. Charlesworth had not the courage to speak out; he could not actually claim what he knew belonged to his friend, but he died letting his friends claim for him that which he would not claim for himself.

"I have entered rather largely into this question of the origin of the system of non-restraint in lunacy, because it is a question that in the future will be of profound interest to the historian, and because said historian will of necessity turn to what is written in this day for his evidences and convictions. I am bound, therefore, to give what seems to be the simple and actual truth; and the truth is, that the whole credit of introduc-

ing the system of non-restraint is due to Mr. Hill. There had been perhaps before him some vague or feeble humanitarian ideas on the subject; there had been an impression, which, in fact, could not fail to arise, that restraint was cruel; but it was Mr. Hill who dared to show that it was as *unnecessary* as it was cruel."

OCCASIONAL COMMENTS ON SOME ARTICLES OF DIET.

By the Author of a "Report on Cheap Wines."

Auldana Wine—Transylvanian Wine—Naussa—Syrian Wine.

I have been urged to continue the papers which I contributed to the *Medical Times and Gazette* more than four years ago, and of which the portion then published referred to *cheap*, or rather *light*, wine, *vice* the ancient port and sherry. The proposition that I started with was the necessity of conciliating and exciting the appetite of the invalid in cases of debility, and of administering a bountiful and varied selection of food. Wine was treated of as the best stimulant to the appetite, and as itself supplying a most valuable kind of nutriment. There remains, however, a very large field of alimentary substances which deserve the attention of the Medical Practitioner who desires to compass either of the ends just mentioned, and these I purpose to discuss empirically—that is, practically—in future papers, in which some details of diet and cookery for the sick will be considered. At present I wish to say a few more words about wine—a subject not easy to exhaust, and to possess a knowledge of a great variety of which is like a quiverful of arrows in the hands of the Medical Practitioner.

The first new kind of wine I must mention is grown upon soil inhabited by Englishmen, and is the product of the Auldana vineyards, so called after their first planter, Mr. Patrick Auld, whose name will be handed down to posterity, like those of Dionysus and Ceres, inseparably blended with that of his excellent wine. The Auldaua vineyards are situated near the River Torrens, above Adelaide, South Australia. They were planted by Mr. Auld at various times between 1837 and 1847, and have had his unremitting attention and endeavours since to make the produce as perfect as the purest juice of the finest grapes can be. The vines came from the stock introduced into the Australian continent by Sir Charles M'Arthur, and amongst red varieties included the Shiraz, Carbinet, Donzelinho, Malbec, and Espenoir; amongst the white, the Verdeilho, Grenache, Palo-Mino Blanco, Pedro Ximenes, and Riesling. These are selected and mixed in due proportions, some to give astringency, some flavour, softness, or strength. The soil is deep—the vine-roots penetrate for thirty feet through calcareous *débris*, with fragments of quartz and slate. It is reckoned that one acre of ground on the hills may produce 400 or 450 gallons of good wine; but if quantity be desired more than quality, five times that amount might be got on the plains contiguous to the river. The vines, which are propagated by cuttings, begin to bear at four years, and are in their prime after seven years.

The vintage is in March; the grapes are separated from the stalks by a machine, and are crushed by rollers covered with felt, so that the stones may not be cracked, and so give their astringent bitterness to the wine. Every part of the process is conducted with the greatest cleanliness and delicacy—there is neither handling nor treading. To make red wine, the berries, separated from the stalks and crushed by the mill, are fermented with the skins; to make white wine, the skins are separated before fermentation, for any grape that has white juice will yield white wine, if red skins be kept out. Great attention and skill are required in the winemaker about the time of the vintage, as the grapes rapidly increase in sugar under a hot sun. Moreover, great care is required to insure uniformity of result, because in the same vat the upper layers of liquid may have their saccharine density reduced to 1° whilst the under layers have 10°. The first fermentation lasts for six or seven days; the wine is racked in July, and twice a year afterwards. The wines mature rapidly under the great heat to which they are exposed, for they are kept in shingle-roofed houses, elevated about three feet above the ground, where the temperature is, in summer, from 120° to 160° in the sun, and often 90° inside. All the processes of winemaking have been made out empirically and adapted to the local circumstances by Mr. Auld, who has been unassisted by foreign manipulation.

The wines, which have been imported into England, and which are to be tasted at Walbrook House, Walbrook, E.C., are white and red. Both are what the gipsy girl in "Peregrine Pickle" told Tom Pipes was "meat for the master"—that is, they do not aspire to be the *vin ordinaire* of daily humble life, but to be the restoratives of the invalid and the luxuries of people of condition. The white, which varies from 36s. to 50s., is a charming wine, pale in colour, delicate in taste, fresh and fragrant as innocent girlhood, having no acidity, but a charming appetising aroma of the fresh grape. I may recall what I have said in former papers of the *Dioszegur Bakator*, or of some kinds of Sauterne; only it is fuller-bodied. It produces no uric acid nor kidney irritation.

The red wines are lower-priced by one-third, and have a character of their own. A Bordeaux wine merchaut called on me the other day, and, in order to improve the occasion, I had up a bottle of Auldana, and asked him what it was. He said that I must pardon him for his want of familiarity with Burgundy, but he supposed it to be *Pomard*, and greatly he stared when I told him it was Australian, for no Frenchman can conceive of any wine that is not French. But it is not like Burgundy either. From Bordeaux it differs in absence of astringency, and scarcely perceptible acidity, and in greater smoothness and rotundity, its flavour is *sui generis*, and taste very soft; and it would, in my judgment, suit any one who wanted a full-bodied nutritious wine without headiness. We of the old country are under deep obligations to our young colonists for sending us such proofs of their industry and good taste. Australia as yet is a wine-importing country, but she grows a great deal, and I hope will spare us some of it, so it be as good as the Auldana.

Transylvanian Wine.—Whilst welcoming new contributors to the Physician's dietetic armoury, we must not forget the older ones, who continue to place novelties before us. Transylvania is a country which, if means of communication are improved, will be able to send us excellent wine. Of these there is one, the *Mediasch*, which is supplied by Max Greger, and which seems deserving of attention. It is as different from the white Auldana as a woman of 30 is from a girl of 20, yet each good in her kind; it is deeper-coloured, more acidulous, and of old Rhenish quality. A short time ago, a number of *savants* did me the honour to meet at my house to form a jury for the purpose of tasting and comparing all the artificially preserved soups in the market. Of the proceedings of this jury I may give some account to the readers of the *Medical Times and Gazette* ere long; suffice it to say now that I selected the *Mediasch* to refresh them under their labours, and that they all approved it highly.

Naussa.—Amongst the Greek wines introduced by Mr. Denman, there is a new one of great merit from the neighbourhood of Mount Olympus, named *Naussa*. It is a young and very powerful wine, with all the elements of red wine in great force, yet not so astringent as the Kephisia, and therefore more agreeable. It seems a good stout restorative wine now, and promises to develope great excellence when more mature.

Syrian Wine.—If I speak of one wine more, it is to show the growing interest of the whole universal civilised world in wine culture. Last year, my much-esteemed friend Signor Giuseppe Churi, the Maronite, who once acted as dragoman to the late Captain Sir W. Peel in his travels in Africa, and is now settled at Beirout, sent me specimens of wine grown on the slopes of Mount Lebanon. The wine is of four sorts, labelled—1. "Vin doux Rosa du Mont Liban, 1864, d'Assad Ebin el Moghobeï;" 2. "Vin doux Rosa de l'Antiliban, 1865;" 3. "Vin blanc des coteaux du Temple de Balbek, 1863;" 4. "Vin d'Or sec du Mont Liban, 1863." The get-up of the samples is most creditable to the good taste of the grower. Assad Ebin el Moghobeï, for the bottles are beautifully packed in rush basket work, and nicely labelled. The *vin doux Rosa* is of a pale pinkish hue, sweetish, but apparently quite stable, and with a decided aromatic taste of Cyprus wine. The other wines also have considerable merit, but are not dry. Nevertheless, they have quite the potentiality of being developed into good, full-flavoured white wines under the care and skill of the grower. Any philosophical œnologist of cosmopolitan tendencies who desires to complete his collection of wines from all parts of the world will be glad to hear that these wines are procurable from Signor Churi. Besides, people who are interested in the Holy Places might like to have these wines for sacraments, weddings, etc., just as they do the waters of Jordan at a baptism.

BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

(*From our Correspondent.*)

(*Concluded from page* 261.)

REPORT ON THE PHYSIOLOGICAL ACTION OF HYDRATE OF CHLORAL.

By Benjamin W. Richardson, M.D., F.R.S.

We have already recorded that this report was drawn up by the desire of the President of the Biological Section and the Department of Physiology. It came before the Section on Tuesday. In opening the subject, the author first expressed his thanks to Mr. Daniel Hanbury, of Plough-court, who had supplied him with a specimen of the hydrate of chloral, and had also been so good as to abstract from Liebreich's papers the principal facts and opinions on which the introduction of the hydrate into Medical practice was based. In brief, hydrate of chloral is a white crystalline body, soluble in water, and yielding a solution not very disagreeable to the taste. It is made by the addition of water to the substance chloral. Chloral, the composition of which is C_2HCl_3O, is the final product of the action of dry chlorine on ethylic alcohol. It is an oily fluid, thin, colourless, volatile. The specific gravity is 1·502 at 64° Fahr., and it boils at 202° Fahr. It has a vapour density of 73, taking hydrogen as unity. The odour is pungent. When chloral is treated with a little water, heat is evolved, and small stellate white crystals are formed as the fluid solidifies. The solid substance is the hydrate of chloral, $C_2HCl_3OH_2O$. The hydrate is slowly volatilised if it be exposed to the air, and the odour of it, were it not pungent, is so like melon as to be hardly distinguishable from melon. When heat is applied to the hydrate it distils over without undergoing decomposition.

When to a watery solution of hydrate of chloral caustic soda or potassa is added, the hydrate is decomposed, chloroform ($CHCl_3$) is set free, and a formate of sodium or potassium, according to the alkali used, is formed. It was on a knowledge of this decomposition by an alkali that Liebreich was led to test the action of the substance physiologically. He conceived the idea that in the living blood the same change could be effected, and that the chloroform would be liberated so slowly that anæsthesia of a prolonged kind would result. To try this he subjected animals to the action of chloral, and even man, and proved that sleep could be rapidly induced without the second stage of excitement common to the action of chloroform when it is given by inhalation. Liebreich produced in a rabbit, by a dose of 0·5 gramme of the hydrate of chloral, a sleep which lasted nine hours. This dose was equivalent to 0·35 of chloral, and to 0·29 of chloroform. The symptoms, he found, were like those produced by chloroform. In some cases he gave the hydrate to the human subject. The first case was that of a lunatic, to whom he administered 1·35 gramme. No irritation was set up, and five hours of sleep was obtained. In a second case he gave internally a dose of 3·5 grammes to a man suffering from melancholia, by which he produced a sleep of sixteen hours.

Such, said Dr. Richardson, was an epitome of the facts placed before him at the time when he commenced to make his experiments. In setting out on his own account, he first prepared a standard solution of the hydrate. He found that 30 grains dissolved in 40 grains of water, and formed a saturated solution, the whole making up exactly the fluid drachm. The standard solution prepared in this way was very convenient.

He next proceeded to inquire whether, by the addition of the hydrate to fresh blood, chloroform was liberated. This was proved to be the fact; the odour of chloroform was very distinct from the blood, and cloroform itself was distilled over from the blood, and condensed by cold into a receiver.

The narcotic power of the hydrate was then tried on pigeons, rabbits, and frogs. The standard solution named above was employed, and was administered either by the mouth or by hypodermic injection. The action was equally effective by both methods. The general results were confirmatory of Liebreich's own experience to a very considerable extent. They are as follows:—In pigeons, weighing from 8½ to 11 ounces, narcotism was produced readily by the administration of from 1½ to 2½ grains of the hydrate. In these animals the dose of 2½ grains was the extreme that could be borne with safety, and a dose of 1½ grain was sufficient to produce sleep and insensibility. The full dose of 2½ grains produced drowsiness in a few minutes, and deep sleep with entire insensibility in twenty minutes. Before going to sleep there was in every case, whether the dose were large or small, vomiting. As the sleep and the insensibility came on, there was in every instance a fall of animal temperature, and even in cases where recovery followed, this decrease was often to the extent of five degrees. The respirations also fell in proportion, declining in one case from 34 to 19 in the minute during the stage of insensibility. From the full dose that could be borne by the pigeon the sleep which followed lasted from three and a half to four hours. Six hours at least was required for perfect recovery. During the first stages of narcotism in pigeons the evolution of chloroform by the breath was most distinctly marked.

In rabbits weighing from 83 to 88 ounces, thirty grains of the hydrate were required in order to produce deep sleep and insensibility. A smaller dose caused drowsiness and want of power in the hinder extremities, but no distinct insensibility.

When the full effect is produced in rabbits from the administration of the large dose, the drowsiness comes on in a few minutes; it is followed by want of power in the hinder limbs, and in fifteen minutes by deep sleep and complete insensibility. The pupil dilates, and becomes irregular; the respiration falls (in one case from 60 to 39 in the minute), and the temperature declines 6° Fahr.; sensibility returns with the rise in number of respiratory movements, but in some cases falls again during the process of recovery. The drowsiness, or, if the animal is left alone, what may be called sleep, lasts from five and a half to six hours. But it was observed that the period of actual anæsthesia was very short, lasting not longer than half an hour, after which the skin seemed rather more than naturally sensitive to touch. During recovery there are tremors of muscles almost like the rigors from cold; they are due probably to great failure of animal temperature.

In frogs a grain of the hydrate causes almost instant insensibility, coma, and death.

In further prosecution of his research, the author tested, on similar subjects, the effect of chloroform, bichloride of methylene, tetrachloride of carbon, and chloride of amyl. In all the observations with these substances, the narcotising agent was used by hypodermic injection. It was found, as a result of these inquiries, that seven grains of chloroform, five of tetrachloride of carbon, and seven of chloride of amyl, produced the same physiological effect as two grains of the hydrate. Seven grains of bichloride of methylene induced a shorter insensibility. A rabbit subjected to thirty grains of chloroform slept four hours and twenty-five minutes; and a pigeon subjected to seven grains slept three hours and twenty-five minutes. All these agents caused vomiting in birds, before the insensibility was pronounced, the same as did the hydrate; but in no animal was there any sign of the stage of excitement which is seen when the same agents are administered by inhalation. This fact is most important as indicating the difference of action of the same remedy by difference in the mode of administration. The temperature of the body was reduced by the agents named above, but not so determinately as by the hydrate.

Two animals, pigeons, made to go into profound sleep, the one by the hydrate, the other by chloroform (each substance administered subcutaneously), were placed together, and the symptoms were compared. The sleep from the chloroform was calmer; there was freedom from convulsive tremors, which were present in the animal under the hydrate, and recovery was, it was thought, steadier. It was observed, and the fact is well worthy of note, that no irritation was caused in the skin or subjacent parts by the injection of the chloroform and other chlorides.

The neutralising action of the hydrate on strychnine was tried, and it was determined that the substance arrests the development of the tetanic action of the poison for a short period, and maintains life a little longer afterwards, but does not avert death. This subject deserves further elucidation.

When the hydrate of chloral is given in an excessive dose it kills: there are continuance of sleep, convulsion, and a fall of temperature of full eight degrees before death.

The post-mortem appearances were noticed after a poisonous dose. The vessels of the brain are found turgid with blood. The blood is fluid, and coagulation is delayed (in a bird to a period of three minutes), but afterwards a loose coagulum is formed. The colour of the brain substance is darkish pink. The muscles generally contain a large quantity of blood, which exudes from them, on incision, freely. This blood coagulates with moderate firmness. Immediately after death all motion of the heart is found to be arrested. The organ is left with blood on both sides, but with more in the right than the left side. The colour of the blood on the two sides is natural, and

the coagulation of this blood is moderately firm. The other organs of the body are natural.

Other observations were made on the changes which the blood undergoes when the hydrate of chloral is added to it. The corpuscles undergo shrinking, and are crenate; and when excess of hydrate is added the blood is decomposed in the same way as when treated with formic acid. The summary of the author's work may be put as follows:—

Hydrate of chloral, administered by the mouth or by hypodermic injection, produces, as Liebreich states, prolonged sleep.

The sleep it induces, as Liebreich also shows, is not preceded by the stage of excitement so well known when chloroform is administered by inhalation.

The narcotic condition is due to the chloroform liberated from the hydrate in the organism, and all the narcotic effects are identical with those caused by chloroform.

In birds the hydrate produces vomiting in the same manner, and to as full a degree, as does chloroform itself.

The sleep produced by hydrate of chloral is prolonged, and during the sleep there is a period of perfect anæsthesia; but this stage is comparatively of short duration.

The action of the hydrate is (as Liebreich assumes) first on the volitional centres of the cerebrum; next, on the cord; and, lastly, on the heart.

PRACTICAL APPLICATIONS.

Whether hydrate of chloral will replace opium and the other narcotics is a point on which the author was not prepared to speak. It is not probable it will supersede the volatile anæsthetics for the purpose of removing pain during the performance of Surgical operations, but it might be employed to obtain and keep up the sleep in cases of painful disease. This research had, however, led to the fact that chloroform, when injected subcutaneously in efficient dose, leads to as perfect and as prolonged a narcotism as the hydrate, with an absence of other symptoms caused by the hydrate, and which are unfavourable to its action. This was a new truth in regard to chloroform, and might place it favourably by the side of the hydrate for hypodermic use. Lastly, as the hydrate acts by causing a decomposition of the blood—*i.e.*, by undergoing decomposition itself and seizing the natural alkali of the blood, it adds to the blood the formate of sodium. How far this is useful or injurious remains to be discovered. But while putting these views as to practical application at once and fairly forward, Dr. Richardson said it was due to Liebreich to add that his (Liebreich's) theory and his experiments have done fine service in a physiological point of view. They have shown in one decisive instance that a given chemical substance is decomposed in the living body by virtue of pure chemical change, and that the symptoms produced are caused by one of the products of that decomposition. The knowledge thus definitively obtained admits of being applied over and over again in the course of therapeutical inquiry.

The author concluded by thanking most heartily Dr. Shapter, of Exeter, Dr. Kelburne King, of Hull, Mr. Ley, House-Surgeon to the Devon and Exeter Hospital, Mr. Lewis Shapter, and Messrs. Drew, Wilson, Hawkins, and Vincent for the very able assistance they had rendered him—assistance without which he could not possibly, in the time, have drawn out so full and so clear an experimental report.

Discussion.

In the discussion which followed, Dr. Kelburne King said that, having seen the experiments and observed the action of chloroform by the side of hydrate of chloral, he had no hesitation in pronouncing in favour of chloroform simply. Dr. Michael Foster, as well as the President, remarked that the fact that this report was produced while the Association was sitting was the best evidence of the value of associations like the British Association for the Advancement of Science, in which men engaged in different departments of science came together, each in his way prepared to help towards one common object and advancement. Mr. Mackie, as a "layman," would enter into no details, but could not avoid expressing, on behalf of men of science generally, his satisfaction at the method of research in therapeutics which Dr. Richardson was carrying out. It seemed to him that the study of the action of remedies would, after all, soon become exact science, and that an advance in this direction, such as was never contemplated until now, was a fact of the day.

An Instrument for recording Respiratory Movements.

By Burdon Sanderson, M.D., F.R.S.

Dr. Burdon Sanderson exhibited an instrument, lately contrived by him, for registering the respiratory movements in man and animals. The purpose of the instrument is to measure the extent and duration of the *variations* of *diameter* of the chest which result from its expansion and contraction in breathing, and to record those variations on a cylinder revolving by clockwork. Various methods have been employed for this purpose; none of them, however, yield satisfactory results. The best—viz., that of Professor Marey—has the fundamental defect that the curve inscribed on the cylinder does not express the variation of diameter of the chest in breathing, but merely the movement of one part of the chest wall in relation to a fixed point outside of the body. For example, in investigating the movement of the sternum according to Professor Marey's method, what is measured is not the variation of distance between the sternum and spinal column, but merely the variation of distance between the sternum and the instrument, or the table on which it is placed. If it were possible to fix the spinal column, the result of the two measurements would be identical; but inasmuch as the spinal column cannot by possibility be rendered immovable, and as the movements to be investigated are themselves slight in extent, the difference is very considerable. The same objection applies to instruments contrived by other observers, as, *e. g.*, to the ingenious machine of Dr. Hawksley. In all of them the results are spoilt and rendered valueless by the confusion of the true respiratory movements with the other irregular movements of the trunk. Dr. Sanderson's instrument consists of a light frame of wrought iron of the shape of the Greek letter Π, of such size that the arms of the Π are sufficiently wide apart to comprehend the chest. One of the arms is rigid, and from its internal side, near its extremity, projects a rod, ending in a button covered with wash leather. This button can be fixed at any distance from the arm. The other arm is flexible, consisting of a steel spring, and is also furnished with a rod and button, the two buttons being so placed as to face each other. The distance between them is expressed by a graduation on one of the rods. When the instrument is in use the button which is attached to the rigid arm is gently but firmly pressed against the surface of the chest, at a point corresponding to one extremity of the diameter to be investigated and the rod adjusted to such a length that the other button is kept in contact with the surface of the chest opposed to it by the spring. This being the case, the spring follows with exactitude all the movements of the surface against which it rests. By a mechanical arrangement, which cannot well be described without a figure, the movements of the spring are transferred (multiplied by three) to the recording cylinder, which may stand on a table at any convenient distance from the person or animal under investigation. The regularity and sharpness of the tracings obtained are most satisfactory, and exhibit not only the movements of respiration, but those of the heart. When the instrument is so applied that the movable button is in contact with the præcordia, a tracing is obtained which exhibits all the features of those yielded by the cardiograph, with this great advantage, that the respiratory movement is inscribed at the same time, so that, in addition to its utility for recording the movements of respiration, it affords a means of investigating the relation between the respirations and cardiac movements in man with an exactitude which has not before been attained. Dr. Sanderson claims for his instrument (1) that in point of exactitude it comes up to a very high standard, and (2) that it is applicable both for the purposes of the physiologist and for clinical investigation.

On Human Vaccine and Heifer Lymph compared.

By H. Blanc, M.D.

Dr. Blanc, the author, said that by the Vaccination Act of 1867 every parent was bound to have his child vaccinated within three months of the child's birth. Compulsion was always distasteful, but, if properly applied, the Act would have the effect of eradicating from us one of the greatest scourges that ever afflicted mankind. But if no steps be taken to make the Act more perfect the public resistance to it would render it a dead letter. The declared enemies of vaccination were by far less dangerous to its cause than those who, in the presence of the strongest evidence, persisted in their denial of the possibility of the transmission of disease and of the actual degeneration of the vaccine lymph, and who endeavoured by partial and trivial facts to force on the public a belief in a perfection which no longer existed. The anti-vaccinators, however wrong in many important points, had, by their exaggerated statements, done good service to the cause of vaccination. By enlarging on its existing defects they had called public attention to this important subject. The one indispensable condition of compulsory vaccination was that the vaccine should be as pure as possible. The present vaccine, he

most positively declared, did not possess that condition. He therefore proceeded to discuss these two important questions—1st. Can disease be transmitted with humanised vaccine lymph? 2nd. Is humanised lymph of long standing a reliable prophylactic against small-pox? He did not believe that every possible disease could be communicated by human lymph, or that lunacy could be traced to vaccine. That it predisposed to cholera, scrofula, and that the many ailments that affected children after vaccination were due to that cause, was incorrect, irrational, and absurd. At the same time he believed that under certain circumstances the transmission of disease was not only possible, but must be received as an acknowledged fact. Science acknowleged two orders of disease that had been transmitted with human vaccine lymph—certain diseases of the skin and syphilis. He quoted Ceely, of Aylesbury, the *Medical Times and Gazette* (Paris letter), Dr. Ricord, and Dr. Depaul, the director of public vaccination in France. The last named said that Dr. Henry Roger had examined at Auray 54 children who were suffering from syphilis inoculated with vaccine lymph. A similar instance was reported by Dr. Depaul from the Département du Lot. Dr. Blanc wished to be distinctly understood that he did not look on the transmission of diseases of such frequency as to deter from the practice of arm-to-arm vaccination; but they could not deny the existence of the possibility, and to those who objected to vaccination on this score we should at least allow the choice between humanised vaccine lymph and spontaneous cow-pox transmitted in all its purity from heifer to heifer. This brought him to the second branch—Is humanised lymph of long standing a reliable prophylactic against small-pox? He said it was not. The present lymph had lost much of its anti-variolic power. This view he supported by reference to Dr. Ballard, Mr. Simon, and others, and proceeded to prove the correctness of the view by reference to indisputable facts of gradual increasing resusceptibility to small-pox and the gradual increasing fatality amongst the vaccinated. Direct inoculation from the cow was, according to the testimony of Jenner, a most perfect and lasting protection against small-pox. In the results of vaccination in the first year following its discovery there was not the complete protection as when animal vaccination was the agent, still the results were far superior to those observable as vaccinators gradually departed from the original source of vaccine. Another inference from Jenner's observations was that a few cases of post-vaccinal small-pox were noticed as soon as natural animal vaccination was superseded by the use of humanised lymph, but still rarely. Having cited a host of facts and statistics in support of his view, the author proposed as an effective remedy a return to the practice from which Jenner derived his great discovery. Vaccination direct from the heifer was no novel and untried system. For many years it had been established in Naples, Paris, Brussels, St. Petersburg, Vienna, Berlin, Marseilles, etc., and everywhere, after a hard-fought battle against apathy and routine, it had been accepted by the learned and by the people at large. The lymph used by animal vaccination was spontaneous cow-pox, transmitted in all its purity through a succession of heifers; it had never passed through the human body. Animal vaccination offered the following advantages—1st, the healthy heifer supplied the lymph free from all morbid and diathetic principles; 2nd, the lymph retained all its essential qualities—activity, development, and duration; and finally, the supply was unlimited. Animal vaccination would silence all honest opposition, and anti-vaccinators, unless prejudiced, would be the first to join the ranks of the true friends of vaccination, and the ravages of small-pox would be checked. All who had tried the system were imbued with its merits. From a central establishment in London where hundreds could be vaccinated daily if required, inoculated calves or lymph for that purpose could be forwarded to any town in the kingdom. Dried lymph on points could be forwarded to country Practitioners, and for those who did not believe in the transmission of disease, liquid lymph in tubes of first generation could be supplied, of as great anti-variolic power as heifer lymph, and in ordinary hands even of more value, as, being slightly humanised, it would take more readily in the human subject. In adopting the animal vaccination they would be being their duty as men of science and as honest men. Finally, we must improve, not abandon, compulsory vaccination, complete Jenner's great work, and restore to his immortal discovery all its former usefulness, glory, and prestige.

Dr. Blanc was heartily thanked for his contribution.

On the Brain of a Negro.

By R. Garner.

The author described his mode of making casts of the brains of man and animals, first hardening them in a solution of corrosive sublimate, rather more than 1 oz. to a pint of water at 60°, which forms a liquid of the specific gravity of the brain itself, 1·038, and in which it neither sinks nor swims. If carefully made, the casts are an exact image of the brain, for there is no contraction after immersion as in alcohol, and they serve well for permanent record and comparison of the convolutions. The negro in question had been cook in ships and a gentleman's servant, and therefore was more educated than his race generally—in fact, his brain weighed 49 oz., quite the average of the Englishman's, though it retained the negro characters of narrowness, longness, and height. Compared with the brain of an Englishman, who during life was well known to the author, and who, if name were anything, ought to be of our noblest blood, who could read, write, and sum well, was of average intelligence, but self-indulgent and choleric, the negro's was the larger, richer in its convolutions generally, and less symmetrical from their greater complication. The author has a method of marking on his casts the situation of the sutures, the course of the coronal and of the lambdoidal being pretty well distinguished by certain fissures on both surfaces of the hemispheres, and he objects to the fissure of Rolando, situated too far back, being called the coronal fissure. This fissure of Rolando was more anterior in the negro's than in the European brain, not from shortness of the anterior or frontal portion, but rather from the richness of the gyri behind, the post-parietal, annectent, and cuneus. The skull was thick and heavy, as is usual in his race, and the parietals did not well join the sphenoidal alæ. The sulci were often an inch deep, the grey matter looked dusky, but the arachnoid had no pigment. The cerebellum was not full, but the reverse, as in Colori's example, which agreed with the author's in form, but was a less developed brain. Of course, in most European races (brachycephalic) the brain is much wider than in the negro, and the phrenologist would say that to this are due the white man's desire and power to rule; but the width of the cranial base may perhaps depend upon other causes, and whether the negro is the better or the worse for the mere form of his brain, or whether any other peculiar shape of brain has very much effect on the faculties, or what, seems difficult to say. His brain is well developed in the posterior lobe, and, though this has been considered a pithecoid or quadrumanous character solely, the author believes it to belong to the quadrumana and bimana, the lobes smooth in the former, with more gyri in the latter. The orbital lobules are certainly simple in the negro. The author thinks that the negro brain is here shown to be capable of large development, still retaining its characters, though his own prepossessions are that the negro is in his place as the cultivator of the soil in hot regions, and as servant and not master. At present we can only judge of the power of the brain by its size and the development of its convolutions; and the first circumstance requires modification: for instance, the Chinese giant finds everybody's hat much too small for him. The brains of imbeciles, though small, have all the essential parts and convolutions. We now know the topography of the convolutions pretty well, and an expert would have no difficulty in tracing out those of the upper superficies in a blank oval; what remains is to connect their development with the formative fascicles of brain fibres, and on this point no two anatomists agree. One of the author's casts was taken from the brain of a man aged 97, and showed well the senile shrinking of the convolutions.

On the Homologies in the Extremities of the Horse.

By R. Garner.

The author's view that the cannon-bone of the horse is the third metatarsal (behind), combined with an element from the fourth, arguing from the connexion of the cannon-bone above with two tarsal bones, and from a comparison of the extinct horse's supplementary toes with those of the ox, obtained no favour with the chairman, no mean authority, who, however, could assign no use for the callosities called *châtaignes* and *ergots*, or *spurs*, on the legs of the horse, and which the author believed to be traces of hoofs or nails, though he said that they have a musky odour, and that some might assign a different use to them.

Further Observations on Dendroidal Forms assumed by Minerals.

By J. D. Heaton, M.D.

In this communication the attention of the Section was again drawn to the peculiarities of the dendroidal forms developed upon some purely mineral crystals when immersed in weak solutions of silicate of soda, and some additions were

made to the observations upon this subject read at the meeting of the Association at Dundee in 1867. It was then pointed out that when crystals of sulphate of iron, sulphate of copper, or some other mineral salts are immersed in a dilute solution of silicate of soda, in the course of a few hours branches shoot perpendicularly upwards in the liquid, presenting a remarkable resemblance to the branches of some vegetation. These branches are straighter in a rather stronger solution, more contorted, and sometimes distinctly spiral, when the solution is somewhat weaker; but results are only attainable within certain limits of dilution, of the solution ordinarily supplied for commercial purposes about one part in eight being most efficient. The trunks of these mineral vegetations occasionally ramify and subdivide, and sometimes parallel branches, after growing side by side for a time, will approximate and again anastomose into a single trunk. At the base those developed on sulphate of iron may have a diameter of one-sixteenth or one-twentieth of an inch; as they elongate they gradually narrow to that of a fine hair. They have a definite limit of growth, restricted to a height of from four to six inches. Those developed on sulphate of copper are shorter and more delicate than those on sulphate of iron. When the power of growth fails they terminate in fine needle-shaped extremities. Dr. Heaton had stated at Dundee his opinion that the terminations of branches still in process of elongation presented pointed extremities, which were carried forward as growth proceeds, necessarily implying an interstitial mode of increase. But having since made an arrangement by which branches may be observed microscopically in the act of growth, he must now correct that statement. No change of size or form can be observed in a branch subsequent to its first development; but as a branch elongates, it narrows as the power of growth fails, and when the needle-shaped point is formed, there is no more elongation. The growing point of an elongating branch, as seen under the microscope, appears enveloped in a slight cloudiness in the liquid medium, which is gradually lifted up and precedes the extremity of the elongating branch, whose gradual and continuous development presents a very curious appearance. The branches are delicate tubes having thin semitransparent walls; they fall in pieces when taken out of their native fluid. Under a high power of the microscope, their walls present a finely granular structure, but no trace of crystalline form. Both the silica of the solution and the constituents of the crystal on which the branches grow enter into their formation. What is the nature of the force which determines the assumption of dendroidal forms and a tubular structure by these strictly mineral formations, and their upright growth, in opposition to the tendencies of gravitation, like the ascending axis of a plant? It is neither simple aggregation, nor is it crystallisation. It presents certainly, in its results, a remarkable resemblance to that force by which is effected the growth of living tissues under the influence of vitality, and upon which it may serve to throw some light. And thus these dead structures, assuming the forms, and increasing so much after the manner, of living tissues, seem to effect one slight gap (amongst others) in that wall of separation by which it has hitherto generally been held that the mineral world is absolutely divided from the world of organisation, but which now seems at various points to be giving way. In connexion with this subject, Dr. Heaton noticed a communication by Mr. W. C. Roberts to the *Journal of the Chemical Society* upon the occurrence of organic forms in colloid silica as obtained by Graham's process of dialysis. These specimens have all the appearance of microscopic fungi, presenting radiating fibres composed of elongated cells, with occasional clusters of cells having the appearance of fructification, very much resembling common mildew. The Rev. Mr. Berkeley, the eminent mycologist, has seen them, and recognises their fungoid character, and even their specific peculiarities.

On the Interpretation of the Limbs and Lower Jaw.

By Prof. Cleland.

In this paper it was pointed out that the branchial arches of fishes form circles internal to the primary circles of the vascular system, and that the costal arches encircle the visceral cavity, external to the vascular arches, but deeper than the muscular system, and it was sought to be shown that the limbs are divisible into two parts, limb arch and appendage, and that the limb arch is not the property of one particular segment, but of a whole region of the body; and further, that from its mode of development from the ventral plates before the dorsal plates have passed far round the body, it may come to lie either outside or inside the costal arches, the latter, however, being the usual position. The lower jaw, together with the suspensorium, was held to have the characters, not of a costal, but of a limb arch, and the operculum of fishes was considered as a radiation.

Report on the Spectroscopic Examination of Animal Substances.

By E. Ray Lankester.

The report related to the absorption spectra of liquids and solids found in animal tissues. The various spectra furnished by hæmoglobin, the red oxygen-condensing matter of blood, had been examined, and it was announced as a remarkable fact that the poisonous gas cyanogen acts on hæmoglobin in exactly the same way as does the poisonous gas carbonic oxide, giving the same spectrum and tint, differing slightly from those of oxyhæmoglobin, and at the same time rendering the hæmoglobin indifferent to the action of reducing solutions. After keeping for six hours, CyHb—as the cyanogen-hæmoglobin may be written—becomes converted apparently into HCyHb, or hydro-cyani-hæmoglobin, since it gives a spectrum identical with that obtained by the action of hydrocyanic acid or of cyanide of potassium. On adding sulphide of ammonium to the HCyHb or KCyHb, two bands were shown by Dr. Preyer to appear, which, Mr. Lankester pointed out, were distinct from those of Stokes' reduced hæmatin, though much like them. The report also contained an account of experiments on chlorocruorin—the green blood-matter which takes the place and function of hæmoglobin in some organisms; to wit, the annelides, siphonostoma, and sabella. Its oxy- and simple condition were shown to have distinct spectra, and, by the action of KCy and $(NH_4)_2S$ consecutively, exactly the same spectrum was obtained from chlorocruorin as from hæmoglobin. The body affording this spectrum, which thus furnishes the link between these remarkable red and green blood-substances, the reporter proposed to call "cyanosulphæm." Hæmoglobin was shown to occur in all vertebrates and in many invertebrata, Mr. Lankester adding a crustacean to the list which he had formerly given, comprising the mollusc *Planorbis*, the insect larva *Chironomus*, and many annelids. With regard to the chlorophyl-like body, the spectrum of which Mr. Lankester had formerly described, new details were now added, and the opinion expressed that chlorophyl was a highly protean and complex body. Mr. Lankester had not succeeded in working with Mr. Sorby's standard interference scale, on account of the inaccuracy attending its manufacture, and he now proposed the spectrum of the gas N_2O_4 as affording a natural, unchangeable, and thoroughly efficient standard for reference. The combination of prisms in the Sorby-Browning microspectroscope was considered better than any other for these observations.

An Obstacle to Human Longevity beyond Seventy Years.

By Sir Duncan Gibb, Bart.

The author of this paper adduced an experience of 5000 cases in which he had examined the position of the epiglottis. The persons were all healthy and of different ages. In 11 per cent. the epiglottis was pendent. He is of opinion that the cartilage is in no case pendent over seventy years. In persons from 70 to 95 years of age, of whom he has examined several, the cartilage was vertical, and the same was observed in a person who had attained 102 years. From his observations, the author further stated his opinion that pendency of the epiglottis is adverse to longevity.

A Cause of Diminished Longevity among the Jews.

By the same Author.

The author attributed to the use of olive oil as food by the Jews a reduction in length of life. The persistent feeding upon the oil gave to the Jews what was designated as the "*sanguineo-oleaginous expression.*" In persons presenting this appearance, life is comparatively short; they die from fatal congestive disease before they reach the last term of natural existence. In them usually the epiglottis is pendent. These papers were read in the Biological Section in the Department of Zoology and Ethnology.

Résumé.

Amongst other papers of interest to the Profession, and read before the Association, was one "On the Solution of Uric Acid Calculi and the Quantitative Analysis of Uric Acid," by the Rev. W. V. Harcourt; "On the Treatment and Utilisation of Sewage," by Dr. Paul; "On the Solubility of Lead and Copper in Pure and Impure Water," by Dr. T. L. Phipson; "On Contributions to Vital Statistics," by Dr. Stark; "On the Rapidity of Human Thought," by Mr. Hyde Clarke; "On the Primæval Status of Man," by Mr. Walter C. Dendy; "On the Distribu-

tion of Heat on the Sea-surface throughout the Globe," by Admiral Sir E. Belcher; "On the so-called '*Petrified Human Eyes*' from the Graves at Arica, in Peru," by the Rev. Dr. A. Hume; "On the Occasional Definition of the Covolutions of the Brain on the Exterior of the Brain," by Mr. T. S. Prideaux; "On the Absorption Bands of Bile," by Dr. Andrews; and "On the Action of Hydrochloric Acid on Morphia and Codeia," by Dr. Matthiessen and C. R. Wright.

A report by Professor Crum-Brown, "On the Connexion between Chemical Composition and Physiological Activity," was received as read.

Note on the Report on Hydrate of Chloral.

Dr. Richardson requests to add to the report on hydrate of chloral the fact that a pigeon, which had been so profoundly narcotised by the hydrate as to seem actually dead at the meeting when the report was read, began about an hour afterwards to breathe again, and ultimately made a perfect recovery. The dose which produced this effect was two and a half grains. He wishes also to state, in answer to several inquirers, that a dose of thirty grains of the hydrate of chloral is, according to his estimate, equivalent, as a narcotic, to one grain of opium.

ARMY MEDICAL DEPARTMENT REPORT FOR 1867.

(*Continued from page* 263.)

The results of revaccination of soldiers and recruits are satisfactory, and show that more attention has been directed by Medical officers to the distinction between perfect and modified vaccine pustules. Of recruits enlisted at the head-quarters of recruiting districts the curious fact appears that of English recruits 73·8, Scotch 123·9, and Irish 51·6 per 1000 bore marks of small-pox; and that 886 English, 842 Scotch, and 888 Irish per 1000 bore marks of vaccination; while 40 English, 33 Scotch, and 60 Irish per 1000 bore no satisfactory marks, so that the Irish show the highest proportion of vaccinated, lowest of small-pox marks, and highest of no marks.

The number discharged as invalids was 1629, or 22·18 per 1000, which, added to 690 deaths, makes the proportion of total loss by deaths and invaliding 31·58 per 1000. The highest amount of invaliding was 30·29 in the Depot Battalions, and the lowest 13·85 per 1000 in the Household Cavalry. The invaliding was lower in all arms than in 1866, and considerably under the average of the preceding eight years.

The mean daily sick per 1000 of the troops generally was 42·47, varying from 47·96 in the Depot Brigade Royal Artillery and 45·92 in the Foot Guards to 27·43 in the Household Cavalry. Compared with the results for 1866, there has been a trifling increase in the mean daily sick of the troops generally. This has taken place in the Foot Guards and Infantry of the Line, the Depot Brigade Royal Artillery, and the Depot Battalions; but in all of them the proportion has been under the average of the seven preceding years.

The returns of recruiting present their usual mine of most interesting information as to the physique, the educational acquirements (or rather deficiencies), the nationalities, heights, weights, ages, and occupations of men offering themselves for military service. The total number of primary inspections was 26,646. Of these, 8658, or 325 per 1000, were rejected on primary inspection, and 1411, or 53 per 1000, on secondary inspection, making a total of 378 per 1000. The proportion rejected on secondary inspection of recruits primarily passed by army Medical officers was 41 per 1000, and of those primarily passed by civil Medical Practitioners 139 per 1000.

England and Wales furnished 710, Scotland 111·6, Ireland 172·6, and colonies and foreign countries 5·8 in every 1000 recruits. There has been a marked decrease in the proportion of Irish, and an increase in that of Scotch and English recruits.

As usual, diseases of the eyes were the most frequent causes of rejection, being 42 per 1000. In the result of primary and secondary inspections varix caused the rejection of 35·84, malformed chest 29·54, defects of lower extremities 29·31, varicocele 23·38, disease of heart 23·83, and syphilis 16·51 per 1000.

The most usual age of recruits was from 18 to 19, lads of which age were in the proportion of 2844 per every 10,000. From 19 to 20 the proportion was 1563.

In every 10,000 recruits 2845 were from 5 feet 5 inches to 5 feet 6 inches in height, and 2565 from 5 feet 6 inches to 5 feet 7 inches. Men of six feet and upwards were in the proportion of 86 in the 10,000. The weight of 3019 in the 10,000 was from 120 lbs. to 130 lbs., and of 2367 from 130 lbs. to 140 lbs.; men of 170 lbs. and upwards were in the proportion of 35 in every 10,000. Of every 1000 recruits 222, or more than one-fifth, were unable to read or write, 107 were able to read only, and 671 were able to read and write.

Labourers, husbandmen, and servants contributed 591 in every 1000 recruits, and 369 per 1000 of this class were rejected. Mechanics employed in occupations favourable to physical development gave 164 per 1000, and of these 432 per 1000 were rejected. Manufacturing artisans were in the proportion of 158 per 1000, and 374 per 1000 were rejected.

"Compared with the preceding year there has been a marked decrease in the proportion of labourers, husbandmen, and servants enlisted, while there has been an increase in the manufacturing artisans and mechanics—a result, there is too much reason to suppose, of the generally depressed state of trade during the year."

The sanitary reports fully indicate the increasing attention and zeal displayed by the Medical authorities of the various military districts. They are, on the whole, of a satisfactory nature, although many complain of the continued existence of important sanitary defects. Inspector-General Lawson informs us that at Aldershot "the old-fashioned urine tubs still continue in use. The apparatus invented by Captain Lempriere, R.E., was found to be liable to the objection that the metal of which it was composed corroded, and its use was discontinued." Also that "there are several different varieties of basins used in barracks, none of which are perfect. A good cheap serviceable basin for soldiers' ablutions is a desideratum."

At Colchester, "Staff-Surgeon Ponlton, Acting Principal Medical Officer, alludes to the quantity of meat in the soldiers' rations being barely sufficient, especially for growing lads, who require a larger amount of animal food to promote their physical development in the early stage of military life." We find a similar observation made by Deputy-Inspector-General Bowen, Principal Medical Officer of the Chatham District, who reports that "it is a prevalent opinion amongst the Medical officers in charge of troops that an increase of meat in the ration is required. Such is also my own opinion, especially in the case of depots, where there are many young soldiers, and where men are much employed on public works or fatigue." At Portsmouth similar remarks have been made by the Medical officers of the 12th Brigade Royal Artillery, the 5th Depot Battalion at Parkhurst, and 34th Regiment. It certainly appears to us that 12 oz. of meat daily, and only bread and tea for breakfast, are insufficient for growing lads and men from whom a considerable amount of exertion and night duty is expected.

At Woolwich there has been an extremely suspicious connexion between defective privies and untrapped sewers and an epidemic of scarlatina among the soldiers' families in the brick cottages on the common, which Deputy-Inspector-General Barrow hopes may soon be pulled down, "and additional model Cambridge cottages erected."

Inspector-General W. M. Muir, C.B., remarks on the overland route for invalids from India, that for the first time two batches of invalids were conveyed from India by this route; the first arrived on November 23, 1867, and the second on January 18, 1868. "On neither of these occasions were the men so carefully selected as it was supposed they ought to have been in order to obviate the risk arising from sudden change of temperature and other inconveniences. Men suffering from fever, bowel and hepatic affections, have generally derived benefit from the homeward voyage *viâ* the Cape, and Dr. Muir considers that "it would appear, therefore, desirable to continue sending such by this route, and cases of a lighter character, or such as are not likely to suffer by sudden transition to a cold climate, by the new or overland one." As Dr. Muir is now principal Medical officer of British troops in India, we have no doubt that he will direct his further attention to this important subject. He also reports the jetty at Netley as being unsuitable, and even dangerous, for landing men in the winter season, and recommends railway transport instead.

From exceptional causes the water supply at Netley was very inadequate during the year; but, even at all times, Dr. Muir considers it far below the requirements of such a large establishment, and states that "on the arrival of a large batch of invalids it is sometimes a week before *all* the men can have a bath, without which none ought ever to be sent to bed." The swimming-bath, supplied by a windmill pump, is still in an unsatisfactory state, the pump being frequently at a stand-still for want of wind. Dr. Muir recommends the erection of a

steam pump. The Medical officers' quarters are still damp, though somewhat improved by the outer walls having been painted with coal-oil during the summer.

The above presents an abstract of the most important points contained in the "Statistical and Sanitary Reports of Troops serving in the United Kingdom." We must defer to a future occasion our analysis of the returns from foreign stations, also our notice of the many valuable reports and papers on practical subjects in the Medical section of the volume.

REVIEWS.

A Memoir of John Conolly, M.D., D.C.L., comprising a Sketch of the Treatment of the Insane in Europe and America. By Sir James Clark, Bart., K.C.B., M.D., F.R.S., Physician-in-Ordinary to the Queen. London: John Murray, Albemarle-street. 1869. 8vo, pp. 298.

"Human beings pass away, but the good they do is immortal; and certainly, my dear and esteemed friend, you have not lived in vain." So wrote Conolly to Hastings, and so writes Clark of Conolly. The good men do is immortal. Their errors and failures are forgotten, their toil and suffering cease, they pass away, "there is no more sorrow;" but the good they do is immortal.

Conolly certainly did not live in vain. "Few men would have attempted, and few could have accomplished, what he did. The suddenness and thoroughness of the first step he took in the introduction of non-restraint into an asylum containing 800 patients, revealed a man of strong convictions and of courage to act on them. But the completion of his benevolent work was greatly due to other high qualities of mind—self-abnegation, kindliness of heart and manner, and great consideration for those who shared his labours. These did much to secure the steady progress which he made in obtaining followers—a progress so steady that it was soon true of his own country that there was scarcely an asylum remaining in it whose boast it was not that in the treatment of its inmates every form of mechanical restraint had been abandoned."

Thus writes Clark of Conolly, and the pages of his memoir fully justify this estimate of the character of one whose works have conferred a lasting benefit upon mankind.

Sir James Clark has done good service by thus reminding the public of what Conolly did, and informing them how he worked until all forms of mechanical restraint were disused in our asylums. And there can be no doubt that the manner in which attention has been called to the happy results of Conolly's labours, by one who towards the close of a long, useful, and honoured career, can survey as from a height, and weigh with impartial balance, the doings of contemporaries, will do much to secure justice to Conolly's memory, and will assist in the extension of the system of non-restraint from this to other countries.

We must refer our readers to the book itself for an interesting account of Conolly's early life and education, his practice at Chichester, his friendship with Sir John Forbes, his removal to Stratford-on-Avon and life there, his Professorship of Medicine in University College for four years, his practice at Warwick and Birmingham, and his appointment as Resident-Physician to Hanwell Asylum. Then from 1839, when Conolly entered on his duties at Hanwell and began to remove all mechanical restraints, until he resigned his office and was appointed Visiting-Physician, Sir James Clark has made his history of ten years a history of the progress of the non-restraint system, of the difficulties which Conolly overcame during its establishment, of his practical teaching by clinical lectures on insanity, of the gradual improvement in the organisation of our asylums, of his exertions in the establishment of middle-class asylums, of the Asylum for Idiots and the Training of Imbecile Children, and his efforts to extend the non-restraint system to other countries.

Next, after this period of active usefulness, comes a history of declining health, and in 1849, feeling the "influence of ten years' anxious work on a constitution never very robust," he writes to his friend W. Savage Landor—"There is a stanza in a certain ode to Robert Southey which I repeat almost daily, beginning 'We hurry to the river we must cross,' and it always consoles me, and renews my wish not to let the mind languish as years advance upon me, but rather, following the author's inspiring example, to continue thinking and doing to the last such worthy things as may take away all dreariness from that inevitable stream." And so, while suffering from rheumatism and neuralgia, he resolved to do the work before him; and well he did it, retaining asylum duties, entering on a large consulting practice, writing for this and other journals excellent commentaries on the insanity of children, the physiognomy of insanity, and other subjects relating to lunacy, and carrying on a large and anxious Professional correspondence.

Then follows a history of failing bodily health and mental energy, of gradually increasing weakness accompanied with a depressing feeling of sadness. His state is thus portrayed in one of his own letters to Sir James Clark:—

"Perhaps the wonder is that any of us retain cheerfulness, for the loss of our friends is inevitable and dreadful, and whatever we do or think of, the hopes that cheered us no longer animate us to exertion. It is still a great blessing to retain one's *mind*, and to feel tranquilly assured that whatever has happened, and whatever is to follow, has been, and will be, regulated by a First Cause—all-wise and all-good. . . . . Certainly, as we approach the end of this mortal life, we feel more and more that we are gradually becoming quite detached from it. The body slowly perishes, and will not *let* the mind act freely; but the consciousness that the mind is *still* living, and capable of living, seems never to fade." And a little further on, in another letter to his biographer, he says—"I am sure I could write something about the creeping on of old age truer than what Cicero wrote, for the 'De Senectute' was composed when he was only 63, and I am 71. It is, however, a great blessing to retain one's rational faculties, and to be perfectly content and grateful to the Author of our being on whom we all depend. I shall in a few weeks hear the birds of the lawn no more, and shall no more see the trees familiar to me, nor the old asylum still within view. But the recollections of scenes in *that* building will gladden my heart as long as I live—recollections so precious that I often say I ought to be content with them, if every other blessing had been withheld from me." Fifteen months after this letter was written, at the age of 73, after gradually increasing feebleness, "passed away a good man, having fairly earned a reputation as a practical philanthropist which will carry his name down to posterity among the benefactors of his race."

Here we must stop; but while recommending to the attention of our readers the chapters which contain an account of Conolly's literary works, we must also direct them especially to a chapter of Sir James Clark's own, of only a few pages, but one of extreme value, on the failure of mental energy at any age as a consequence of mental overwork. The symptoms of this failure—the danger of insanity from overwork of the brain, the preservation of mental vigour by reduction of active mental work after a certain age, and the danger of too early mental work in precocious children—are all sketched by the hand of a master. These few pages alone are a real addition to our literature. So are the Notes on Continental Asylums, on the treatment of the insane in our colonies, and on the state of the insane in India. Altogether, the book is of great interest and exceeding value, and it is with infinite pleasure we find that Sir James Clark, after a long and arduous Professional career, and after attaining his 81st year, has preserved his mental vigour, and has occupied leisure hours in his honourable retirement by writing this memoir of his old friend. They who know Sir James Clark know how vigorous is his mental energy—how well he is acquainted with the results of the most recent investigations bearing upon Medical science, whether made at home or abroad; how warm are his old friendships; how strong his sense of duty; how conscientious his exercise of patronage; and how he is respected and loved by all who have known him long or well. And they who do not know him personally may learn from this memoir (though, with characteristic modesty, he has said nothing of his own share in Conolly's good works, nor of the important aid which he gave him and obtained for him) something of a man who is passing his declining years, as he has passed all his active life, in kindly, active, intelligent, unselfish labour for the good of others.

Newcastle-on-Tyne. — The inauguration of the Prudhoe Memorial Convalescent Home will take place on Tuesday, September 14, at 1 o'clock.

Birmingham Medical Benevolent Society.—The following appointments were made at the annual general meeting of the Society, held at the "Hen and Chickens" Hotel, New-street, on Friday, August 27:—*President:* Mr. D. W. Crompton. *Vice-Presidents:* Mr. Spencer Edmonds, Appleby; Mr. F. P. Palmer, Walsall; Mr. Malin Sherman, Birmingham; Mr. David Johnson, Birmingham. Dr. Bell Fletcher, Mr. Edwin Chesshire, and Mr. Clayton were re-appointed Directors.

GENERAL CORRESPONDENCE.

ON CHLORAL.

LETTER FROM DR. BENCE JONES.

[To the Editor of the Medical Times and Gazette.]

SIR,—I shall be glad if you think the following letters on "chloral" to be worth publishing in your journal. Professor du Bois-Reymond, Secretary of the Berlin Academy of Sciences, nearly three months since wrote to me thus:—

"Berlin, 17, Victoria Strasse, June 5, 1869.

"Here is a piece of scientific intelligence for you well calculated deeply to impress English minds. You know what chloral is—aldehyde in which 3H are replaced by 3Cl. $\left.\begin{matrix} C_2Cl_3O \\ H \end{matrix}\right\}$ The hydrate is a crystalline body, C_2Cl_3HO,H_2O, keeps well, and can easily be "dosirt." I do not know your technical terms. In presence of an alkali chloral splits up into formic acid and chloroform. It entered Liebreich's (the protagon man's) head that perhaps, with regard to the alkaline character of the liquids of the animal body, the same reaction might occur in the living animal, and that thus chloroform might slowly and gradually be developed in the very brain of a man.

"The experiment has most wonderfully confirmed this conjecture. 0·1 grm. (1·5 grs.) chloral injected under the skin of a good-sized rabbit causes it to fall into a lethargic sleep, which lasts nine or ten hours, during which it may be thrown over the back of a chair, like a towel, and from which it awakens quite jolly, rubs its eyes, and asks for more carrots and potatoes. Similar results were obtained on dogs. On man chloral has been tried by Langenbeck and Bardeleben internally—the quantity required for action, 0·43 grm. (6·5 grs.), being too large to admit of hypodermic injection, at least at one time and one place. A sleep of a full hour has been the result,(a) but, of course, more experiments have to be made in order to ascertain the limits of the doses and of the action of this new anæsthetic.

"Liebreich has been able to demonstrate, by using the corresponding compound of iodine, that iodoform in the body is changed into hydroiodic acid, which appears in the urine, and carbonic acid; so it is likely that chloroform undergoes a similar process. From the 0·43 chloral given to a man, only 0·29 grm. (4 grs.) chloroform can be produced.

"The facts are published here. I have communicated them to the Academy (Thursday last, June 3), so you need not make a secret of them."

On the receipt of this note, I first thought of sending it to your journal, but, on second thoughts, it seemed better to try the substance first, and I accordingly went to Messrs. Hopkins and Williams, and read Mr. Williams the note, and asked him to make me some chloral. Meeting Mr. Morson a few days afterwards, I read him the note also, and asked him to make me some of the substance. Weeks went on, and I heard and saw nothing of the chloral.

As Dr. Tyndall was going to Berlin, I asked him to find out more about chloral for me. He saw du Bois and Hofmann on July 19.

Dr. Hofmann wrote to me:—

"10, Dorotheen Strasse, July 23, 1869.

"I hear from Tyndall that you naturally feel some interest in chloral. Of course, I imagined that long ago Messrs. Hopkins and Williams had prepared it, and that chloral was quite accessible in London. Otherwise I would have sent you some long ago. The specimen which I forward with this note was prepared by Dr. Martius, and may be relied upon as pure. It is certainly a remarkable experiment to dissolve some of the hydrate of chloral in water, and to add a few drops of a solution of soda, when the chloroform falls like a rain."

A few days afterwards I received the following note from Dr. Oscar Liebreich:—

"Berlin, July 25, 1869.

"Dear Sir,—I have heard from M. du Bois-Reymond that you intend to make use of hydrated chloral. I believe that the results of its application will, for the present, not always prove satisfactory, as the preparations sold under that name contain many injurious impurities. I take the liberty of sending a small quantity—small because I have not more left.

"For a person in good health, 2 grm. (31 gr.) are sufficient; for lunaties in delirium 4 grm. were employed. I prescribe its solution in 15 grm. (ʒss.) of water, with the addition of 15 grm. (ʒss.) of syrup. cort. aurantii. I understand that Messrs. Martius and Mendelsohn, in Rummelsburg, near Berlin, furnish a good article. I hope soon to be able to send you my paper on the subject.

"In conclusion, as I do not know any English publishing firms, I take the liberty of asking you for the address of one who might perhaps publish my paper, which will comprise three sheets."

On the receipt of this note, I consulted Mr. Churchill, and he advised that the paper should be published in one of the Medical journals, but I have heard nothing further from Dr. Liebreich.

I took the chloral to Mr. Williams to show him what I wanted, and I asked him to send to Dr. Martius for a supply of it. This has very lately arrived, and he has dispensed some of it to one of my patients according to Liebreich's formula. Mr. Williams told me a few days since that it was very dear.

The specimen I received from Liebreich was very soluble in water, giving a perfectly clear solution. That from Dr. Martius, sent to me by Hofmann, gives a slightly cloudy solution, perhaps from some slight impurity.

Of the results of the use of chloral in Medicine, I have as yet nothing of my own worth sending to you, and my absence from London will prevent me at present from trying it fully as I wished to do before writing to the *Medical Times and Gazette*.

I am, &c.

Folkestone, August 27. HENRY BENCE JONES.

(a) "The action, in fact, seems to realise those mediæval stories about drugs which make a man sleep a given time in unconscious lethargy. It was, perhaps, chloral which Fra Lorenzo gave to Juliet!"

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, August 26, 1869:—

Murphy, Michael Dominic, Egmont, Buttevant, Cork.
Preston, Theodore Julian, 42, Belsize-road, N.W.
Schmidt, Alfred Edwin, Tyssen-street, Bethnal-green.
Sharpe, Henry John, Queen-street, Worship-street.
Vines, Henry Jeckell Kendrick, Friar-street, Reading.

The following gentlemen also, on the same day, passed their First Professional Examination:—

Ling, Edward Clayton, Middlesex Hospital.
Stephens, Thomas Palmer, Guy's Hospital.
Turner, Henry Guntou, Guy's Hospital.

NAVAL AND MILITARY APPOINTMENTS.

MEDICAL DEPARTMENT.—Assistant-Surgeon Thomas Alexander Clapperton MacArthur, from Royal Artillery, to be Staff Assistant-Surgeon, *vice* Joseph Septimus Steward, who resigned on July 8, 1869. Assistant-Surgeon Alexander Ferrier Churchill, M.D., from 31st Foot, to be Staff Assistant-Surgeon, *vice* James Hector, M.B., appointed to the 31st Foot. Assistant-Surgeon John Colahan, M.D., from 24th Foot, to be Staff Assistant-Surgeon, *vice* Eugene Valentine MacSwiney, M.D., appointed to the 24th Foot. Assistant-Surgeon Charles Haines, from 10th Foot, to be Staff Assistant-Surgeon, *vice* Robert F. Buchanan, appointed to the 10th Foot.

WAR OFFICE.—The following appointments have been made:—Staff Assistant-Surgeon Robert Francis Buchanan, to be Assistant-Surgeon, *vice* Charles Haines, appointed to the Staff. 24th Foot: Staff Assistant-Surgeon Eugene Valentine MacSwiney, M.D., to be Assistant-Surgeon, *vice* John Colahan, M.D., appointed to the Staff. 31st Foot: Staff Assistant-Surgeon James Hector, M.B., to be Assistant-Surgeon, *vice* Alexander Ferrier Churchill, M.D., appointed to the Staff. 40th Foot: Surgeon George William Peake, M.D., having completed 20 years' full-pay service, to be Surgeon-Major under the provisions of the Royal Warrant of April 1, 1867.

BIRTHS.

AMELER.—On August 7, at Henley-park, Yorkshire, the wife of Dr. Vincent Ameler, of Norfolk, and Colville-square, Hyde-park, W., London, of a daughter.

BARROW.—On August 15 and 16, at Aldershot, the wife of T. S. Barrow, M.D., 23rd Royal Welsh Fusiliers, of twins, boy and girl, the latter (born on the 16th) being stillborn.

CURTIS.—On August 26, the wife of Albert Curtis, M.R.C.S., of Staines, of a daughter.

MARTYN.—On July 25, at Richmond-hill, Clifton, the wife of Dr. S. Martyn, of a son.

REID.—On August 27, at the Manse Chapel of Garioch, Aberdeenshire, the wife of John Watt Reid, M.D., Staff Surgeon H.M.S. *Lord Warden*, of a son.

SUTHERLAND.—On August 24, at St. Andrews, the wife of Dr. J. Sutherland, Deputy Inspector-General of Hospitals, Bengal Army, of a son.

MARRIAGES.

BONNER—BARKER.—On August 26, at St. Nicholas' Church, Brighton, Robert Bonner, only son of Robert Bonner, of Brighton, to Marian, eldest daughter of Dr. William John Barker, of Leipzig, Saxony.

EVANS—GREEN.—On August 26, at Thundridge Church, John Tasker Evans, jun., M.D., Hertford, to Jane Emily, daughter of Edward H. Green, Esq., Sprangewell, Herts.

HANSBURG—HUTCHINSON.—On August 25, at Trinity Church, Ryde, F. L. Leopold Hansburg, Esq., of Rosenfels, Woolton, to Isabella, eldest daughter of Dr. Francis Hutchinson, of Woburn-place, Russell-square. No cards.

IONIDES—BIRO.—On August 29, at the Greek Church, Welbeck-street, Luke A. Ionides, of 1, Holland-park, to Elfrida Elizabeth, second daughter of George Bird, M.D., of 49, Welbeck-street, Cavendish-square.

NUGENT—COLTHIAST.—On August 3, at the parish church, Kingston, Jamaica, Henry Nugent, Army Medical Staff, second son of John Nugent, M.D., of Grosvenor-square, Dublin, to Fannie Ann, third daughter of Henry Forbes Colthirst, Esq., of Kingston, Jamaica.

ROBERTS—ROBERTS.—On August 11, at Dysgwylfa, by the Rev. Robert Ellis, Ysgoldy, and the Rev. John Owen, Tynllwyn, G. W. Roberts, Surgeon, Clwt-y-Bont, Carnarvon, to Sarah, youngest daughter of the late Richard Roberts, Esq., of Castell, Llanddeiniolen. No cards.

WARD—HALLOWES.—On August 26, at St. Mildred's, Canterbury, John Hext, second son of John Ward, M.R.C.S., of Bodmin, to Florence Caroline Blackwood, elder surviving daughter of Price Blackwood Hallowes, F.R.C.S., of Canterbury.

DEATHS.

BEGBIE, JAMES, M.D., Physician-in-Ordinary to the Queen for Scotland, at his residence, 10, Charlotte-square, Edinburgh, on August 26.

BROCK, ANN REES, widow of W. Brock, M.D., late of Clifton, at Clevedon, on August 29, aged 80.

BULLAR, WILLIAM, M.D., at Basset Wood, near Southampton, on August 29, in the 60th year of his age.

MACKMURDO, GILBERT WAKEFIELD, F.R.S., F.R.C.S., at East Hainault Lodge, Chigwell-row, Essex, on August 26, in the 71st year of his age.

PURCELL, CHARLES GOAE, M.D., youngest son of Dr. Purcell, late Poor-law Inspector for Ireland, at Scarborough, on August 27, aged 22.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

BOOTLE HOSPITAL AND DISPENSARY.—House-Surgeon; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to W. S. Brice, Esq., Richmond-vale, Bootle, near Liverpool.

BOURNEMOUTH GENERAL DISPENSARY.—Resident Surgeon. Candidates must be registered, and must possess a qualification in Medicine as well as Surgery. Testimonials, diplomas, etc., to be sent, under seal, to the President of the Bournemouth Dispensary on or before September 9.

GREAT NORTHERN HOSPITAL.—House-Surgeon. Applications and testimonials to G. Reid, Esq., Secretary, at the Hospital, Caledonian-road, N., on or before September 7.

LONDON HOSPITAL, WHITECHAPEL-ROAD.—Surgeon; must be F.R.C.S.E. Candidates to attend at a meeting of the House Committee, on September 7, at 1 o'clock p.m. Election on September 14, at half-past one o'clock.

LONDON HOSPITAL, WHITECHAPEL-ROAD.—Assistant-Surgeon; must be M.R.C.S.E. Applications and testimonials to the Assistant-Secretary at the Hospital, from whom further particulars may be obtained.

LONDON HOSPITAL, WHITECHAPEL-ROAD.—Junior Assistant-Surgeon. Applications and testimonials to the House Committee on or before September 20. Election on September 21, when personal attendance will be required.

ROYAL ISLE OF WIGHT INFIRMARY.—House-Surgeon; must be duly qualified. Applications and testimonials to the Secretary on or before October 5. The duties to commence on November 3.

ROYAL SOUTH LONDON DISPENSARY, ST. GEORGE'S-CROSS, S.E.—Honorary District Surgeon. Apply, for further information, to Mr. Hentsch, at the Dispensary.

TOWER HAMLETS DISPENSARY.—Resident Medical Officer; must be L.S.A., and be registered. Candidates to attend personally at the election, at 7 o'clock p.m., on September 6.

WARNEFORD HOSPITAL, LEAMINGTON PRIORS.—House-Surgeon; must be M.R.C.S. Lond., Edin., or Dublin, and L.S.A. or L.R.C.P.L. Applications and testimonials to the Secretary.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Abergavenny Union.—The Abergavenny District is vacant; population 12,628; salary £100 per annum, inclusive of the Workhouse.

Blackburn Union.—Dr. Garstang has resigned the Second District; population 26,515; salary £160 per annum; no fees.

APPOINTMENTS.

Billericay Union.—Frederick Carter, L.R.C.P., M.R.C.S.E., to the Mountnessing District and the Workhouse.

Caxton and Arrington Union.—John Giles, M.R.C.S.E., L.S.A., L.R.C.P. Edin., to the Caxton District and the Workhouse.

Newton Abbot Union.—William M. Richards, M.R.C.S.E., L.S.A., to the Teignmouth District.

Prescot Union.—Egerton F. Hall, M.R.C.S.E., L.R.C.P. Edin., M.D. St. And., to the Prescot District and the Workhouse.

Ulverstone Union.—James Robinson, L.R.C.P. Edin., M.R.C.S. Edin., L.S.A., to the Ulverstone District and the Workhouse.

Wakefield Union.—Alfred Ginders, L.R.C.P. Edin., L.F.P. and S. Glas., to the Altofts District.

IT is not true that any opposition was made by the Council of the British Association to the election of Professor Huxley. On the contrary, he was elected unanimously.

THE Emperor of the French is said to be suffering from prostatic calculus—at any rate, from great irritation of the prostate. He also has chronic rheumatism, and is said to have alarmed his attendants by fainting when a catheter was with some difficulty passed in the erect posture.

THERE is but little doubt that, early in 1870, the inhabitants of Calcutta will be in possession of the comfort of a plentiful supply of pure filtered water laid all over the town.

PRIVATE advices inform us that the epidemic in Trinidad continues to increase; the deaths registered in July were 130, against 75 in July, 1868. Of these deaths 40 were from some description of fever. No reliance can be placed on the description of the fever given by the informant, as there are no Medical certificates. Still, the registrar, an intelligent man, generally gets an approximation to the right cause, especially in such cases as yellow fever. Mr. Wickham, M.R.C.S., etc., one of the most promising and intelligent Practitioners, died on Monday, the 2nd, of yellow fever. The editor of the principal newspaper is also dead of the same disease, and was buried on the 6th. Two of the Dominican priests here are dead; three others have had the disease. The deaths registered up to now, August 6, were 35. That is more than six per diem, in a population of 19,000. Dysentery is now becoming very fatal, and some severe cases of diarrhœa have occurred. But typhoid and yellow fevers are the principal diseases. With all this disease and mortality it is said that the town council will not spend a pound on permanent sanitary improvements, or even take any measures for checking the spread of the epidemic. The apathy and indolence of these Creoles is something incredible. Further advices, dated August 7, say that out of 37 deaths registered up to August 6 at 4 p.m., 11 were from some kind of fever, and 11 from dysentery or diarrhœa. The water supplied is very impure, and is contaminated with fæces. Typhoid fever is spreading all over the island. Two cases only, and no deaths, occurred amongst the military, who, in spite of the rainy season, were moved out into camp.

BY the *Brazil and River Plate Mail* news has arrived of a sad occurrence in the death of one of our artillery officers by that peculiar pneumonic affection called "Puna" in the Cordilleras of the Andes. This gentleman, with a brother officer, passed through Buenos Ayres some time previous, being then bent on a pleasure trip in the direction of Bolivia and Peru. Arrived at Catamarca, where they had personal introductions, they hired thence mules and peons, intending to cross the Cordilleras at the pass of Tinogasta, places which are easily found on the map, and which lie much in the same latitude as Copiabo towards the coast, between that place and Tucuman, three or four hundred miles north-west of Cordova. The height of this pass is 16,000 feet above the level of the sea. When they had reached the level of 14,500 feet, Captain Webber was attacked with the "puna," a disease peculiar to the high regions of the Cordillera, and due to the effect produced upon the lungs and circulation of the blood by the great rarefaction of the air in those that are not native-born, or by long and early use acclimatised. He became delirious, and Mr. Wallace, who was himself suffering from the same cause, retraced his steps, keeping Captain Webber on his mule in a state of insensibility. Captain Webber died when they had descended 1000 feet, and was buried on the side of the mountain. He belonged to an old English family, and was heir to a large property. Captain Wallace, the other officer, has joined his regiment at Gibraltar. The disturbance of the balance of circulation, which constitutes this disease (the "puna"), is not perhaps thoroughly understood. Some have supposed that the cells of the lungs undergo an active contraction. It will be an object with us shortly to lay before our readers some account of the climatic conditions and physiological peculiarities of these regions, which have now a special interest connected with them from the strong recent recommendations that have been bestowed on elevated regions as health resorts in phthisis. The defiles which cross the vast Himalayan plateau in India, which has been a subject recently of notable geographical discovery, lie even at a greater height than this pass of the Cordillera. We are not as yet informed, however, whether they can boast an equal immunity from phthisis.

THE SALIVARY GLANDS UNDER EMOTION.—In an interesting article on the mode of conducting criminal trials in France, M. Maxime Ducamp, speaking of the introduction of the prisoner into court, observes—"It is rare that the accused, who has had long days of solitude and reflection to prepare himself for this terrible ordeal, does not put on a good countenance. But a physical phenomenon which is invariably produced indicates to the experienced eye the strength of the

sensations which he is endeavouring to master. All depressing emotion acts directly on the salivary glands, diminishing a portion of their secretion. Hence it induces a constantly repeated motion of deglutition which may be followed on the neck of the accused by the perpetual to-and-fro movement of the *pomum Adami*. This bone, incessantly descending and re-ascending, seeming as if making an effort to arrest the passage of the words, is sometimes so violently agitated that it might be regarded as seized with convulsions."—*Revue des deux Mondes*, August 15.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Professor Fayrer's cases of Hypertrophy of the Leg shall appear immediately.

Wallingford.—We are obliged to be very circumspect, and not to say too much at a time on the subject of our correspondent's note. It is, as our correspondent intimates, very difficult to communicate knowledge on the subject in question.

Birmingham.—Feeling, good or bad, is an impalpable essence, and often exists without reason. If there be reason for bad feeling, it is often such as does not bear the light.

Birmingham.—It is reported that Dr. Fleming has declined the task of giving the introductory lecture at the Birmingham Medical School, and has resigned his seat in the Council of the School. It is much to be regretted.

A. B. C. should make his application to the Secretary of the Royal College of Surgeons.

S.—The article in the *Homœopathic Monthly Review* shall receive attention at the proper time.

Sulphites in Foot and Mouth Disease.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I perceive in some of the daily papers instructions in the use of the sulphites are hazarded with the semblance of authority, which instructions have no ground in science or experience. The smallest quantity recommended by Dr. Polli for a daily administration to cattle is three and a-half ounces (100 to 150 grammes) of the sulphite. In a recent communication to me he says, "How can they look for good results if they give such insufficient doses?" I have the most precise directions from Dr. Polli for treatment of this complaint, but have experienced a very great difficulty in getting them into print, because they are a little long and really will not bear compression. I yet hope some complaisant editor will give me a column or so; for I do not see why a public benefit should be at my expense. I may say that glysters, and also lotions, with the sulphites, are very applicable to this disease, but there is great niceness of detail required, which I must reserve for publication elsewhere.

7, Westbourne-park. I am, &c. George Gaskoin.

Vaccination.—It has not escaped our observation that the anti-vaccination clique is formed of a curious medley—eclectics, homœopaths, botanists, "philosophers," and dupes.

Lunacy.—Dr. Davey's paper on "The Insane Poor in Middlesex" was read at the annual meeting of the Medico-Psychological Association in 1867, and published in the *Journal of Mental Science* for October, 1867. It has just been reprinted, in the form of a pamphlet, by Leech and Taylor, of Bristol.

An Old Student.—Liston was remarkably sensitive with respect to adverse criticism. He fretted under the slightest attack. On one occasion an article appeared in an Indian Medical journal written by one of his own pupils. It described, in very flattering terms, the wonderful manual skill of the operator; and the writer remarked it was astounding how he could perform very delicate operations with such an enormous hand. Liston read the article, and, notwithstanding all the kind things that were said in it, he remarked—"Not at all complimentary, I think."

D.—Junket is made by curdling milk with rennet, and then adding nutmeg, or, if they are to be had, cream and brandy. It makes in its simple form a wholesome dinner for children, and is prepared and sent out by Mr. Maslen, milkman, Gilbert-street, Oxford-street, W. The rennet is the stomach of the calf, cleansed and preserved in brine. These may be procured at a shop in Gilbert-street, Oxford-street, which is the great emporium for the eatable viscera of sheep and oxen, such as liver, lungs, lights, calves' heads, oxtails, sweetbreads, and the like. Rennet is liable to become mouldy if ill-kept, and, as it is so powerful an agent, is sure to do harm if not in good condition. In the letter of Dr. Whitby which appeared in our number for August 21, the word "cooking" was used by error for "soaking." The rennet cannot be cooked without destroying its qualities. Our last advices assured us that the subjects of the poisoning were all doing well, and had gone for change of air; and we are told further that junket is said to have produced symptoms analogous to typhoid in certain parts of Germany.

J. H., M.D.—Consult the Roll of the College of Physicians. A remarkable *double diploma* was given to Dr. Silvester by the College in 1693, making him both Fellow and Licentiate.

Ignotus.—Dr. Power, Queen-square, Bloomsbury.

A Country Member.—The library and museum were closed on Wednesday last for one month.

Dr. Powell.—It is stated in Dod that Doctors of Medicine take precedence of barristers, and even Queen's counsel, "on the ground of ancient usage." Mr. Pott resigned the Surgeoncy of St. Bartholomew's in 1787, saying he had "served the Hospital as man and boy for half a century." Sir Trevor Lawrence is preparing a life of his father.

Arts Examination.—In reply to several correspondents, we have only to repeat that pupils passing the preliminary examination at the Hall (which is recognised also by the College) during the present month, would be enabled to commence their Professional studies in October.

Cheselden.—Mr. South, we believe, is writing a history of St. Thomas's Hospital and of the College of Surgeons. Professor Erasmus Wilson wrote a history of the Middlesex Hospital.

A Naval Surgeon.—The College of Surgeons do not publish a list of Blane medallists. The recipients are not necessarily members of the London College; more generally of the Scotch.

A Third Year's Student.—There will be an examination about the middle of November, at which you could present yourself, and when your four years will have been completed.

A Teacher, Borough.—It was an error on the part of our contemporary, as we pointed out at the time. The only members of the Court of Examiners not on the Council are, taking them in seniority—Messrs. Skey, Partridge, and Adams: the first two named gentlemen have filled the President's chair. Mr. Hancock, of Charing-cross Hospital, is the next senior member of the Council for selection.

British and Foreign Degrees.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Having been honoured with many important communications from all parts of the United Kingdom, in consequence of your courteous notice of the above subject, detailing, *inter alia*, authentic accounts of numerous examinations, undergone at various institutions, both by admitted and rejected candidates for diplomas, of surpassing interest, alike to the public and the Medical Profession, will you kindly permit me to acknowledge them very gratefully through the medium of your valuable journal? And at the same time, may I heartily assure my esteemed correspondents that their respective contributions shall have due place and attention? This favour is sought at your hands, Sir, solely because the topic in question is one of deep national interest, and I find it inconvenient, if not impossible, adequately to reply to all these gentlemen at the present moment, owing to the pressure of heavy literary and Professional engagements. The Imperial Legislature obviously intended to provide for the registration of Doctors of Medicine of foreign universities (Schedule A, Medical Act, 1858) who had "sufficient reason" for registering their degrees. And surely being already registered, by virtue of British diplomas, is a "sufficient reason." We may remember also that her Majesty's Exchequer of Pleas ("Ellis *v.* Kelly," Law Reports) has legally and equitably decided that a previously qualified Practitioner can maintain the rights and privileges of his unregistered academical doctorate, in spite of all adversaries. I am, &c.

Liverpool, August 16. William Hitchman, M.D.

Dr. Williams, Swansea.—In Hutchinson's "Biography" you will find an account of Dr. Robert Brady, M.P. for the University of Cambridge; he died in 1700. Dr. John Brady, a Member of the London College of Surgeons, represented Leitrim for many years. He has been again returned.

P. D., Fowey.—Queen Caroline died after an unsuccessful operation of hernia by the celebrated Surgeon, Ranby. Her daughter Louisa, Queen of Denmark, died, at the early age of 26, of an operation for the same complaint, which lasted an hour. Caroline of Brunswick, wife of George IV., also fell a victim to strangulated umbilical hernia, as did also Queen Anne.

A Student.—You must register your Hospital studies during the first fortnight in the ensuing month at the College of Surgeons. Do not forget to provide yourself with a certificate of having passed the Preliminary Examination in Arts.

Medical Scholarships for Women.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—As there are probably many Medical men who have daughters not disqualified for the study of Medicine, I venture to ask you to give insertion to the regulations for the Medical scholarships now offered to women.

In the selection of subjects in both the compulsory and optional part of the examination, attention has been paid to the requirements of the various Medical examining bodies for their preliminary or arts examination; and as the standard adopted will be as nearly as possible that of the matriculation examination of the University of London, students who do well in the examination, even those who do not gain the scholarships, will not find it difficult to pass subsequently the arts examination of the examining body whose diploma they may eventually desire to obtain.

The action of the universities of Paris, Zurich, and Edinburgh makes it unnecessary to discuss whether women are to be allowed to practise Medicine; the question is practically settled, and, being so, there seems to be no reason why the daughters of Medical men should not be among the first to take advantage of the turn in the tide. I am, &c.

20, Upper Berkeley-street, W. Elizabeth Garrett, L.S.A.

Two scholarships, each of the annual value of £50, tenable for three years, and to be awarded by competitive examination, are offered to women who wish to study Medicine.

The examination for the scholarships will be held in London in June, 1870. Candidates must be under 25 years of age on January 1, 1870. The examination will be conducted by means of written papers on the following subjects:—

Group 1.—*Compulsory Subjects.*—1. Arithmetic. This subject will

include fractions, decimals, interest, and proportion. 2. Algebra, to simple equations. 3. Euclid—first three books. 4. Elementary mechanics. 5. English—prose composition and grammar. 6. Latin—easy translation into English and grammar.

Candidates for the scholarships must satisfy the examiners on all the subjects in group 1.

Group 2.—*Optional Subjects.*—(A) 1. Greek—easy passages of Attic Greek for translation into English, and easy English sentences for translation into Greek, with questions on grammar. 2. German—a prose composition to be written in the language, with questions on grammar. 3. French—ditto. (B) 4. Natural philosophy. 5. Chemistry. 6. Botany, including vegetable physiology.

Of the optional subjects each candidate must select two upon which to be examined. The two subjects chosen must not be taken from the same division (A or B). No candidate will be allowed to take more than two of the optional subjects.

The scholars will be required to satisfy the donors from time to time that they are pursuing a regular course of Medical study at a recognised school of Medicine.

For further particulars apply to Miss Garrett, 20, Upper Berkeley-street, Portman-square, London.

Albinus.—The skeleton of the extraordinary man is in the museum of the College of Surgeons; the corpse was interred in a cemetery a few miles from Edinburgh, and nightly watched for some weeks by the friends of the deceased. A great rivalry existed amongst the resurrectionists of Edinburgh to obtain the body, for which a large sum was offered, and nightly it was attempted by some of them; but Liston with a friend repaired in broad daylight, when the grave was not watched, opened it, raised the body, which they placed in a gig, and returned in triumph to Edinburgh. It was, however, a long time before he could exhibit the skeleton in his museum.

A Constant Reader (London).—Smith, we think, acted with great propriety and with a due regard to his position and that of Brown. Under the circumstances of the case, the patient was clearly under the professional care of Smith. It is idle to suppose that any rule of Medical etiquette can supersede the expressed wishes of a patient, or, as in this case, the father of the child who had met with a serious accident. Whatever relations existed between Brown and the family of the patient, he was not justified in the course he pursued. If Brown had been sent for at the time he visited the child, then he might properly have proposed a consultation.

COMMUNICATIONS have been received from—

Mr. Gopaul Chunder Roy; Dr. Fayrer; Assistant-Surgeon N. Alcock; Dr. Cornelius B. Fox; Dr. Bence Jones; Mr. Hutchinson; Dr. Hughlings-Jackson; Mr. Ireland; Mr. Perkins; An Assistant-Surgeon; Dr. Bakewell; Dr. Elam; Miss Garrett; Mr. Taylor; Mr. A. B. Farr; Mr. W. Hughes; Dr. S. Martyn; Dr. Willoughby Arding; Mr. F. Smith; Dr. Philipson; Dr. MacCormack; Dr. Andrew Smart; Dr. B. W. Richardson; Mr. J. Chatto; Dr. B. Ball; Mr. Spencer Wells; Dr. Sturges; Mr. T. Bryant.

BOOKS RECEIVED—

Army Medical Report, vol. ix.—St. Thomas's Hospital Calendar—Bulletin Général de Thérapeutique — The Practitioner, September — Revista Médico-Quirúrgica, July 8, 23—Dr. Kennion on the Harrogate Waters—Davey on the Law of Lunacy, etc.—Davey on Insanity and Crime—Davey on the Insane Poor in Middlesex—Salt's Catalogue of Surgical Instruments—Smith on Scarlet Fever—American Journal of the Medical Sciences, No. 115—Chicago Medical Investigator, No. 71—Edinburgh Medical Journal, September—Pharmaceutical Journal, September—Dr. Philipson on the Health and Meteorology of Newcastle and Gateshead.

NEWSPAPERS RECEIVED—

L'Union Médicale—Gazette des Hôpitaux—The Medical and Surgical Reporter, three numbers—The Anti-Vaccinator, Nos. 1 and 2—New York Medical Gazette—Gazette Hebdomadaire.

VITAL STATISTICS OF LONDON.

Week ending Saturday, August 28, 1869.

BIRTHS.

Births of Boys, 1032; Girls, 1015; Total, 2047.
Average of 10 corresponding weeks, 1859-68, 1890·3.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	756	707	1463
Average of the ten years 1858-67	642·8	617·6	1260·4
Average corrected to increased population	...	...	1386
Deaths of people above 90	...	...	...

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-cough.	Typhus.	Diarrhœa.	Cholera.
West	463388	1	2	9	1	11	9	24	...
North	618210	1	1	29	2	24	3	34	...
Central	378058	...	6	20	1	12	5	19	...
East	571158	2	5	50	2	22	10	45	...
South	773175	1	6	35	...	18	14	73	...
Total	2803989	5	20	143	6	87	41	195	...

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	30·078 in.
Mean temperature	68·4
Highest point of thermometer	89·0
Lowest point of thermometer	50·3
Mean dew-point temperature	57·6
General direction of wind	Variable.
Whole amount of rain in the week	0·00

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, August 28, 1869, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the year 1869.	Persons to an Acre. (1869.)	Births Registered during the week ending Aug. 28.	Deaths. Corrected Average Weekly Number.	Deaths. Registered during the week ending Aug. 28.	Temperature of Air (Fahr.) Highest during the Week.	Temperature of Air (Fahr.) Lowest during the Week.	Temperature of Air (Fahr.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3170754	40·7	2047	1462	1463	89·0	50·3	68·4	0·00	0
Bristol (City)	169423	36·1	114	76	*46	90·3	50·4	65·9	0·01	1
Birmingham (Boro')	360846	16·1	232	175	163	89·6	52·4	67·5	0·00	0
Liverpool (Boro')	509052	93·7	314	295	299	86·0	54·2	65·8	0·00	0
Manchester (City)	370892	82·7	212	210	*199	...	...	...	...	...
Salford (Borough)	119350	23·1	93	60	64	90·6	49·9	66·9	0·00	0
Sheffield (Borough)	239752	10·5	171	126	138	90·5	52·1	67·0	0·00	0
Bradford (Borough)	138522	21·0	150	71	71	81·2	53·5	65·1	0·00	0
Leeds (Borough)	253110	11·7	281	129	137	85·0	55·0	64·9	0·00	0
Hull (Borough)	126682	35·6	81	59	68	83·0	48·0	61·2	0·00	0
Nwestl-on-Tyne, do.	130503	24·5	112	69	59	...	...	...	...	...
Edinburgh (City)	178002	40·2	146	86	112	80·7	51·0	62·6	0·00	0
Glasgow (City)	458937	90·6	308	268	226	77·7	47·6	62·1	0·01	1
Dublin (City, etc.†)	320762	32·9	152	158	139	84·2	43·7	64·7	0·00	0
Total of 14 large Towns	6546587	35·5	4113	3244	3184	90·6	43·7	65·2	0·00	0
Paris (City)	1889842	...	...	...	875 Week ending Aug. 21.	...	...	...	...	...
Vienna (City)	(1863) 560000	...	...	...	327	...	...	64·6	...	...

Week ending Aug. 21.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 30·078 in. The barometrical reading decreased from 30·17 in. on Sunday, August 22, to 29·87 in. on Saturday, August 28.

The general direction of the wind was variable.

Note.—The population of Cities and Boroughs in 1869 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous.

* The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

† Inclusive of some suburbs.

APPOINTMENTS FOR THE WEEK.

September 4. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 1½ p.m.

6. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 1½ p.m.; St. Peter's Hospital for Stone, 2½ p.m.

7. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.

8. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.

9. *Thursday.*

Operations at St. George's, 1 p.m. Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

10. *Friday.*

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

PURE CHOCOLATE.

COMPAGNIE COLONIALE DE PARIS, 4, Pall-mall, S.W.

"We have examined a variety of the chocolates of the Compagnie Coloniale, and found them to consist solely of cocoa of superior quality and sugar."—Lancet.

"The chocolates of the Compagnie Coloniale boast themselves with justice on high quality, careful preparation, no admixture save sugar, and moderate price."—Medical Times and Gazette.

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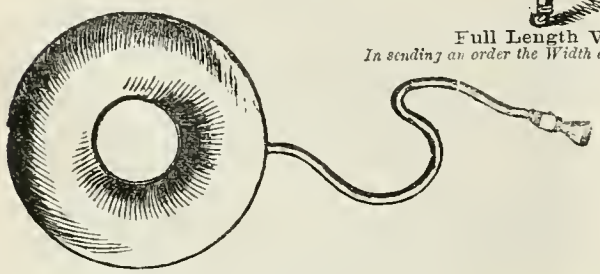
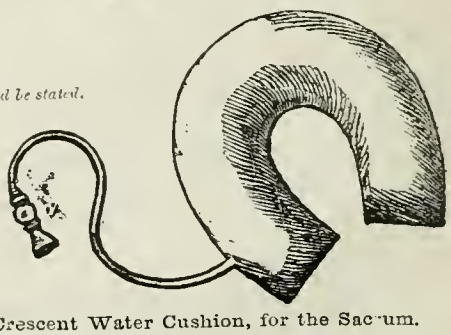


Circular Water Cushion, for sitting on.



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RULES AND REGULATIONS

OF THE

EXAMINING MEDICAL BODIES IN ENGLAND.

SESSION 1869—70.

EXTRACTS FROM THE REGULATIONS OF THE GENERAL MEDICAL COUNCIL ON THE SUBJECTS OF PRELIMINARY EXAMINATION AND OF THE REGISTRATION OF MEDICAL STUDENTS, 1869.

I.—PRELIMINARY EXAMINATION.

1. That Testimonials of Proficiency, granted by the National Educational Bodies, according to the subjoined list, may be accepted.

LIST OF EXAMINING BODIES WHOSE EXAMINATIONS FULFIL THE CONDITIONS OF THE MEDICAL COUNCIL AS REGARDS PRELIMINARY EDUCATION.

I. Universities of the United Kingdom.—Oxford: Examination for a Degree in Arts, Responsions, Moderations, Local Examinations (senior), Certificate to include Latin and Mathematics. Cambridge: Examination for a Degree in Arts, previous Examination, Local Examinations (senior), Certificate to include Latin and Mathematics. Durham: Examination for a Degree in Arts, Examination for Students in their second and first years, Registration Examination for Medical Students, Local Examinations (senior), Certificate to include Latin and Mathematics. London: Examination for a Degree in Arts, Matriculation Examination. Aberdeen, Edinburgh, Glasgow, and St. Andrews: Examination for a Degree in Arts, Preliminary Examination for Graduation in Medicine or Surgery. Edinburgh: Examination of (senior) Candidates for Honorary Certificates under the Local Examinations of the University of Edinburgh. Dublin: Examination for a Degree in Arts, Entrance Examination. Queen's University (Ireland): Examination for a Degree in Arts, Entrance Examination, Examination for the Diploma of Licentiate in Arts, previous Examination for B.A. Degree.

II. Other Bodies named in Schedule (A) to the Medical Act.

III. Examining Bodies, in the United Kingdom, not included in Schedule (A) to the Medical Act.—Royal College of Preceptors: Examination for a First-class Certificate.

IV. Colonial and Foreign Universities and Colleges.—Universities of Calcutta, Madras, and Bombay: Entrance Examination, Certificate to include Latin. M'Gill College, Montreal: Matriculation Examination. University of Toronto; King's College, Toronto; Queen's College, Kingston; Victoria College, Upper Canada: Matriculation Examination. King's College, Nova Scotia: Matriculation Examination, Responsions. University of Fredericton, New Brunswick: Matriculation Examination. University of Melbourne: Matriculation Examination, Certificate to include all the subjects required by the General Medical Council. University of Sydney: Matriculation Examination. Codrington College, Barbadoes: 1. English Certificate for students of two years' standing, specifying the subjects of Examination. 2. Latin Certificate, or "Testamur." Tasmanian Council of Education: Examination for the Degree of Associate of Arts, Certificate to include Latin and Mathematics. Christ's College, Canterbury, New Zealand: Voluntary Examinations, Certificate to include all the subjects required by the General Medical Council.

That it be recommended to the Licensing Boards not to accept the certificate of proficiency in General (preliminary) Education from any of the bodies, the names of which are contained in the list annually circulated, unless such certificate testify that the student to whom it has been granted has been examined in—1. English Language, including Grammar and Composition. (a) 2. Arithmetic, including Vulgar and Decimal Fractions; Algebra, including Simple Equations. 3. Geometry—First two books of Euclid. 4. Latin, including Translation and Grammar. And in one of the following optional subjects: Greek, French, German, Natural Philosophy, including Mechanics, Hydrostatics, and Pneumatics.

That students who cannot produce any of the testimonials referred to in the first recommendation be required to pass an Examination in Arts, established by any of the bodies named in Schedule (A) to the Medical Act, and approved by the General Medical Council.

II.—REGISTRATION OF MEDICAL STUDENTS.

Every Medical Student shall be registered in the manner prescribed by the General Medical Council.

No Medical Student shall be registered until he has passed a Preliminary Examination, as required by the General Medical Council.

The commencement of the course of Professional Study recognised by any of the Qualifying Bodies shall not be reckoned as dating earlier than fifteen days before the date of Registration.

The Registration of Medical Students shall be placed under the charge of the Branch Registrars.

Every person desirous of being registered as a Medical Student shall apply to the Branch Registrar of the division of the United Kingdom in which he is residing, according to a Form, which may be had on application to the several Qualifying Bodies, Medical Schools, and Hospitals; and shall produce or forward to the Branch Registrar a Certificate of his having passed a Preliminary Examination, as required by the General Medical Council, and a statement of his place of Medical study.

Each of the Branch Registrars shall supply to the several Qualifying Bodies, Medical Schools, and Hospitals, in that part of the United Kingdom of which he is Registrar, a sufficient number of blank Forms of Application for the Registration of Medical Students.

The several Branch Councils shall have power to admit special exceptions to the foregoing Regulations as to Registration, for reasons which shall appear to them satisfactory.

The several Qualifying Bodies are recommended not to admit after October, 1870, to the final Examination for a Qualification under the Medical Acts, any Candidate (not exempted from Registration) whose name had not been entered in the Medical Students' Register at least four years previously.

In the case of Candidates from other than Schools of the United Kingdom, the Branch Councils shall have power to admit exceptions to this recommendation.

(a) The General Medical Council will not consider any Examination in English sufficient that does not fully test the ability of the Candidate—1st. To write a few sentences in correct English on a given theme, attention being paid to spelling and punctuation as well as to composition. 2nd. To write a portion of an English author to dictation. 3rd. To explain the grammatical construction of one or two sentences. 4th. To point out the grammatical errors in a sentence ungrammatically composed, and to explain their nature. 5th. To give the derivation and definition of a few English words in common use. Provided always, that an Examination may be accepted as satisfactory that secures, on the part of the Candidate passing it, a sufficient grammatical knowledge of English.

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UNIVERSITY OF OXFORD.

DEGREES IN MEDICINE.

No one may be admitted a Student in Medicine until he has passed all the Examinations required for the degree of B.A.

1. Candidates for the degree of B.M. are required to pass two Examinations, each of which is held yearly in full Michaelmas Term, usually at the end of November, due notice being given, in the usual manner, by the Regius Professor of Medicine. Each Examination is conducted by the Regius Professor of Medicine and three persons who have been admitted to Regency either as Masters of Arts or as Doctors, and who are nominated yearly by the Vice-Chancellor subject to the approval of Convocation. Each Examination is conducted partly in writing, partly *viva voce*, and part of each is practical. The subjects of the first Examination are Human Anatomy and Physiology, Comparative Anatomy and Physiology to a certain extent, and those parts of Mechanical Philosophy, Botany, and Chemistry which illustrate Medicine. The subjects of the Second Examination are the Theory and Practice of Medicine (including diseases of women and children), the Materia Medica, Therapeutics, Pathology, the Principles of Surgery and Midwifery, Medical Jurisprudence, and General Hygiene. Every Candidate at this second Examination is to be examined in two of the ancient authors, Hippocrates, Aretæus, Galen, and Celsus, or in one of those four, and in some modern author approved by the Regius Professor. (a) His knowledge of disease also is tested at the bedside, and he is required to make stethoscopic and microscopical observations on patients submitted to him.

Before a Candidate is admitted to the first of these two Examinations, he must have spent two years in Professional studies after having passed the Examinations required for the degree of B.A., unless he was placed in the First or Second Class in the School of Natural Science, in which case, if he received from the Public Examiners a special Certificate of his attainments in Mechanical Philosophy, Chemistry, or Botany, he may be admitted to this Examination at once, and

(a) Such as Morgagni, Sydenham, Boerhaave.

need not then be examined again in any science specified in such Certificate. Before a Candidate is admitted to the Second Examination, he must have completed sixteen Terms from the date of the same *Testamur* and two years from the date of his *Testamur* in the first Medical Examination, and must deliver to the Regius Professor satisfactory Certificates of his attendance at some Hospital of good repute. Every one intending to be a Candidate at either Examination is required to give the Professor notice of his intention a fortnight at least before the week in which the Examination is to be held.

No one from another University can be incorporated as a Graduate in Medicine without passing these two Examinations.

2. A Bachelor of Medicine wishing to proceed to the degree of Doctor is required to read publicly within the precinct of the Schools, in the presence of the Regius Professor, a Dissertation composed by himself on some Medical subject approved by the Professor, and to deliver to him a copy of it.

The following Teachers in Physical Science have Departments in the University Museum:—Regius Professor of Medicine, Dr. Acland, F.R.S.; Natural Philosophy, Professor B. Price, F.R.S.; Geometry, Professor H. S. Smith, F.R.S.; Experimental Philosophy, Professor Clifton, F.R.S.; Chemistry, Sir B. C. Brodie, Bart., M.A., F.R.S.; Demonstrator of Chemistry, E. Madan, M.A.; Zoology, Professor Westwood, M.A.; Geology, Professor Phillips, F.R.S.; Mineralogy, Professor Maskelyne, F.R.S.; Linacre Professor of Physiology, Professor Rolleston, F.R.S.; Lees Reader in Anatomy, W. E. Church, M.B.; Demonstrator in Anatomy, Charles Robertson, Esq.; Demonstrations in Pathological Anatomy by Henry Tuckwell, M.D.

UNIVERSITY OF CAMBRIDGE.

REGULATIONS FOR DEGREES IN MEDICINE AND SURGERY.

Degree of Bachelor of Medicine.—Before a Student can become a Bachelor of Medicine he must have resided nine terms (three academical years).

Five years of Medical study are required, of which time six terms (two academical years) shall be spent in the University after the student has passed the previous Examination. In the case of those who have graduated with honours as Bachelor of Arts, four years of Medical study are deemed sufficient, and four terms only of Medical Study in the University are required.

The Previous Examination may be passed in the Lent term (at the latter end of March) by those who declare themselves as Medical Students and have commenced residence in the University in the previous October. In addition to the Previous Examination, the Student is required to pass an Examination in Algebra at the same time or in some subsequent term.

There are three examinations for M.B.

The first Examination is in—1. Mechanics and Hydrostatics; 2. Chemistry, with Heat and Electricity; 3. Botany. Before presenting himself for it the Student must have attended Lectures on Chemistry, including manipulations, and Botany. (Students who have obtained honours in any Tripos or passed the general Examination for B.A. are not required to be examined in Mechanics and Hydrostatics; and those who have passed the special Examination in Botany for B.A. are not required to be again examined in that subject.)

The Second Examination is in—1. Elements of Comparative Anatomy; 2. Human Anatomy and Physiology; 3. Pharmacology. The Student must have completed two years of Medical study, the time of Medical study required to be spent in the University being included in these two years, and must also produce Certificates of attendance on Lectures on the Elements of Comparative Anatomy, Human Anatomy and Physiology, Materia Medica and Pharmacy, and Pathology; one year's Hospital Practice and one season's Dissections.

Students who have obtained honours in the Natural Sciences Tripos, and have passed with credit the Examination in Chemistry, Botany, or Comparative Anatomy, are not required to be again examined in those subjects.

The Third Examination is in—1. Pathology and Practice of Physic (two papers); 2. Clinical Medicine (in the wards of the Hospital); 3. Medical Jurisprudence. The Candidate must have completed the course of Medical Study, and must produce Certificates of attendance on one Course of Lectures on each of the following subjects:—Principles and Practice of Physic, Clinical Medicine, Clinical Surgery, Medical Jurisprudence, and Midwifery, and of having attended Hospital Practice during three years.

After the Third Examination an Act has to be kept, which consists in reading an original thesis, followed by a *viva voce* Examination on the subject of the thesis, as well as on other subjects of the Faculty.

The *Degree of Doctor of Medicine* may be taken three years after M.B. An Act has to be kept with *viva voce* Examination, and an essay has to be written extempore. A Master of Arts of four years' standing can proceed direct to M.D., provided he produces the same certificates and passes the same Examinations as for M.B.

Degree of Master in Surgery.—The Candidate must have passed all the Examinations for the Degree of M.B., and must produce Certificates of having attended a second Course of Lectures on Human Anatomy, one Course of Lectures on the Principles and Practice of Surgery, one year's Clinical Surgical Lectures, ten cases of Midwifery, a second season of Dissections, three years the Surgical Practice of a recognised Hospital, and of having been House-Surgeon or Dresser at such Hospital for six months. The subjects of the Examination are—1. Surgical Anatomy; 2. Pathology and the Principles and Practice of Surgery; 3. Clinical Surgery; and 4. Midwifery.

All the Examinations are partly in writing, partly *viva voce*, and take place in the Michaelmas and Easter Terms, an interval of two days being allowed to intervene between the first and second Examinations for M.B.

Attendance at the Hospital and Lectures in Cambridge is recognised by the Universities of Cambridge and London, and (for one year) by the College of Surgeons and the Society of Apothecaries.

UNIVERSITY OF LONDON.

BACHELOR OF MEDICINE.

Candidates for the Degree of Bachelor of Medicine are required—

1. To have passed the Matriculation Examination, or to have taken a Degree in Arts in either of the Universities of Sydney, Melbourne, or Calcutta (provided, in the last case, that Latin has been one of the subjects in which he has passed).

2. To have passed the Preliminary Scientific Examination.

3. To have been engaged in his Professional studies during four years subsequently to Matriculation or Graduation in Arts, at one or more of the Medical Institutions or Schools recognised by this University; one year, at least, of the four to have been spent in one or more of the recognised Institutions or Schools in the United Kingdom.

4. To pass two Examinations in Medicine.

PRELIMINARY SCIENTIFIC (M.B.) EXAMINATION.(a).

The Preliminary Scientific Examination takes place once in each year, and commences on the third Monday in July.

[Candidates for the Degree of M.B. are strongly recommended by the Senate to pass the Preliminary Scientific Examination before commencing their regular Medical Studies; and to devote a preliminary year to preparation for it according to the following programme:—*Winter Session:* Mechanical and Natural Philosophy; Chemistry (especially Inorganic); Zoology.—*Summer Session:* Practical Chemistry (Inorganic) Botany.]

No Candidate is admitted to this Examination until he has completed his seventeenth year, and has either passed the Matriculation Examination or taken a Degree in Arts in either of the Universities of Sydney, Melbourne, or Calcutta (provided, in the last case, that Latin has been one of the subjects in which he has passed); nor unless he have given notice of his intention to the Registrar at least *fourteen days* before the commencement of the Examination.

The fee for this Examination is £5.

Candidates are examined in the following subjects(b):—Mechanical and Natural Philosophy, Inorganic Chemistry, Botany and Vegetable Physiology, Zoology.

(a) Candidates who matriculated previously to January, 1861, will not be required to pass the Preliminary Scientific (M.B.) Examination in any other subjects than Chemistry and Botany; and they will be allowed to pass the Preliminary Scientific Examination and the First M.B. Examination in the same year, if they so prefer.

(b) Candidates who shall pass in all the subjects of the Preliminary Scientific (M.B.) Examination, and also *at the same time* in the Mathematics of the First B.Sc. Examination, shall be considered as having passed both the Preliminary Scientific Examination, and also the First B.Sc. Examination, without being required to pay an additional fee; and Candidates who shall pass in all the subjects of the Preliminary Scientific (M.B.) Examination, and who shall have *previously* passed the First B.A. Examination, shall be admissible to the Second B.Sc. Examination.

EXAMINATION FOR HONOURS.

Any Candidate who has passed the Preliminary Scientific (M.B.) Examination in all its subjects may be examined for Honours in (1) Experimental Physics, (c) (2) Chemistry, (3) Botany, and (4) Zoology, unless he have previously obtained an Exhibition in either of these subjects at the First B.Sc. Examination, in which case he shall not be admissible to the Examination for Honours in that subject.

If, in the opinion of the Examiner, any candidate of not more than twenty-two years of age, who has passed either the First B.Sc. Examination or the Preliminary Scientific (M.B.) Examination, shall possess sufficient merit, the Candidate who shall distinguish himself the most of all the Candidates who shall have passed either of the said Examinations, and who are not more than twenty-two years of age, in Experimental Physics, the Candidate who shall have distinguished himself the most of all the Candidates who have passed either of the said Examinations, and who are not more than twenty-two years of age, in Chemistry, the Candidate who shall distinguish himself the most of all the Candidates who shall have passed either of the said Examinations, and who are not more than twenty-two years of age, in Botany, and the Candidate who shall distinguish himself the most of all the Candidates who shall have passed either of the said Examinations, and who are not more than twenty-two years of age, in Zoology, shall each receive an Exhibition of £40 per annum for the next two years, payable in quarterly instalments (it being intended that one Exhibition only shall be given in each case among all the Candidates, although some of such Candidates may have passed the First B.Sc. Examination and others the Preliminary Scientific (M.B.) Examination); provided that on receiving each instalment he shall declare his intention of presenting himself either at the Second B.Sc. Examination within two Academical Years (d) from the time of his passing the First B.Sc. Examination, or at the First M.B. Examination within Three Academical Years from the time of his passing the Preliminary Scientific (M.B.) Examination, as the case may be.

Under the same circumstances the First and Second Candidates for Honours in Experimental Physics shall each receive the Neil Arnott Bronze Medal.

FIRST M.B. EXAMINATION.

The First M.B. Examination takes place once in each year, and commences on the last Monday in July.

No Candidate is admitted to this Examination unless he have produced Certificates to the following effect:—1. Of having completed his nineteenth year. 2. Of having passed the Preliminary Scientific Examination at least one year previously.(e). 3. Of having, subsequently to having passed the Matriculation Examination, or taken a Degree in Arts in one of the before-named Universities, been a Student during two years at one or more of the Medical Institutions or Schools recognised by this University, and of having attended a Course of Lectures on each of three of the subjects in the following list:—Descriptive and Surgical Anatomy, General Anatomy and Physiology, Comparative Anatomy, Pathological Anatomy, Materia Medica and Pharmacy, General Pathology, General Therapeutics, Forensic Medicine, Hygiene, Midwifery and Diseases peculiar to Women and Infants, Surgery, Medicine. 4. Of having, subsequently to having passed the Matriculation Examination, or taken a Degree in Arts, dissected during two Winter Sessions. 5. Of having, subsequently to having passed the Matriculation Examination, or taken a Degree in Arts, attended a Course of Practical Chemistry, comprehending Practical Exercises in conducting the more important processes of General and Pharmaceutical Chemistry; in applying Tests for discovering the Adulteration of articles of the Materia Medica, and the presence and nature of Poisons; and in the examination of Mineral Waters, Animal Secretions, Urinary Deposits, Calculi, etc. 6. Of having attended to Practical Pharmacy, and of having acquired a practical knowledge of the Preparation of Medicines.

These Certificates shall be transmitted to the Registrar at least *fourteen days* before the commencement of the Examination.

The fee for this Examination is £5.

Candidates are examined in the following subjects:—Anatomy, Physiology,(f) Materia Medica and Pharmaceutical Chemistry, Organic Chemistry.

The examinations are by printed papers and *viva voce*.

EXAMINATION FOR HONOURS.

Any Candidate who has been placed in the First Division at the First M.B. Examination may be examined for Honours in (1) Anatomy, (2) Physiology, Histology, and Comparative Anatomy, and (3) Materia Medica and Pharmaceutical Chemistry, and Organic Chemistry. If in the opinion of the Examiners sufficient merit be evinced, the Candidate who shall distinguish himself the most in Anatomy, the Candidate who shall distinguish himself the most in Physiology, Histology, and Comparative Anatomy, and the Candidate who shall distinguish himself the most in Materia Medica, Pharmaceutical Chemistry, and Organic Chemistry, shall each receive an Exhibition of £40 per annum for the next two years, payable in quarterly instalments; provided that on receiving each instalment he shall declare his intention of presenting himself at the Second M.B. Examination within three Academical Years from the time of his passing the First M.B. Examination. Under the same circumstances, the First and Second Candidates in each of the preceding subjects shall each receive a Gold Medal of the value of £5.

SECOND M.B. EXAMINATION.(g)

The Second M.B. Examination takes place once in each year, and commences on the first Monday in November. No Candidate is admitted to this Examination within two Academical Years of the time of his passing the First Examination, nor unless he have produced Certificates to the following effect:—1. Of having passed the First M.B. Examination. 2. Of having, subsequently to having passed the First M.B. Examination, attended a Course of Lectures on each of two of the subjects comprehended in the foregoing list (vide First M.B. Examination, § 3), and for which the Candidate had not presented Certificates at the First M.B. Examination. 3. Of having conducted at least Twenty Labours. Certificates on this subject will be received from any qualified Practitioner in Medicine. 4. Of having attended the Surgical Practice of a recognised Hospital or Hospitals during two years, with Clinical Instruction and Lectures on Clinical Surgery. 5. Of having attended the Medical Practice of a recognised Hospital or Hospitals during two years, with Clinical Instruction and Lectures on Clinical Medicine. N.B. The Student's attendance on the Surgical and on the Medical Hospital Practice specified in Regulations 4 and 5 may commence at any date after his passing the Preliminary Scientific Examination, and may be comprised either within the same year or within different years; provided that in every case his attendance on Surgical and Medical Hospital Practice be continued for at least eighteen months subsequently to his passing the First M.B. Examination. Attendance during three months in the Wards of a Lunatic Asylum recognised by the University, with Clinical Instruction, may be substituted for a like period of attendance on Medical Hospital Practice.(h) 6. Of having, subsequently to the completion of his attendance on Surgical and Medical Hospital Practice, attended to Practical Medicine, Surgery, or Midwifery, with special charge of patients, in a Hospital, Infirmary, Dispensary, or Parochial Union, during six months. 7. Of having acquired proficiency in Vaccination. Certificates on this subject will be received only from the authorised Vaccinators appointed by the Privy Council. The Candidate must also produce a Certificate of Moral Character from a teacher in the last School or Institu-

(c) This Exhibition, having been provided by the liberal endowment of Dr. Arnott, will be entitled "The Neil Arnott Exhibition."

(d) By the term "Academical Year" is ordinarily meant the period intervening between any Examination and an Examination of a higher grade in the following year; which period may be either *more* or *less* than a Calendar year. Thus the interval between the *First* Examinations in Arts, Science, and Medicine, and the *Second* Examinations of the next year in those Faculties respectively, is about sixteen months; whilst the interval between the Second B.A. Examination and the M.A. Examination of the next year, or between the Second B.Sc. Examination and the D.Sc. Examination of the next year, is less than eight months. Nevertheless, each of these intervals is counted as an "Academical Year."

(e) Candidates who matriculated previously to January, 1861, will not be required to pass the Preliminary Scientific Examination in any other subjects than Chemistry and Botany; and they will be allowed to pass the Preliminary Scientific Examination and the First M.B. Examination in the same year, if they so prefer.

(f) Any Candidate is allowed, if he so prefer, to postpone his Examination in Physiology from the First M.B. Examination at which he presents himself for examination in the remaining subjects until the First M.B. Examination in the next or any subsequent year; but such Candidate shall not be admitted to compete for honours on either occasion; and he shall not be admitted as a Candidate at the Second M.B. Examination until after the lapse of at least twelve months from the time of his passing the Examination in Physiology.

(g) Any Candidate for the Second M.B. Examination who has passed the First M.B. Examination under the former Regulations, will be required to have also passed the Examination in Physiology at some previous First M.B. Examination carried on under the present Regulations; at which Examination he shall not be allowed to compete for Honours.

(h) The Senate regard it as highly desirable that Candidates for the Degree of M.B. should practically acquaint themselves with the different forms of insanity by attendance in a Lunatic Asylum.

tion at which he has studied, as far as the teacher's opportunity of knowledge has extended. These Certificates shall be transmitted to the Registrar at least *fourteen days* before the Examination begins.

Candidates are examined in the following subjects:—General Pathology, General Therapeutics and Hygiene, Surgery, Medicine, Midwifery, Forensic Medicine. The Examinations include questions in Surgical and Medical Anatomy, Pathological Anatomy, and Pathological Chemistry. The Examinations are by printed papers, and *viva voce*, with Practical Examinations in Clinical Medicine and Forensic Medicine. N.B. Candidates will be expected to write Prescriptions in Latin, without abbreviations.

The Senate desire it to be understood that Bachelors of Medicine of the University of London have no right, as such, to assume the title of Doctor of Medicine.

EXAMINATION FOR HONOURS.

Any Candidate who has been placed in the First Division at the Second M.B. Examination may be examined for Honours in (1) Medicine, (2) Midwifery, and (3) Forensic Medicine.

If in the opinion of the Examiners sufficient merit be evinced, the Candidate who shall distinguish himself the most in Medicine shall receive £50 per annum for the next two years, with the style of University Scholar in Medicine.

Under the same circumstances, the Candidate who shall distinguish himself the most in Midwifery shall receive £30 per annum for the next two years, with the style of University Scholar in Midwifery.

Under the same circumstances, the Candidate who shall distinguish himself the most in Forensic Medicine shall receive £30 per annum for the next two years, with the style of University Scholar in Forensic Medicine.

Under the same circumstances, the First and Second Candidates in each of the preceding subjects shall each receive a Gold Medal of the value of £5.

BACHELOR OF SURGERY.

The Examination for the Degree of Bachelor of Surgery takes place once in each year, and shall commence on the Tuesday following the fourth Monday in November.

No Candidate is admitted to this Examination unless he have produced Certificates to the following effect:—1. Of having taken the Degree of Bachelor of Medicine in this University. 2. Of having attended a Course of Instruction in Operative Surgery, and of having operated on the Dead Subject.

These Certificates shall be transmitted to the Registrar at least *fourteen days* before the Examination begins.

The Examinations comprise—Surgical Anatomy and Surgical Operations, by printed papers; Examination, and Report on Cases of Surgical Patients; Performance of Surgical Operations upon the Dead Subject; Application of Surgical Apparatus; *viva voce* Interrogation.

EXAMINATION FOR HONOURS.

Any Candidate who has passed the B.S. Examination may be examined for Honours in Surgery. The Examination is conducted by means of Printed Papers.

If in the opinion of the Examiners sufficient merit be evinced, the Candidate who shall distinguish himself the most shall receive £50 per annum for the next Two Years, with the style of University Scholar in Surgery.

Under the same circumstances, the First and Second Candidates shall each receive a Gold Medal of the value of £5.

MASTER IN SURGERY.

The Examination for the Degree of Master in Surgery shall take place once in each year, and shall commence on the fourth Monday in November.

No Candidate is admitted to this Examination unless he have produced Certificates to the following effect:—1. Of having taken the Degree of Bachelor of Surgery (i) in this University. 2. Of having attended, subsequently to having taken the Degree of Bachelor of Surgery in this University—*a*. To Clinical or Practical Surgery during two years in a Hospital or Medical Institution recognised by this University; *b*. Or to Clinical or Practical Surgery during one year in a Hospital or Medical Institution recognised by this University, and of having been engaged during three years in the practice of his Profession; *c*. Or of having been engaged during five years in the practice of his Profession, either before or after taking the Degree of Bachelor of Surgery in this University. One year of attendance on Clinical or Practical Surgery, or two years of practice, will be dispensed with in the case of those Candidates who at the B.S. Examination have been placed in the First Division. 3. Of Moral Character, signed by two persons of respectability.

These Certificates shall be transmitted to the Registrar at least fourteen days before the Examination begins.

The fee for the Degree of Master in Surgery shall be £5.

The Examination shall be conducted by means of printed papers and *viva voce* interrogation.

Candidates shall be examined in the following subjects:—Logic and Moral Philosophy. (Any Candidate who has taken the Degree either of B.A., B.Sc., or M.D. in this University is exempted from this part of the Examination; and any Candidate who has passed the Second M.B. Examination may at any subsequent M.S. Examination present himself for Logic and Moral Philosophy alone, if he so prefer; thereby gaining exemption, if he should pass, from Examination in that subject when he presents himself to be examined for the Degree of Master in Surgery.) Surgery.

The Examination is conducted by printed papers and *viva voce* interrogation, and includes the dissection of a Surgical Region or performance of Surgical operations. Practical Examination in Clinical Surgery.

DOCTOR OF MEDICINE.

The Examination for the Degree of Doctor of Medicine takes place once in each year, and commences on the fourth Monday in November. No Candidate is admitted to this Examination unless he have produced certificates to the following effect:—1. Of having taken the Degree of Bachelor of Medicine in this University. 2. Of having attended, subsequently to having taken the Degree of Bachelor of Medicine in this University—*a*. To Clinical or Practical Medicine during two years in a Hospital or Medical Institution recognised by this University; *b*. Or to Clinical or Practical Medicine during one year in a Hospital or Medical Institution recognised by this University, and of having been engaged during three years in the practice of his Profession; *c*. Or of having been engaged during five years in the practice of his Profession, either before or after taking the Degree of Bachelor of Medicine in this University. (One year of attendance on Clinical or Practical Medicine, or two years of practice, will be dispensed with in the case of those Candidates who at the Second M.B. Examination have been placed in the First Division.) 3. Of Moral Character, signed by two persons of respectability.

These Certificates shall be transmitted to the Registrar at least *fourteen days* before the Examination begins.

The fee for the Degree of Doctor of Medicine shall be £5.(k)

The Examination is conducted by means of printed papers and *viva voce* interrogation, and includes the following subjects:—Logic and Moral Philosophy. (Any Candidate who has taken the Degree either of B.A., B.Sc., or M.S. in this University is exempted from this part of the Examination; and any Candidate who has passed the Second M.B. Examination may present himself at any subsequent M.D. Examination for Logic and Moral Philosophy alone, if he so prefer; thereby gaining exemption, if he should pass, from Examination in that subject when he presents himself to be examined for the Degree of Doctor of Medicine.) Medicine, including a commentary on a case of Medicine or Midwifery. Practical Examination in Clinical Medicine.

If in the opinion of the Examiners sufficient merit be evinced, the Candidate who shall distinguish himself the most in Medicine at the Examination for the Degree of Doctor of Medicine shall receive a Gold Medal of the value of £20.

REGULATIONS RELATING TO CANDIDATES WHO COMMENCED THEIR MEDICAL STUDIES IN OR BEFORE JANUARY, 1839.

Bachelor of Medicine.—Candidates who commenced their Professional Studies in or before January, 1839, shall be required to pass the Preliminary Scientific Examination in Chemistry and Botany only, and shall be admitted to the First Examination for the Degree of Bachelor of Medicine on producing certificates to the following effect:—1. Of having been engaged during two years in their Professional Studies. 2. Of having attended a Course of Lectures on each of four of the subjects comprehended in the list (*vide* First M.B. Ex. § 3). 3. Of having dissected during nine months. 4. Of having attended to Practical Pharmacy during a sufficient length of time to enable

(i) Candidates who have obtained the Degree of Bachelor of Medicine previously to 1866 will be admitted to the Examination for the Degree of Master in Surgery without having taken the Degree of Bachelor of Surgery; and in the case of such Candidates, the attendance on Surgical Practice required by Regulation 2 may commence from the date of the M.B. Degree.

(k) This fee will continue to be £10 to all such as, having taken their M.B. Degree under the former regulations, shall not have paid the fee of £5 at the Preliminary Scientific Examination.

them to acquire a practical knowledge in the preparation of medicines.

Candidates who commenced their Professional Studies in or before January, 1839, shall be admitted to the Second Examination for the Degree of Bachelor of Medicine on producing Certificates to the following effect:—1. Of having been engaged during four years in their Professional Studies. 2. Of having passed the first M.B. Examination. 3. Of having attended a Course of Lectures on each of two of the subjects comprehended in the list (*vide* First M.B. Ex. § 3). 4. Of having dissected during twelve months. 5. Of having attended to Practical Pharmacy during a sufficient length of time to enable them to acquire a practical knowledge in the preparation of medicines. 6. Of having conducted at least Six Labours. 7. Of having attended the Surgical Practice of a recognised Hospital or Hospitals during twelve months. 8. Of having attended the Medical Practice of a recognised Hospital or Hospitals during other twelve months. 9. Of Moral Character from a Teacher in the last School or Institution at which they have studied, as far as the Teacher's opportunity of knowledge has extended.

Candidates who have not taken a Degree in Arts, or passed the Matriculation Examination in this University, will be required to translate a portion of Celsus *de Re Medicâ*.

REGULATIONS RELATING TO PRACTITIONERS IN MEDICINE OR SURGERY DESIROUS OF OBTAINING DEGREES IN MEDICINE.

Bachelor of Medicine.—Candidates shall be admitted to the two Examinations for the Degree of Bachelor of Medicine on producing certificates to the following effect:—1. Of having been admitted prior to the year 1840 members of one of the legally-constituted bodies in the United Kingdom for licensing Practitioners in Medicine or Surgery; or of having served previously to 1840 as Surgeons or Assistant-Surgeons in her Majesty's Army, Ordnance, or Navy, or in the service of the Honourable the East India Company. 2. Of having received a part of their education at a recognised Institution or School, as required by the Charter of the University. 3. Of Moral Character, signed by two persons of respectability.

Candidates who have not taken a Degree in Arts, or passed the Matriculation Examination in this University, will be required to translate a portion of Celsus *de Re Medicâ*.

Doctor of Medicine.—Candidates who have been engaged during five years in the practice of their Profession shall be admitted to the Examination for this Degree on producing certificates to the following effect:—1. Of having been engaged during five years in the practice of their Profession. 2. Of having taken the Degree of Bachelor of Medicine in this University.

Candidates who have not taken a Degree in Arts, or passed the Matriculation Examination in this University, will be required to translate a portion of Celsus *de Re Medicâ*.

UNIVERSITY OF DURHAM.

For Registration.—No one shall be held to be a Student in Medicine who has not been registered in a register kept for that purpose. No one shall be so registered unless he produce Certificates of age and character, and have passed one of the preliminary Examinations recommended by the General Medical Council. Every registered Student shall receive from the Registrar a Certificate of his Registration, for which he shall pay the sum of 5s. The Registration Examination shall be directed to the rudiments of Religion, Literature, and Science; and shall be conducted by two or more Examiners nominated by the Warden. The Registration Examination shall be held twice a year, viz.:—Shortly before the Winter Session and shortly before the Summer Session of the College of Medicine of Newcastle-upon-Tyne. The Registration Examination will begin at Durham, on Tuesday, September 21, 1869, and on April 19 and September 20, 1870, at 9 a.m. on each day. Application to be made to Arthur Beanlands, Esq., Durham, at least one month before the day of examination, to whom also Candidates must, at the same time, send the Examination Fee, £1, and the certificates of age and character, and specify the Optional Subjects in which he wishes to be examined. Every one who passes that Examination shall receive a Certificate signed by the Examiners without further payment. The Warden shall have authority, in case of urgency, to appoint an Extraordinary Registration Examination at any time. Any one who presents himself for such Extraordinary Examination shall pay the sum of £2.

Subjects of Examination for September 21, 1869.—Necessary Subjects:—The History contained in the Acts of the Apostles; the History of England to the end of the reign of Henry III.; English Grammar and Composition; Arithmetic, including Vulgar and Decimal Fractions; Algebra, including Simple Equations; Euclid, Books I. and II.; the Geography of Great Britain, Ireland, and France. Candidates will be expected to draw from memory Outline Maps of these Countries, showing their chief ranges of mountains and their principal rivers, and also to answer questions connected with them. Latin Grammar with Virgil, Æneid, Lib. I. and II. And one of the following optional subjects:—Greek Grammar, with Xenophon's Memorabilia; French Grammar, with Voltaire's Charles XII.; German Grammar, with Goethe's Dichtung und Wahrheit, Book I.; Elementary Questions in Mechanics, Hydrostatics, and Pneumatics.

Subjects of Examination for April 19 *and September* 20, 1870. Necessary Subjects:—The History contained in the Acts of the Apostles, English Grammar and Composition, Arithmetic, including Vulgar and Decimal Fractions; Algebra, including Simple Equations; Euclid, Books I. and II.; Latin Grammar with—In April, Cæsar de Bello Gallico, Lib. I. and II.; in September, Virgil, Æneid, Lib. I. and II.; and one of the following optional subjects:—Greek Grammar, with Xenophon's Memorabilia; French Grammar, with Voltaire's Charles XII.; German Grammar, with Goethe's Dichtung und Wahrheit, Book I.; Elementary Questions in Mechanics, Hydrostatics, and Pneumatics.

Subjects of Examination for a Medical Scholarship in the University, October 5, 1869.—1. The Gospel of St. Luke in Greek. 2. Latin Grammar. 3. Cæsar de Bello Gallico, Book IV. 4. Arithmetic and Algebra. 5. Euclid, Books I. and II. 6. History of the Reigns of Charles II. and James II.

Subjects of Examination for the Dickinson Memorial Scholarship, College of Medicine, July 1870.—Printed questions in Principles and Practice of Medicine, Pathology and Pathological Anatomy, Principles and Practice of Surgery, and Principles and Practice of Midwifery.

For the Licence in Surgery. (Residence in Durham is not imperative.)—The Regulations are the same as those for the Licence in Medicine, except that the final Examination is directed more particularly to Surgery, and may or may not be passed at the same time as the final Examination for the Licence in Medicine.

For the Licence in Medicine. (Residence in Durham is not imperative.)—A Candidate must produce Certificates of Registration as a Student in Medicine, of having, after Registration, spent four years in Medical study, at one or more of the Schools recognised by the Licensing Bodies named in Schedule (A) of the Medical Act, 1858, of good moral conduct, and of having attained the age of twenty-one years. There are two Examinations; one after the Second Winter Session, the other after the Fourth Winter Session, of Medical Study. The first is directed to Anatomy, Physiology, and Chemistry. The second to the other branches of Medical Education, and more particularly to the Practice of Medicine.

For the Degree of Master in Surgery. (Residence during Three Terms at Durham is necessary.)—A Candidate must be a Licentiate in Surgery, and also a Licentiate in Medicine, of the University, and of the standing of eighteen terms (six years) at least from the date of his Registration at Durham, and of three terms at least from the date of his admission to the Licence in Surgery. He must be a Bachelor of Arts, or have passed the final examination for B.A., or one equivalent thereto. He must have spent one year at least in Medical and Surgical study in some School of Medicine in connexion with the University, and have passed the Examination for the Degree of Master in Surgery. The Examination for this Degree is directed chiefly to the Practice of Surgery.

For the Degree of Bachelor in Medicine. (Residence during three terms at Durham is necessary.)—A Candidate must have obtained a Degree in Arts of the University of Durham, or have passed the final examination for the Degree of Bachelor of Arts, or one equivalent thereto, must be of the standing of three terms at least as a Licentiate in Medicine of the University, and of the standing of eighteen terms (six years) from the date of his Matriculation at Durham, and have passed the examination for the Degree of Bachelor of Medicine. A Candidate must write an Essay on some Medical subject selected by himself and approved by the Reader in Medicine, and pass an examination thereon, including the Collateral Medical Sciences involved in the subject of the essay.

For the Degree of Doctor in Medicine.—A Candidate must be of the standing of three terms at least as a Bachelor in Medicine of the University of Durham, and of the standing of twenty-one terms (seven years) from the date of his Matriculation at Durham, and have passed the Examination for the Degree of

Doctor in Medicine. The Examination is similar to that for the Degree of Bachelor in Medicine.

The Examinations for the Licences and Degrees in Medicine and in Surgery are conducted in Newcastle. Those for the Licences: 1. By printed papers of questions. 2. Practically in Anatomy, Physiology, Chemistry, Materia Medica, Surgery, Medicine, and Medical Jurisprudence. 3. *Vivâ voce* on all the subjects. The Examinations are held, except in special cases, yearly in the month of June, at the close of the Easter Term, and are open to members of the University. The next Examination will begin on Monday, June 14, 1870, at 9 a.m. The Licences and Degrees are conferred in Convocation at Durham. The Examiners (three or more in number) are appointed yearly by the Warden of the University, and approved by Convocation.

CURRICULUM OF THE UNIVERSITY OF DURHAM.

A Candidate for the Licence in Medicine and for the Licence in Surgery must bring evidence of having attended: 1. During the first two years of study—Two six months' Courses of Lectures on Anatomy, two six months' Courses of Lectures on Physiology. One six months' Course of Lectures on Chemistry. Of having been engaged for three months in Practical Pharmacy, and for two Winter Sessions in Practical Dissection of the human body, and of having attended for twelve months the Surgical and the Medical Practice, with Clinical Lectures on Surgery and on Medicine, at a Hospital recognised by the University. 2. During the remaining two years—Two six months' Courses of Lectures on the Principles and Practice of Surgery. Two six months' Courses of Lectures on the Principles and Practice of Medicine. Two three months' Courses of Lectures and Demonstrations on Morbid Anatomy. One three months' Course of Lectures on each of the following subjects: Botany, Materia Medica, Practical Chemistry, Midwifery, and Medical Jurisprudence. Together with Surgical and Medical Hospital Practice, and Clinical Lectures on Surgery and Medicine for two Winter Sessions and one Summer Session.

Expenses at Durham: Entrance Fees: Admission Fee to University, £2; Caution Money, at University College, £20;(a) Caution Money, at Bishop Hatfield's Hall, £15.

Terminal Expenses at University College: Three Terms in the Year (Eight Months): Rent of room, unfurnished, from £4 to £5; College Commons, comprising dinner and meat, luncheon (per week), 14s.; service, gas, and detriments, £3 15s.; coals, £1 1s. The average annual expenses at the College, including those of the University, may be estimated at £80 to £85.

Terminal Expenses at Bishop Hatfield's Hall: Three Terms in the Year (Eight Months): A set of rooms, furnished (with the exception of linen), £6 6s. to £7 7s.; Commons or board, including servants and all domestic charges (except washing for 10⅔ weeks, at £1 1s.), £11 4s.; Tuition Fees, Library, &c., £6.

Fees for Examination and Degrees: For Senior Middle Class Examination, £1; for Examination at the end of first year, £1; for Registration Examination, £1; for extraordinary Registration Examination, £2; for Registration, 5s.; for a Certificate in Chemistry, 10s.; for each public Examination in Medicine or in Surgery, £1; for a Licence in Medicine, £3; for a Licence in Surgery, £3; for a Degree of Master in Surgery, £6; for a Degree of Bachelor in Medicine, £6; for a Degree of Doctor in Medicine, £6.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

BYLAWS RELATING TO MEMBERS.

1. The Members of the College, present and future, are alone eligible to the Fellowship. They have the use of the Library and Museum, and are admitted to all Lectures, but they are not entitled to any share in the government, or to attend or vote at General Meetings of the Corporation. 2. All persons who have been admitted before February 16, 1859, Licentiates of the College, are entitled to be admitted Members of the College. 3. Any Extra-Licentiate who shall have produced Testimonials as to character satisfactory to the Censors, and shall have assured the said Censors that he is not engaged in the practice of Pharmacy, and who shall comply with such other Regulations as are required by the Bylaws of the said Corporation, may be proposed to the College to be admitted a Member of the College. 4. Any person who shall have satisfied the College touching his acquirements in general Science and Literature, and his knowledge of Medicine, Surgery, and Midwifery, and who shall comply with the Bylaws and Regulations of the College, may be proposed to the College to be admitted a Member of the College. 5. Every Candidate for the Membership of the College, under the last Bylaw, who shall have commenced his Professional Studies after September, 1861, shall satisfy the Censors' Board that previously to the commencement of his Professional Studies he has obtained a Degree in Arts from some University of the United Kingdom or of the Colonies, or from some other University specially recognised by the Medical Council, or that he has passed Examinations equivalent to those required for a Degree in Arts. All other Candidates for Membership shall be examined on the subjects of General Education by the President and Censors of the College. 6. Every Candidate for Membership shall furnish proof that he has attained the age of twenty-five years. 7. Every Candidate shall produce a Testimonial from a Fellow or Member of the College, satisfactory to the Censors' Board, to the effect that, as regards moral character and conduct, he is a fit and proper person to be admitted a Member of the College. 8. Every Candidate (*except such as shall be admissible under the provisions of Sections* 15 *and* 16) shall produce proof of his having been engaged in Professional Studies during a period of five years, of which four years at least shall have been passed at a Medical School or Schools, recognised by the College. 9. Every Candidate (*except such as shall be admissible under the provisions of Sections* 15 *and* 16) shall produce evidence, satisfactory to the Censors' Board, of his having fulfilled the Course of Study prescribed for Licentiates of the College (see below) with the following exceptions:—(1.) The Candidate for Membership must have attended Lectures on Clinical Medicine during Three Winter and Three Summer Sessions, the attendance not to commence earlier than the Second Winter Session, at a recognised Medical School. (2.) He must have attended diligently during three Winter Sessions and three Summer Sessions the Medical Practice, *and during three Winter Sessions and two Summer Sessions the Surgical Practice*, of an Hospital containing at least 100 beds, and have been engaged during six months in the Clinical Study of Diseases peculiar to Women, and have served the office of Clinical Clerk in the Medical Wards during at least six months. [The requirements printed in italics apply to Candidates who commenced their Professional Education in the United Kingdom on or after October 1, 1867, and to Candidates who commenced their Professional Education at a recognised Foreign or Colonial School on or after October 1, 1868.] 10. Every Candidate who has prosecuted his studies abroad, whether in part or to the full extent required by the preceding Bylaw (*except such as shall be admissible under the provisions of Section* 16), shall, nevertheless, bring proof of his having attended, during at least twelve months, the Medical Practice of an Hospital in the United Kingdom containing at least 100 beds. 11. If the Censors' Board doubt the sufficiency of the Certificates and Testimonials produced by any Candidate, or his fitness, in any respect, for admission to Examination, they may submit the case to a General Meeting of the Fellows. 12. No Candidate shall be admitted to Examination who is engaged in trade; or who dispenses medicine, or makes any engagement with a Chemist, or any other person, for the supply of medicines; or who practises Medicine or Surgery in partnership, by deed or otherwise, so long as that partnership continues. 13. No Candidate shall be admitted to Examination who refuses to make known, when required by the President and Censors, the nature and composition of any remedy he uses. 14. Every Candidate (except in cases specially exempted), under Sections 15 and 16, shall give proof of his acquirements by written answers to questions placed before him, and shall be examined *vivâ voce* at three separate Examinations, and shall be approved by the President and Censors, or by the major part of them. 15. Any Candidate who has already obtained the Degree of Doctor or Bachelor of Medicine at a University in the United Kingdom, wherein the Courses of Study, and the Examinations to be undergone by the Students previously to graduation, shall have been adjudged by the Censors' Board to be entirely satisfactory, shall be exempt (if the Censors shall think fit) from all or any parts of the Examinations hereinbefore described, except such as relate to the Third or Pass Examination; the nature and extent of which Examination shall, in the case of each Candidate, be determined by the Censors' Board. Every Candidate for the Membership will, however, be required to translate into English a passage from a Latin author, and he will have the opportunity of showing a knowledge of Greek, or of one or more of the modern European languages. 16. If any Candidate who has attained the age of forty years shall produce Testimonials not merely satisfactory as to his moral character and conduct, and his general and Professional acquirements, but further showing that he has improved the art or extended the science

(a) This is returned to the Student on leaving the University, and is a guarantee fund against loss by terminal defalcations.

of Medicine, or has at least distinguished himself highly as a Medical Practitioner, the Censors' Board, having well weighed and considered these Testimonials, may, if they see fit, submit them to the Fellows at a General Meeting, and it shall be determined by the votes of the Fellows present, or of the majority of them, taken by ballot, whether the Candidate shall be admitted to Examination, which shall, in every such case, be as full and complete as the Censors may deem sufficient. 17. Any Candidate who shall produce satisfactory evidence of having passed an Examination on Anatomy and Physiology, conducted by any of the Bodies named in Schedule (A) to the Medical Act, and recognised by the College as requiring a Course of Study and an Examination satisfactory to the College, will be exempt from re-examination on the subjects of the Primary Examination.(a) 18. Any Candidate who shall have obtained a Degree in Surgery, at a University in the United Kingdom, after a Course of Study and an Examination satisfactory to the College, will be exempt from re-examination on Surgical Anatomy and the Principles and Practice of Surgery. 19. Any Candidate who shall have passed the Examination on Surgery conducted by the Royal College of Surgeons of England, or the Royal College of Surgeons of Edinburgh, or the Royal College of Surgeons in Ireland, after a Course of Study and an Examination satisfactory to the College, will be exempt from re-examination on Surgical Anatomy, and on the Principles and Practice of Surgery.

The Fee to be paid for admission as a Member of the College shall be 30 guineas.

BYLAWS AND REGULATIONS RELATING TO THE EXAMINATION FOR THE MEMBERSHIP.

Every Candidate for the Membership of the College (except such as shall be admissible under the provisions of Sections 15 and 16 of the Bylaws) will be required to pass the following Examinations:—

The First Examination, on Anatomy and Physiology, will be conducted on successive days, as follows:—On the First day: *Evening*, from Seven to Ten, by written questions. On the Second day: *Evening*, commencing at Seven o'clock, *viva voce*, on Dissections and Preparations.

The Second Examination will be conducted on successive days, as follows:—On the First day: *Evening*, from Seven to Ten, by written questions on Surgical Anatomy, and on the Principles and Practice of Surgery. On the Second day: *Morning*, the Candidate's practical knowledge will be tested, either at the College or in the Surgical Wards of an Hospital. *Afternoon*, from One to Four, on *Materia Medica*, and on *Chemistry in its applications to Pathology, Pharmacy, and Toxicology. This Examination will be conducted partly by written questions and partly in a practical manner. Evening*, commencing at Seven o'clock, by written questions on Midwifery and the Diseases peculiar to Women.

The Third or Pass Examination will be conducted on successive days, as follows:—On the First day: *Afternoon*, from Two to Six, by written questions on Medical Anatomy, and on the Principles of Medicine. On the Second day: *Afternoon*, from Two to Six, by written questions on the Practice of Medicine, including the *Principles of Public Health*, and on Psychological Medicine. On the Third day: The Candidate's practical knowledge will be tested, either at the College or in the Medical Wards of an Hospital. On the Fourth day: *Afternoon*, commencing at Three o'clock, *viva voce*, on Medical Anatomy, and on the Principles and Practice of Medicine.

(The Regulations in italics apply to Candidates who commenced their Professional Education in the United Kingdom on or after October 1, 1865; and to Candidates who commenced their Professional Education at a recognised Foreign or Colonial School on or after October 1, 1866.)

Examinations of Candidates for the Membership of the College will take place during 1869-70, commencing as follows:—*First Examination:* October 5; December 7; February 7; April 4; July 4; October 3; December 5. *Second Examination:* October 12; December 14; February 14; April 11; July 11; October 10; December 12. *Third or Pass Examination:* October 21; January 20; April 21; July 21; October 20.

Candidates will not be admitted to the First Examination until after the termination of the second Winter Session of Professional Study at a recognised Medical School, nor to the Second Examination until after the termination of four years of Professional Study, nor to the Third or Pass Examination until after the completion of the required Course of Professional Study.

Every Candidate must give fourteen days' notice in writing to the Registrar of the College of his intention to present himself for Examination, at the same time transmitting the following Certificates: — *For the Primary Examination.*—Evidence of having passed an Arts Examination; of having been duly registered as a Medical Student; and of having completed the second Winter Session of Professional Study at a recognised Medical School. *For the Second Examination.*—Evidence of having completed four years of Professional Study; of having attained the age of twenty-one years; of Instruction and Proficiency in the Practice of Vaccination; and of having attended not less than twenty labours. *For the Pass Examination.*—Proof of having attained the age of twenty-five years; a Testimonial from a Fellow or Member of the College; evidence of having completed the required course of Professional Study.

(a) *See* Regulations relating to the Examinations.

LICENTIATES.

The College will, under its Charter, grant Licences to practise Physic, including therein the Practice of Medicine, Surgery, and Midwifery (which Licences are not to extend to make the Licentiates Members of the Corporation) to persons who shall conform to the following Bylaws:—

Every Candidate for the College Licence (except when otherwise provided by the Bylaws) is required to produce satisfactory evidence to the following effect:—1. Of having attained the age of twenty-one years. 2. Of moral character. 3. Of having passed, before the commencement of Professional Study, an Examination in the subjects of General Education recognised by the College. 4. Of having been registered as a Medical Student in the manner prescribed by the General Medical Council. 5. Of having been engaged in Professional Studies during four years, of which at least three Winter Sessions and two Summer Sessions shall have been passed at a recognised Medical School or Schools, and one Winter Session and two Summer Sessions in one or other of the following ways:—*a.* Attending the Practice of a Hospital or other Institution recognised by the College for that purpose; *b.* Receiving instruction as the pupil of a legally qualified Practitioner, holding any Public Appointment which affords opportunities, satisfactory to the Examiners, of imparting a practical knowledge of Medicine, Surgery, or Midwifery; *c.* Attending Lectures on any of the required subjects of Professional Study at a recognised place of instruction. (Professional Studies commenced *before* the Candidate shall have passed an Examination in the subjects of General Education will not be recognised by the College.) 6. *Of having attended, during three Winter Sessions and two Summer Sessions, the Medical and Surgical Practice at a recognised Hospital or Hospitals;* and of having been engaged during six months in the Clinical Study of Diseases peculiar to Women. 7. Of having studied the following subjects:—Anatomy (with dissections) during Two Winter Sessions; (b) Physiology during Two Winter Sessions; Chemistry during Six Months; Practical Chemistry during Three Months; Materia Medica during Three Months; Practical Pharmacy during Three Months (by Practical Pharmacy is meant Instruction in the Laboratory of a Registered Medical Practitioner or of a Member of the Pharmaceutical Society of Great Britain, or of a Public Hospital or Dispensary recognised by the College); Botany during Three Months (this Course of Lectures may be attended prior to the commencement of Professional Studies; and any candidate producing satisfactory evidence that Botany formed one of the subjects of his Preliminary Examination will be exempt from attendance on this Course); Morbid Anatomy during Six Months (this includes attendance and instruction in the Post-mortem Room during the period of Clinical Study); Principles and Practice of Medicine during Two Winter Sessions (it is required that the Principles of Public Health should be comprised in this Course of Lectures, or in the Course of Lectures on Forensic Medicine. The attendance on these Lectures must not commence earlier than the second Winter Session at a recognised Medical School); Principles and Practice of Surgery *during Two Winter Sessions* (the attendance on these Lectures must not commence earlier than the second Winter Session at a recognised Medical School); Clinical Medicine *during Two Winter Sessions and Two Summer Sessions*(b) (the attendance on these Lectures must not commence until after the first Winter Session at a recognised Medical School); Clinical Surgery *during Two Winter Sessions and Two Summer Sessions* (the attendance on these Lectures must not commence until after the first Winter Session at a recognised Medical School. By Clinical Medicine and Clinical Surgery are meant special Study and Instruction at the bed-side, with Lectures on Cases); Mid-

(b) The Winter Session comprises a period of six months, and the Summer Session a period of three months.

wifery and the Diseases peculiar to Women during Three Months (Certificates must also be produced of attendance on not less than twenty Labours, and of Instruction and Proficiency in Vaccination); Forensic Medicine during Three Months. 8. Of having passed the Professional Examinations. (The requirements printed in italics apply to Candidates who commenced their Professional Education in the United Kingdom on or after October 1, 1867; and to Candidates who commenced their Professional Education at a recognised Foreign or Colonial School on or after October 1, 1868.)

Any Candidate who shall produce satisfactory evidence of having passed an Examination on Anatomy and Physiology, conducted by any of the Bodies named in Schedule (A) to the Medical Act, and recognised by the College as requiring a course of Study and an Examination satisfactory to the College, shall be exempt from re-examination on the subjects of the Primary Examination.(c) Any Candidate who shall have obtained a Degree in Medicine at a University recognised by the College, after a course of Study and an Examination satisfactory to the College, shall be exempt from re-examination on the subjects of the Primary Examination. Any Candidate who shall have obtained a Degree in Surgery at a University in the United Kingdom, after a course of Study and an Examination satisfactory to the College, shall be exempt from re-examination on Surgical Anatomy, and on the Principles and Practice of Surgery. Any Candidate who shall have passed the Examination on Surgery conducted by the Royal College of Surgeons of England, or the Royal College of Surgeons of Edinburgh, or the Royal College of Surgeons in Ireland, after a course of Study and an Examination satisfactory to the College, shall be exempt from re-examination on Surgical Anatomy, and on the Principles and Practice of Surgery. Any Candidate, being a "Registered Medical Practitioner," whose Qualification or Qualifications shall have been obtained before the 1st day of January, 1861, having been, with the consent of the College, admitted a Candidate for the Licence, will be examined on the Principles and Practice of Medicine, Surgery, and Midwifery; but he will be exempted from such other parts of the Professional Examinations as his Qualifications may seem to the Examiners to render in his case unnecessary.

Licentiates of this College shall not compound or dispense medicines except for patients under their own care.

BYLAWS AND REGULATIONS RELATING TO THE EXAMINATION FOR THE LICENCE.

Every Candidate for the College Licence, before he is admitted to examination, will be required to sign a declaration, stating whether he has or has not been rejected within three months by any of the Examining Boards included in Schedule (A) to the Medical Act.

The First Examination, on Anatomy and Physiology, will be conducted on successive days, as follows:—On the first day: Evening, from 7 to 10, by written questions. On the second day: Evening, commencing at 7 o'clock, *viva voce*, on Dissections and Preparations. The Second, or Pass Examination will be conducted on successive days, as follows:—On the first day: Evening, from 7 to 10, by written questions on Surgical Anatomy, and on the Principles and Practice of Surgery. On the second day: Morning—The Candidate's practical knowledge will be tested, either at the College or in the Surgical wards of an Hospital. Afternoon, from 1 to 4, on Materia Medica, and on Chemistry in its applications to Pathology, Pharmacy, and Toxicology.(d) This examination will be conducted partly by written questions and partly in a practical manner. Evening, commencing at 7 o'clock, by written questions on Midwifery and the Diseases peculiar to Women. On the third day: Evening, from 7 to 10, by written questions on Medical Anatomy, and on the Principles and Practice of Medicine, including the Principles of Public Health. On the fourth day: Morning—The Candidate's practical knowledge will be tested, either at the College or in the Medical wards of an Hospital. Evening, commencing at 7 o'clock, *viva voce*, on the Principles and Practice of Medicine, Surgery, and Midwifery.

Candidates will not be admitted to the First Examination until after the termination of the second Winter Session of Professional Study at a recognised Medical School, nor to the Second or Pass Examination until after the termination of four years of Professional Study.

After October, 1870, the College will not admit to the Pass Examination any Candidate (not exempted from Registration) whose name had not been entered in the Medical Students' Register at least four years previously.

Any Candidate who shall be rejected at the First Examination will not be readmitted to examination until after the lapse of three months, and will be required to produce a Certificate of the performance of Dissections or other Professional Study satisfactory to the Examiners during that time.

Any Candidate who shall be rejected at the Second or Pass Examination will not be readmitted to examination until after the lapse of six months, and will be required to produce a Certificate of Attendance on the Practice of a recognised Hospital during that time, and also of attendance on Clinical Lectures.

Every Candidate intending to present himself for examination is required to give fourteen days' notice in writing to the Registrar of the College, at the same time transmitting the following certificates:—For the First Examination: Evidence of having passed an Arts Examination; of having been duly registered as a Medical Student; and of having completed the second Winter Session of Professional Study at a recognised Medical School. For the Second or Pass Examination: Evidence of having completed four years of Professional Study; of having attained the age of twenty-one years; of Instruction and Proficiency in the Practice of Vaccination; and of having attended not less than twenty labours. A testimonial of moral character is required of every Candidate.

Blank forms of the required Certificates of Attendance on Hospital Practice and on Lectures may be obtained on application at the College.(e)

The Fee for the College Licence is Fifteen Guineas,(f) of which Five Guineas are to be paid on admission to the First Examination, which Fee will not be returned to any Candidate rejected at this examination, but will be allowed in the Fee for the Licence, and he will be admitted to one subsequent First Examination without the payment of an additional Fee.

Any Candidate who shall be rejected at the Second or Pass Examination will have the Fee paid on admission to this examination returned to him, less Three Guineas.

(c) *See* Regulations relating to the Examinations.

(d) Candidates who shall have passed the First Examination for the Licence at this College before October 1, 1867, are exempted from re-examination on Materia Medica and on Chemistry in its application to Pharmacy.

Examinations of Candidates for the College Licence will take place, commencing as follows:—

1869.					
Tuesday	... ...	October 5.	Tuesday	... ...	October 12.
Tuesday	... ...	December 7.	Tuesday	... ...	December 14.
1870.					
Monday	... ...	February 7.	Monday	... ...	February 14.
Monday	... ...	April 4.	Monday	... ...	April 11.
Monday	... ...	July 4.	Monday	... ...	July 11.
Monday	... ...	October 3.	Monday	... ...	October 10.
Monday	... ...	December 5.	Monday	... ...	December 12.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

REGULATIONS RELATING TO THE EDUCATION AND EXAMINATION OF CANDIDATES FOR THE DIPLOMA OF FELLOW.

Preliminary Examination.—Candidates will be required to produce one or other of the following Certificates or Testamurs, viz.:—1. Of Graduation in Arts at a University recognised for this purpose. The following are the Universities at present recognised, viz.:—Oxford, Cambridge, Dublin, London, Durham, Queen's University in Ireland, Edinburgh, Glasgow, Aberdeen, and St. Andrews. Calcutta, Madras, and Bombay. Canada: M'Gill's College, Montreal; and Queen's College, Kingston. A Certificate or Testamur of Graduation in Arts at a foreign University, on the special recommendation of the Court of Examiners, approved by the Council. 2. Of having passed such examinations in Arts as shall from time to time be required for graduation in Medicine by a University recognised for this purpose. The following are the Universities at present recognised, viz.:—Oxford, Cambridge, Dublin, London, and Durham. 3. Candidates who shall not be able to produce one or other of the foregoing certificates will be required to pass an examination in English, Classics, and Mathematics, conducted by the Board of Examiners of the Royal College of Preceptors, under the direction and supervision of the Council of the College.

The following are the subjects of the Examination (No. 3) during the year 1869, viz.: Part I. Compulsory subjects.—1. Reading aloud a passage from some English author. 2. Writing from dictation. 3. English Grammar. 4. Writing a short English composition, such as a description of a place, an account of some useful or natural product, or the like.

(e) Hours of attendance from 11 a.m. to 4 p.m.; Saturdays, 11 a.m. to 2 p.m.

(f) The Fee must be paid three days prior to the day on which the examination commences.

5. Arithmetic. No candidate will be passed who does not show a competent knowledge of the first four rules, simple and compound, of vulgar fractions, and of decimals. 6. Questions on the geography of Europe, and particularly of the British Isles. 7. Questions on the outlines of English History—that is, the succession of the sovereigns and the leading events of each reign. 8. Euclid, Book I. 9. Translation of a passage from the second book of Cæsar's Commentaries "De Bello Gallico." 10. Translation of a passage from the first book of the Anabasis of Xenophon. 11. Translation of a passage from X. B. Saintine's "Picciola." 12. Mathematics. Algebra to Simple Equations inclusive. P.S.—In 1870 Euclid, Books I. and II., or the subjects thereof, will be included in the compulsory subjects. Part II. Optional Subjects.—Papers will also be set on the following four subjects, and each candidate will be required to offer himself for examination on one subject, at his option:—1. Translation of a passage from Schiller's "Wilhelm Tell." Besides these translations into English, the candidate will be required to answer questions on the Grammar of each subject, whether compulsory or selected. 2. Mechanics. The questions will be chiefly of an elementary character. 3. Chemistry. The questions will be on the elementary facts of Chemistry. 4. Botany and Zoology. The questions will be on the classification of Plants and Animals. The quality of the handwriting and spelling will be taken into account. N.B.—Each candidate is required to pay a fee of £2 on the morning of the first day of the examination, prior to his admission thereto. The examination is at present held on or about the third Tuesday or Wednesday in June and December, at the College of Surgeons, Lincoln's-inn-fields. The exact dates of the examinations are duly advertised when fixed in the Medical journals, and candidates are required to send in the prescribed forms of application not less than three weeks before the commencement of each examination.

Note.—*Candidates who have passed an examination recognised as equivalent to the Preliminary Examination for the Diploma of Member, will be required, in order to qualify for the Fellowship, to pass in the subjects numbered* 10, 11, *and* 12 *in Part I., and in one, at their option, of the four subjects included in Part II. of the foregoing examination* (No. 3.)

Professional Education.—1. Except in the cases and instances hereinafter provided for to the contrary, every candidate for admission to the First or Anatomical and Physiological Examination for the Fellowship is required to produce the following certificates, viz.:—1. Of having passed the Preliminary Examination appointed by the Council, or such other examination as the Council may from time to time determine to be equivalent thereto. 2. Of having studied Practical Pharmacy during three months. 3. Of having studied Anatomy and Physiology by attendance on Lectures and Demonstrations, and by Dissections, during three Winter Sessions of not less than six months each, at a recognised School or Schools. 4. Of having attended one Course of Lectures on Comparative Anatomy, one Course of Lectures on Chemistry, and a three months' Course of Practical Chemistry, at a recognised School or Schools.

II. Except in the cases and instances hereinafter provided for to the contrary, every Candidate before his admission to the Second Professional Examination is required to produce the following Certificates, viz.:—1. Of being twenty-five years of age. 2. Of having been engaged for six years in the acquirement of Professional knowledge in Hospitals or Schools of Anatomy, Surgery, and Medicine recognised by the Council of the College for that purpose; or if the Candidate be already a Member of the College, he shall produce Certificates of having been engaged for two years in the acquirement of Professional knowledge in recognised Hospitals and Schools, in addition to the Certificates required for the Diploma of Member. 3. Of having attended Lectures on the Theory and Practice of Surgery, during two Sessions of not less than six months each, at one or more recognised School or Schools. 4. Of having attended one course of Lectures on each of the following subjects, viz.:—Theory and Practice of Medicine, Materia Medica, Midwifery with attendance on cases, and Medical Jurisprudence, at one or more recognised School or Schools. 5. Of having attended a course of Lectures on the Operations of Surgery by a recognised Lecturer. 6. Of having performed operations on the dead body under the superintendence of a recognised Teacher. 7. Of instruction and proficiency in the practice of Vaccination.(a) 8. Of having attended the Surgical Practice with Clinical Lectures on Surgery of a recognised Hospital or Hospitals during four Winter and four Summer Sessions, and the Medical Practice with Clinical Lectures on Medicine of a recognised Hospital or Hospitals during one Winter and one Summer Session. 9. Of having, subsequently to the completion of two years' Professional study, served the office of House Surgeon or Dresser, for not less than six months, in a recognised Hospital in the United Kingdom.

III. In the case of a Candidate who shall have taken by Examination the Degree of Bachelor or Master of Arts in any University in the United Kingdom recognised by the Council for this purpose, it shall be sufficient for him to produce a Certificate or Certificates that he has been engaged for five years (instead of six years) in the acquirement of Professional knowledge in Hospitals or Schools of Anatomy, Surgery, and Medicine recognised by the Council of the College for that purpose.

IV. Any Member of the College shall, after the expiration of eight years from the date of his Diploma, be entitled to be admitted to the Professional Examination for the Fellowship upon the production of a Certificate, signed by three Fellows, that he has been for eight years in the practice of the Profession of Surgery, and that he is a fit and proper person to be admitted a Fellow if upon examination he shall be found qualified.

Professional Examinations.—1. The examinations are held twice in the year, in the months of May and November, and at such other times as the Council may appoint. 2. The Examinations occupy not less than two days, either successive or at such intervals as the Court of Examiners may appoint. 3. The first Examination on Anatomy and Physiology is partly written and partly *viva voce*, on the recently dissected subject and on prepared parts of the Human Body; the second Examination, on Pathology, Therapeutics, and the Principles and Practice of Surgery and Medicine,(b) is partly written, partly *viva voce*, and partly on the practical use of Surgical Apparatus, and includes the examination of Patients, and operations on the dead body. 4. Prior to his admission to the First or Anatomical and Physiological Examination, the Candidate is required to pay—*a*. A fee of five guineas, to be allowed on the fee for the Diploma of Fellow, but to be retained in case of rejection. 5. Prior to his admission to the Second professional Examination, the Candidate is required to pay—*a*. A fee of Five Guineas(c) (if a Member) over and above all charges for stamps, to be retained in case of rejection. *b*. A fee of Twenty-five Guineas(c) (if not a Member) over and above all charges for stamps, of which Five Guineas will be retained in case of rejection. 6. A Candidate whose qualifications shall be found insufficient on his Anatomical and Physiological Examination shall be referred, and shall not be allowed to present himself for re-examination until after the expiration of six months from the date of his reference. 7. A Candidate whose qualifications shall be found insufficient upon his Pathological and Surgical Examination shall be referred, and shall not be allowed to present himself for re-examination until after the expiration of one year from the date of his reference, unless the Court of Examiners shall otherwise determine.

REGULATIONS RESPECTING THE EDUCATION AND EXAMINATION OF CANDIDATES FOR THE DIPLOMA OF MEMBER OF THIS COLLEGE.

I. *Preliminary General Education and Examination.*—Candidates who commenced their Professional Education on or after January 1, 1861, will be required to produce one or other of the following Certificates:—1. Of Graduation in Arts at a University recognised for this purpose. The following are the Universities at present recognised, viz.:—Oxford, Cambridge,

(a) In the case of Candidates who commenced their Professional Education on or after the 1st of October, 1868, the Certificate of Instruction in Vaccination will only be received from recognised Vaccine Stations, or from recognised Vaccine Departments in Medical Schools or Hospitals, or other Public Institutions, where the appointed Teacher of Vaccination is not liable to frequent change, and where ample means for study are provided by not less than such a number of cases (eight or ten on an average weekly) as may be found, after due inquiry, to be sufficient for this purpose at each place.

(b) Candidates can claim exemption from examination in Medicine under the following conditions, viz.:—1. The production by the Candidate of a Degree, Diploma, or Licence in Medicine entitling him to register under the Medical Act of 1858, or a Degree, Diploma, or Licence in Medicine of a Colonial or Foreign University approved by the Council of the College. 2. A declaration by the Candidate, prior to his admission to the Final Examination for the Fellowship, that it is his intention to obtain either of the Medical Qualifications mentioned in the foregoing paragraph, in which case the Diploma of the College will not be issued to him until he shall produce either the said Medical Qualification or proof of having passed the several examinations entitling him to receive the same.—N.B. A Candidate who has passed an examination in Medicine for the Membership will not be required to pass any further examination in Medicine for the Fellowship.

(c) The sum of £2 paid on the Preliminary Examination will be allowed against these amounts.

Dublin, London, Durham, Queen's University in Ireland, Edinburgh, Glasgow, Aberdeen, and St. Andrews; Calcutta, Madras, and Bombay. Canada—McGill College, Montreal; and Queen's College, Kingston. 2. Of having passed an Examination for Matriculation, or such other examination as shall, in either case, from time to time be sanctioned by the Council of this College, at a University in the United Kingdom, or at a Colonial or Foreign University recognised by the Council of this College. The following are the Examinations at present recognised under this Clause (No. 2) viz.:—Oxford.—Responsions or Moderations; Middle-Class Examinations, Senior, the Certificates to include Latin.(d) Cambridge.—Previous Examination; Middle-Class Examinations, Senior, the Certificates to include Latin(d). Dublin.—Entrance Examination. London.—Matriculation Examination. Durham.—Examination of Students in Arts in their second and first years; Middle-Class Examinations, Senior, the Certificates to include Latin; (d) Registration Examination for Medical Students. Queen's University in Ireland.—Two years' Arts Course for Diploma of Licentiate in Arts; Preliminary Examinations at end of B.A. Course; Middle-Class Examinations, the Certificates to include Latin.(d) Matriculation Examinations. Edinburgh, Aberdeen, Glasgow, and St. Andrews.—Preliminary or Extra-Professional Examinations for Graduation in Medicine. Calcutta, Madras, and Bombay.—Matriculation Examinations. Canada—McGill College, Montreal; Matriculation Examination. Queen's College, Kingston.—Matriculation Examination, Preliminary Examination of Students in Medicine. University College, Toronto, Victoria College, Toronto.—Matriculation Examinations. University of Melbourne.—Matriculation Examination, with a Certificate that the Student has passed an Examination in Latin. New York, Bellevue Hospital Medical College.—Matriculation Examination. 3. Of having passed the Preliminary Examination for the Fellowship of this College. 4. Of having passed the Preliminary Examinations of the Royal Colleges of Surgeons in Ireland and of Edinburgh, or of the Faculty of Physicians and Surgeons of Glasgow. 5. Of having passed the Examination in Arts of the Society of Apothecaries of London, or of the Apothecaries' Hall of Ireland. 6. Of having passed the First-Class Examination of the Royal College of Preceptors. 7. Testamur of the Codrington College, Barbadoes. 8. Degree of Associate of Arts granted by the Tasmanian Council of Education, with a Certificate that the Student has been examined in Latin and Mathematics. 9. Candidates who shall not be able to produce one or other of the foregoing Certificates will be required to pass an Examination in English, Classics, and Mathematics, conducted by the Board of Examiners of the Royal College of Preceptors, under the direction and supervision of this College.

The following are the subjects of the Examination (No. 9) during the year 1869, viz.: Part I.—Compulsory Subjects.—1. Reading aloud a passage from some English author. 2. Writing from dictation. 3. English Grammar. 4. Writing a short English composition, such as a description of a place, an account of some useful or natural product, or the like. 5. Arithmetic. No Candidate will be passed who does not show a competent knowledge of the first four rules, simple and compound, of Vulgar Fractions, and of Decimals. 6. Questions on the Geography of Europe, and particularly of the British Isles. 7. Questions on the outlines of English History—that is, the succession of the Sovereigns, and the leading events of each reign. 8. Euclid, Book I. 9. Translation of a passage from the second book of Cæsar's Commentaries "De Bello Gallico." Part II.—Optional Subjects:—Papers will also be set on the following seven subjects; and each Candidate will be required to offer himself for examination on one subject at least, at his option; but no Candidate will be allowed to offer himself for examination on more than four subjects:—1. Translation of a passage from the First Book of the Anabasis of Xenophon. 2. Translation of a passage from X. B. Saintine's "Picciola." 3. Translation of a passage from Schiller's "Wilhelm Tell." Besides these Translations into English, the Candidate will be required to answer questions on the Grammar of each subject, whether compulsory or optional. 4. Mathematics, Algebra to Simple Equations inclusive. 5. Mechanics; The questions will be chiefly of an elementary character. 6. Chemistry; the questions will be on the elementary facts of Chemistry. 7. Botany and Zoology; the questions will be on the classification of Plants and Animals. The quality of the handwriting and the spelling will be taken into account.

(d) On or after January 1, 1870, the Certificates of having passed the Middle-Class Examinations must include Mathematics as well as Latin.

N.B.—Each Candidate is required to pay a fee of £2 on the morning of the first day of the Examination prior to his admission thereto. The Examination is at present held on or about the third Tuesday or Wednesday in June and December, at the College of Surgeons, Lincoln's-inn-fields. The exact dates of the examinations are duly advertised when fixed in the Medical journals; and Candidates are required to send in the prescribed forms of application not less than three weeks before the commencement of each examination.

Note.—A Candidate, in order to qualify for the Fellowship, is required to pass in the subjects numbered 1, 2, and 4, and in one, at his option, of the subjects numbered 3, 5, 6, and 7, Part II., in addition to the compulsory subjects contained in Part II.

Notice.—In the year 1870, *Algebra to Simple Equations inclusive, and Euclid, Books I. and II., or the subjects thereof, will be included in the compulsory subjects in Part I. The subjects in* 1870 *will in other respects be the same as for the present year.*

II. *Professional Education.*—1. Professional Studies prior to the date at which the Candidate shall have passed an Examination in General Knowledge in conformity with the Regulation in the preceding Section, are not recognised.(e)

2. The following will be considered as the commencement of Professional Education:—1. Attendance on the Practice of a Hospital, or other Public Institution recognised by this College for that purpose. 2. Instruction as the Pupil of a legally qualified Surgeon, *holding the appointment of Surgeon to a Hospital, General Dispensary, or Union Workhouse, or where such opportunities of practical instruction are afforded as shall be satisfactory to the Council.* 3. Attendance on Lectures on Anatomy, Physiology, or Chemistry, by Lecturers recognised by this College. *The commencement of Professional study, otherwise than by attendance on Lectures in recognised Medical Schools, or by attendance on the Practice of recognised Hospitals, will not be admitted until a Certificate thereof shall be furnished to the Secretary for registration at the College, by the Practitioner whose Pupil the Candidate shall have become, or by the Medical Superintendent of the Hospital or other Institution to the practice of which he shall have entered, and will, consequently, date only from the reception of such Certificate by the Secretary; the Certificate to be accompanied by proof of having passed the necessary Preliminary Examination in General Knowledge.*

3. Candidates will be required to produce the following other Certificates, viz.:—1. Of being twenty-one years of age. 2. Of having been engaged during four years in the acquirement of Professional knowledge. 3. Of having studied Practical Pharmacy during three months. 4. Of having attended Lectures on Anatomy, delivered not less frequently than four times in each week, during two Winter Sessions. 5. Of having performed Dissections during not less than two Winter Sessions. 6. Of having attended Lectures on Physiology delivered not less frequently than twice in each week, during two Winter Sessions. 7. Of having attended Lectures on Surgery during two Winter Sessions, *of which one Course must not be earlier than the third Winter Session at a recognised Medical School.* 8. Of having attended one Course of Lectures on each of the following subjects—viz., Chemistry, Materia Medica, Medicine, and Midwifery. 9. Of Instruction and Proficiency in the practice of Vaccination.(f) 10. Of having attended, at a recognised Hospital or Hospitals in the United Kingdom or Colonies, the Practice of Surgery, during three Winter(g) and two Summer Sessions; (h) and of having, subsequently to the first Winter Session of the foregoing attendance, attended, at a recognised Hospital or Hospitals, Clinical Lectures on Surgery, during two Winter and two Summer Sessions. 11. Of having attended, at a recognised Hospital or Hospitals in the United Kingdom or Colonies, the Practice of Medicine, and Clinical Lectures on Medicine, during one Winter and one Summer Session. 12. *Of having, subsequently to the completion of two years' Professional Education, taken charge of Patients under the superintendence of a Surgeon during not less than six*

(e) This Regulation applies to Candidates who commenced their Professional Education on or after October 1, 1862.

(f) In the case of Candidates who commenced their Professional Education on or after October 1, 1868, the Certificate of Instruction in Vaccination will only be received from recognised Vaccine Stations, or from recognised Vaccine Departments in Medical Schools or Hospitals, or other Public Institutions, where the appointed Teacher of Vaccination is not liable to frequent change, and where ample means for study are provided by not less than such a number of cases (eight or ten on an average weekly) as may be found, after due inquiry, to be sufficient for this purpose at each place.

(g) The Winter Session comprises a period of six months, and, in England, commences on October 1, and terminates on March 31.

(h) The Summer Session comprises a period of three months, and, in England, commences on May 1, and terminates on July 31.

months, at a Hospital, General Dispensary, or Parochial or Union Infirmary recognised for this purpose, or in such other similar manner as, in the opinion of the Council, shall afford sufficient opportunity for the acquirement of Practical Surgery. N.B.—Blank Forms of the required Certificates may be obtained on application to the Secretary, and all necessary Certificates will be retained at the College.

III.—1. Certificates will not be received on more than one branch of Science from one and the same Lecturer; but Anatomy and Dissections will be considered as one branch of Science.

2. Certificates will not be recognised from any Hospital in the United Kingdom unless the Surgeons thereto be members of one of the legally constituted Colleges of Surgeons in the United Kingdom; nor from any School of Anatomy and Physiology or Midwifery, unless the Teachers in such School be members of some legally constituted College of Physicians or Surgeons in the United Kingdom; nor from any School of Surgery, unless the Teachers in such School be members of one of the legally constituted Colleges of Surgeons in the United Kingdom.

3. No Metropolitan Hospital will be recognised by this College which contains less than 150, and no Provincial or Colonial Hospital which contains less than 100 Patients.

4. The recognition of Colonial Hospitals and Schools is governed by the same regulations with respect to number of Patients and to Courses of Lectures, as apply to the recognition of Provincial Hospitals and Schools in England.

5. Certificates of Attendance upon the Practice of a recognised Provincial or Colonial Hospital unconnected with, or not in convenient proximity to, a recognised Medical School, will not be received for more than one Winter and one Summer Session of the Hospital Attendance required by the Regulations of this College; and in such cases Clinical Lectures will not be necessary, *but a Certificate of having acted as Dresser for the period of at least six months will be required.*

6. Certificates will not be received from Candidates who have studied in London, unless they shall have registered at the College their cards of admission to attendance on Lectures and Hospital Practice within fifteen days from the commencement of the Session; nor from Candidates who have studied in the Provincial Schools of England, unless their names shall be duly returned from their respective Schools.

N.B.—At the Registration in October, Candidates who shall have commenced their Professional Education subsequently to the 1st of October, 1862, will be required to produce a Certificate of having passed one or other of the Preliminary Examinations in General Knowledge recognised by this College.

NOTE.—*The Regulations in italics in Sections 2 and 3 apply to Candidates in the United Kingdom who commenced their Professional education on or after the 1st of October*, 1863; *and to Candidates who commenced their Professional education in the Colonies on or after the 1st of October*, 1864.

7. Those Candidates who shall have pursued the whole of their studies in Scotland or Ireland will be admitted to examination upon the production of the several Certificates required respectively by the College of Surgeons of Edinburgh, the Faculty of Physicians and Surgeons of Glasgow, and the College of Surgeons in Ireland from Candidates for their Diploma, together with a Certificate of instruction and proficiency in the practice of Vaccination, and satisfactory evidence of having been occupied, subsequently to the date of passing the Preliminary Examination, at least four entire years in the acquirement of Professional knowledge; and in the case of Candidates who shall have pursued the whole of their studies at recognised Foreign or Colonial Universities, upon the production of the several Certificates required for their Degree by the Authorities of such Universities, together with a Certificate of instruction and proficiency in the practice of Vaccination, and satisfactory evidence of having been occupied, subsequently to the date of passing the Preliminary Examination, at least four entire years in the acquirement of Professional knowledge.

8. Members or Licentiates of any legally constituted College of Surgeons in the United Kingdom, and Graduates in Surgery of any University recognised for this purpose by this College, will be admitted to examination on producing their Diploma, Licence, or Degree, together with proof of being twenty-one years of age, a Certificate of instruction and proficiency in the practice of Vaccination, and satisfactory evidence of having been occupied, subsequently to the date of passing the Preliminary Examination, at least four entire years in the acquirement of Professional knowledge.

9. Graduates in Medicine of any legally constituted College or University recognised for this purpose by this College, will be admitted to examination on adducing, together with their Diploma or Degree, proof of being twenty-one years of age, a Certificate of instruction and proficiency in the practice of Vaccination, and satisfactory evidence of having been occupied, subsequently to the date of passing the Preliminary Examination, at least four entire years in the acquirement of Professional knowledge.

IV. *Professional Examination.*—This Examination is divided into two parts. 1. The First or Primary Examination, on Anatomy and Physiology, is partly written and partly demonstrative on the recently dissected subject, and on prepared parts of the human body. 2. The Second or Pass Examination, on Surgical Anatomy and the Principles and Practice of Surgery and Medicine,(i) is partly written, partly oral, and partly on the practical use of Surgical Apparatus. 3. The Primary Examinations are held in the months of January, April, May, July, and November, and the Pass Examinations generally in the ensuing week respectively. 4. Candidates will not be admitted to the Primary Examination until after the termination of the Second Winter Session of their attendance at a recognised School or Schools; nor to the Pass, or Surgical Examination, until after the termination of the fourth year of their Professional Education. 5. The fee of £5 5s., paid prior to the Primary Examination, and allowed on the whole fee of £22 (k) payable for the Diploma, is retained; and after any two consecutive failures at the Primary Examination, the Candidate is required to pay an *additional* fee of £5 5s. prior to being again admitted to that Examination, which *additional* fee is also retained. 6. £5 5s., part of the sum of £16 15s., the balance of the whole fee due for the Diploma and paid prior to the Pass Examination, is retained; and after any two consecutive failures at the Pass Examination, the Candidate is required to pay an *additional* fee of £5 5s. prior to being again admitted to the said Pass Examination, which *additional* fee is also retained. 7. A Candidate having entered his name for either the Primary or Pass Examination, who shall fail to attend the meeting of the Court for which he shall have received a card, will not be allowed to present himself for Examination within the period of three months from the date at which he shall have so failed to attend. 8. A Candidate referred on the Primary Examination is required, prior to his admission to re-examination, to produce a Certificate of the performance of dissections during not less than three months subsequently to the date of his reference. 9. A Candidate referred on the Pass Examination is required, prior to his admission to re-examination, to produce a Certificate of at least six months' further attendance on the Surgical Practice of a recognised Hospital, together with Lectures on Clinical Surgery, subsequently to the date of his reference.

QUALIFICATION IN MIDWIFERY.

REGULATIONS RESPECTING THE PROFESSIONAL EDUCATION OF CANDIDATES FOR THIS CERTIFICATE.

1. Persons who were Fellows or Members of the College prior to the 1st day of January, 1853, will be admitted to Examination for the Certificate of Qualification in Midwifery upon producing their Diploma.

2. Persons having become Members of the College subsequently to the 1st of January, 1853, will be admitted to Examination on producing their Diploma, together with a Certificate or Certificates of having attended twenty labours.

3. Members or Licentiates of any legally constituted College of Surgeons in the United Kingdom, and Graduates in Surgery of any University recognised for this purpose by this College, will also be admitted to Examination on producing, together with their Diploma, Licence, or Degree, proof of being twenty-one years of age—of having been occupied at least four entire years in the acquirement of Professional knowledge—of having attended one Course of Lectures on Midwifery—and of having attended not less than twenty labours.

4. Graduates in Medicine of any legally constituted College or University recognised for this purpose by this College, will also be admitted to Examination on producing, together with their Diploma or Degree, proof of being twenty-one years of age—of having been occupied at least four entire years in the acquirement of Professional knowledge—of having completed, at recognised Schools, the Anatomical and Surgical education required of Candidates for the Diploma of Member of the College—of having attended one Course of Lectures on Midwifery—and of having attended not less than twenty labours.

5. Persons having commenced their Professional education, either by attendance on Hospital Practice, or on Lectures on Anatomy, prior to the

(i) Candidates can claim exemption from Examination in Medicine under the following conditions, viz.:—1. The production by the Candidate of a Degree, Diploma, or Licence in Medicine entitling him to register under the Medical Act of 1858, or a Degree, Diploma, or Licence in Medicine of a Colonial or Foreign University approved by the Council of the College. 2. A declaration by the Candidate, prior to his admission to the Final Examination for Membership or Fellowship, that it is his intention to obtain either of the Medical Qualifications mentioned in the foregoing paragraph, in which case the Diploma of the College will not be issued to him until he shall produce either the said Medical Qualification or proof of having passed the several Examinations entitling him to receive the same.

(k) This sum of £22 is exclusive of the fee of £2 paid for the Preliminary Examination.

1st of January, 1853, will be admitted to Examination on producing the several Certificates of Professional education required for admission to Examination for the Diploma of Member of this College at the period when such persons shall respectively have, in such manner, commenced their Professional education.

6. Persons having commenced their Professional education, either by attendance on Hospital Practice or on lectures on Anatomy, after the 31st day of December, 1852, will be admitted to Examination on producing certificates of being 21 years of age, of having been engaged during at least four entire years in the acquirement of Professional knowledge, of having completed at recognised Schools the Professional education required of Candidates for the Diploma of Member of this College, of having attended one Course of Lectures on Midwifery and the Diseases of Women and Children, and of having personally conducted thirty labours.

Note.—All Candidates who shall commence their Professional education on or after October 1, 1866, will, in addition to the Certificates enumerated in the foregoing clauses, be required to produce a Certificate of having, prior to such commencement, passed a Preliminary Examination in General Knowledge recognised by this College.

N.B.—The fee for the Certificate is as follows; viz.:—1. Persons who were Fellows or Members of this College prior to January 1, 1853, Two Guineas. 2. Persons admitted Fellows or Members of this College subsequently to January 1, 1853, Three Guineas. 3, 4. Persons producing any other Diploma or Certificate of Degree which may be considered by the Council to afford satisfactory proof of sufficient Surgical and Medical education, Three Guineas. 5, 6. All other persons, Ten Guineas.

The Examinations are held in the months of February, May, August, and December.

Regulations respecting the Professional Education of Candidates for the Examination in Dental Surgery.

Candidates are required to produce the following certificates:—

1. Of being twenty-one years of age.

2. Of having been engaged during four years in the acquirement of Professional knowledge.

3. Of having attended, at a School or Schools recognised by this College, not less than one of each of the following Courses of Lectures, delivered by Lecturers recognised by this College, viz.:—Anatomy, Physiology, Surgery, Medicine, Chemistry, and Materia Medica.

4. Of having attended a second Winter Course of Lectures on Anatomy, or a Course of not less than twenty Lectures on the Anatomy of the Head and Neck, delivered by Lecturers recognised by this College.

5. Of having performed Dissections at a recognised School during not less than nine months.

6. Of having completed a course of Chemical Manipulation, under the superintendence of a Teacher or Lecturer recognised by this College.

7. Of having attended, at a recognised Hospital or Hospitals in the United Kingdom, the Practice of Surgery and Clinical Lectures on Surgery during two Winter Sessions.

8. Of having attended, at a recognised School, two Courses of Lectures upon each of the following subjects, viz.:—Dental Anatomy and Physiology (Human and Comparative), Dental Surgery, Dental Mechanics, and one Course of Lectures on Metallurgy, by Lecturers recognised by this College.

9. Of having been engaged during a period of not less than three years in acquiring a practical familiarity with the details of Mechanical Dentistry, under the instruction of a competent Practitioner.

10. Of having attended at a recognised Dental Hospital, or in the Dental department of a recognised General Hospital, the Practice of Dental Surgery during two Winter and two Summer Sessions.

N.B. The Students of the London Schools are required to register the above Certificates at this College, and special returns will be required from the Provincial Schools.

The fee for the Certificate of fitness to practise as a Dentist is Ten Guineas, over and above any stamp duty.

Members of the College will be examined only by the section of the Board consisting of persons skilled in Dental Surgery.

A Candidate whose qualification shall be found insufficient will be referred back to his studies, and will not be admitted to re-examination within the period of six months unless the Board shall otherwise determine.

SOCIETY OF APOTHECARIES (ENGLAND).

Every candidate for a certificate of qualification to practise as an Apothecary will be required to produce testimonials—1. Of having passed a preliminary examination in Arts, as a test of general education. (This examination must be passed before the commencement of Professional studies, which is defined by the Medical Council to be "the time of commencing studies at a Medical school.") 2. Of having served an apprenticeship or pupilage of not less than five years to a Practitioner qualified by the Act of 1815. (This period may include the time spent in attending Lectures and Hospital Practice.) 3. Of having attained the full age of twenty-one years, of which satisfactory evidence will be required. 4. Of good moral conduct. 5. Of having pursued a course of Medical study in conformity with the regulations of the Court.

Course of Study.—Every Candidate whose attendance on Lectures shall have commenced on or after October 1, 1863, must attend the following Lectures and Medical Practice during not less than three Winter and two Summer Sessions (each Winter Session to consist of not less than six months, and to commence not sooner than the 1st nor later than the 15th of October; and each Summer Session to extend from May 1 to July 31):—

First Year.—Winter Session: Chemistry; Anatomy and Physiology; Dissections. Summer Session: Botany; Materia Medica and Therapeutics; Practical Chemistry.

Second Year.—Winter Session: Anatomy and Physiology, including Dissections and Demonstrations; Principles and Practice of Medicine; Clinical Medical Practice. Summer Session: Midwifery and Diseases of Women and Children, and Vaccination; Forensic Medicine and Toxicology; Clinical Medical Practice.

Third Year.—Winter Session: Principles and Practice of Medicine; Clinical Medical Lectures; Morbid Anatomy; Clinical Medical Practice.

No certificates of Lectures or of Anatomical Instruction delivered in private to particular Students, apart from the ordinary classes of recognised Public Medical Schools, can be received by the Court of Examiners.

All Students are required *personally* to register the several tickets of admission to Lectures and Medical Practice within the first fifteen days of the months of October and May.

Examination in Arts.—An examination(a) in Arts will take place three times in the year—on the last Friday and Saturday of the months of January, April, and September. By order of the Medical Council, an examination in Arts is compulsory on all gentlemen commencing their studies on or after October 1, 1861, and must be passed previous to registration. Testimonials of proficiency in general education will be received, as exempting from the examination in Arts, at this Hall from the National, Colonial, and Foreign Educational Bodies recognised by the General Council, and also from any of the Licensing Bodies under the Medical Act of 1858.

Professional Examinations.—The Court of Examiners meet in the Hall every Thursday, where candidates are required to attend at 3.45 p.m. Every person intending to offer himself for examination must give notice in writing to the Clerk of the Society on or before the Monday previous to the day of examination, and must at the same time deposit all the required testimonials and the fee at the office of the beadle, where attendance is given every day, except Sunday, from 10 to 4 o'clock; Saturday, 10 to 2.

The examination of candidates is divided into two parts, and is conducted partly in writing and partly *viva voce*.

The First Examination, which may be passed after the second winter session, embraces the following subjects:—The British Pharmacopœia, Latin of Physicians' prescriptions; Anatomy and Physiology; General and Practical Chemistry; Botany, and Materia Medica.

Second or Pass Examination, after the third winter session (the five years' pupilage being completed):—Principles and Practice of Medicine; Pathology and Therapeutics; Midwifery, including the Diseases of Women and Children; Forensic Medicine and Toxicology.

All graduates in Medicine of British Universities will be admitted to a practical examination in Medicine and Midwifery only.

Licentiates of the Royal College of Physicians, London; of the Royal College of Physicians, Edinburgh; of the Royal Colleges of Physicians and Surgeons, Edinburgh; of the King and Queen's College of Physicians, Ireland; of the Faculty of Physicians and Surgeons, Glasgow; and of the Apothecaries' Hall of Dublin, will be admitted to a *viva voce* examination in Medicine, Midwifery, Forensic Medicine, and Toxicology.

Members of the Royal College of Surgeons, England; Licentiates of the Royal College of Surgeons, Edinburgh; and Licentiates of the Royal College of Surgeons, Ireland, possessing a Surgical qualification only, will be admitted to a first and second examination on one evening. The first or *viva voce* examination will include the subjects of Physicians' Prescriptions, Visceral Anatomy, Physiology, Chemistry, Materia Medica, Botany, and Pharmacy; the second, which is partly written and partly *viva voce*, will include the subjects of Practice of Medicine, Pathology, Therapeutics, Midwifery, Forensic Medicine, and Toxicological Chemistry.

Any candidate who has passed his first examination for the licence of the Royal College of Physicians, London; the licence of the King and Queen's College of Physicians, Ireland; the

(a) *Syllabus of Subjects for Examination*, 1870.—English: The leading features of its history, its structure and grammar; English composition. Latin: January examination—Cæsar, De Bell. Gall., Books i. and ii. April examination—Cicero, De Senectute. September examination—Virgil, Æneid, Books i. and ii. Retranslation of easy sentences; grammatical questions will be introduced into the Latin paper, and each Candidate will be expected to give satisfactory answers to these. Mathematics: The ordinary rules of Arithmetic; Vulgar and Decimal Fractions; Addition, Subtraction, Multiplication, and division of Algebraical Quantities; Simple Equations; the first two books of Euclid. Greek: Xenophon, Anabasis, Books i. and ii.; Grammatical Questions. French: Paul and Virginia; translation from English into French; Grammatical Questions. German: Schiller's Wilhelm Tell; translation of short sentences from English into German; Grammatical Questions. Natural Philosophy: Mechanics; Hydrostatics and Pneumatics. (The book recommended for study in this subject is Snowball's "Cambridge Course of Elementary Natural Philosophy.")

joint licence of the Royal Colleges of Physicians and Surgeons, Edinburgh, or for the single licence of the College of Physicians, Edinburgh; the licence of the Faculty of Physicians and Surgeons, Glasgow; the first Professional Examination for the degree of M.B., or Master in Surgery, in the Universities of Oxford, Cambridge, or London; or the second part of the Professional examination for the degree of M.B., or Master in Surgery, in the Universities of Edinburgh, Aberdeen, St. Andrews, and Glasgow; or the first examination for the Medical and Surgical degrees in the Irish Universities; or the first examination for the licence of the Apothecaries' Company, Dublin, will be admitted to a single examination in Materia Medica, Therapeutics, Medicine, Pathology, Midwifery, and Toxicology, part of which examination will be conducted in writing.

The examination of candidates for certificates of qualification to act as Assistant, in compounding and dispensing medicines, is as follows:—In translating Physicians' prescriptions, in the British Pharmacopœia, in Pharmacy, Pharmaceutical Chemistry, and Materia Medica.

By the 22nd section of the Act of Parliament, no rejected candidate for the licence can be re-examined until the expiration of six months from his former examination. A candidate rejected on his first Professional Examination can be admitted to re-examination after the expiration of three months.

Fees.—For a certificate of qualification to practise, six guineas, the half to be paid at the first examination; for an assistant's certificate, two guineas.

Students' Prizes.—The Society of Apothecaries annually offer two prizes for proficiency in the knowledge of Botany, and also two prizes for proficiency in the knowledge of Materia Medica and Pharmaceutical Chemistry. The prizes consist of a gold medal awarded to the candidate who distinguishes himself the most in the examination; and of a silver medal and a book to the candidate who does so in the next degree.

The examination in Botany will be held at the Hall of the Society on the second Wednesday in June at ten A.M., and will be conducted by printed papers and *viva voce* questions.

Each gentleman intending to compete for the prizes must send a written notice of his intention to the beadle on or before the 1st of June, which notice must be accompanied by evidence of his being in attendance on the second summer session of his Medical studies, and by a certificate of his having attended the lectures and class examinations with diligence and regularity.

The examinations in Materia Medica and Pharmaceutical Chemistry will be held at the Hall of the Society on the third Wednesday, and on the following Friday, in October, from ten in the forenoon to one in the afternoon of each day; by printed papers on the Wednesday, and by *viva voce* questions on the Friday.

Each gentleman intending to compete for these prizes must send a written notice of his intention to the beadle on or before the 7th of October, which notice must be accompanied by evidence of his being in attendance on the third winter session of his Medical studies, and by a certificate of his having attended the lectures and class examinations with diligence and regularity.

The Society's Botanic Garden at Chelsea is open daily (except Sunday) from ten till five o'clock P.M., and on Saturdays, from ten till two o'clock. Tickets of admission may be had on application at the Beadle's Office, Apothecaries' Hall, Blackfriars, E.C.

ARMY MEDICAL DEPARTMENT,

WHITEHALL-YARD.

QUALIFICATIONS AND EXAMINATION OF CANDIDATES FOR COMMISSIONS IN THE ARMY MEDICAL SERVICE.

1. Every Candidate desirous of presenting himself for admission to the Army Medical Service must be unmarried, and not under 21 nor over 28 years of age. He must produce a certificate from the District Registrar, in which the date of birth is stated; or, if this cannot be obtained, an affidavit from one of the parents or other near relative, who can attest the date of birth, will be accepted. He must also produce a certificate of moral character from the parochial minister, if possible.

2. The Candidate must make a declaration that he labours under no mental or constitutional disease, nor any imperfection or disability that can interfere with the most efficient discharge of the duties of a Medical officer in any climate.(a) He must also attest his readiness to engage for general service, and to proceed on foreign service when required to do so.

3. The Candidate must be registered under the Medical Act of 1858 as licensed to practise Medicine and Surgery in Great Britain or Ireland.

4. Certificates of registration, character, and age must accompany this Schedule when filled up and returned.

5. Candidates will be examined by the Examining Board in the following subjects:—Anatomy and Physiology. Surgery. Medicine, including Therapeutics, the Diseases of Women and Children, Chemistry and Pharmacy, and a practical knowledge of drugs. (The examination in Medicine and Surgery will be in part practical, and will include operations on the dead body, the application of Surgical apparatus, and the examination of Medical and Surgical patients at the bedside.) The eligibility of each candidate for the Army Medical Service will be determined by the result of the examinations in these subjects only. Candidates who desire it will be examined in Comparative Anatomy, Zoology, Natural Philosophy, Physical Geography, and Botany with special reference to Materia Medica; and the number of marks gained in these subjects will be added to the total number of marks obtained in the obligatory part of the examination by candidates who shall have been found qualified for admission, and whose position on the list of successful competitors will thus be improved in proportion to their knowledge of these branches of science.

6. After passing this examination, every candidate will be required to attend one entire course of practical instruction at the Army Medical School on—(1) Hygiene; (2) Clinical and Military Medicine; (3) Clinical and Military Surgery; (4) Pathology of Diseases and Injuries incident to Military Service.

7. At its conclusion, the Candidate will be required to pass an examination on the subjects taught in the School. If he give satisfactory evidence of being qualified for the practical duties of an Army Medical Officer, he will be eligible for a Commission as Assistant-Surgeon.

8. During the period of his residence at the Army Medical School each Candidate will receive an allowance of 5s. per diem with quarters, or 7s. per diem without quarters, to cover all costs of maintenance; and he will be required to provide himself with uniform (viz., the Regulation undress uniform of an Assistant-Surgeon, but without the sword).

9. All Candidates will be required to conform to such rules of discipline as the Senate may from time to time enact.

EXTRACTS FROM THE ROYAL WARRANT (April 1, 1867) FOR THE PAY AND NON-EFFECTIVE PAY OF MEDICAL OFFICERS.

The daily rates of pay of the Officers of the Medical Branch of the Hospital Department of our Army shall be as follows:—

Medical Staff.—Daily Pay: Director-General, special; Inspector-General, £2, after twenty-five years' service £2 5s., after thirty years' service £2 7s., after thirty-five years' service £2 10s.; Deputy Inspector-General £1 10s., after twenty-five years' service £1 12s., after thirty years' service £1 15s., after thirty-five years' service £1 17s.; Surgeon-Major £1 4s., after twenty-five years' service £1 7s.; Surgeon 17s. 6d., after fifteen years' service 20s.; Assistant-Surgeon, on appointment, 10s., after five years' service 12s. 6d., after ten years' service 15s., after fifteen years' service 17s. 6d. Charge Pay: The Officer in Medical charge of an army in the field, of 10,000 men and upwards, £1 daily; of 5000 men and upwards, 15s. daily; of less than 5000, 10s. daily. Or, in Medical charge of a colony where the number of commissioned officers and enlisted men is 1500 and upwards, 5s. daily.

Apothecaries' Daily Pay.—Apothecaries 9s., after 5 years' service 10s. 6d., 10 years' 12s., 15 years' 13s. 6d., 20 years' 15s., 25 years' 16s. 6d., 30 years' 18s.

Assistant-Surgeons shall, as a general rule, be promoted to the rank of Surgeon in the order of their seniority in the service, unless unfit for the discharge of their duties from physical or Professional incompetence or misconduct. In cases of distinguished service, however, an Assistant-Surgeon may be promoted without reference to seniority; and in such cases, the recommendation detailing the services for which the officer is proposed for promotion shall be published in the General

(a) His physical fitness will be determined by a Board of Medical Officers, who are required to certify that the candidate's vision is sufficiently good to enable him to perform any Surgical operation without the aid of glasses. A moderate degree of myopia would not be considered a disqualification, provided it did not necessitate the use of glasses during the performance of operations, and that no organic disease of the eyes existed. Every candidate must also be free from organic disease of other organs, and from constitutional weakness or other disability likely to unfit him for military service in any climate.

Orders of the Army, and in the *Gazette* in which such promotion shall appear.

A Surgeon, after twenty years' service in any rank, shall be styled Surgeon-Major, but a Surgeon of less than twenty years' full-pay service may be promoted to the rank of Surgeon-Major for distinguished service. The recommendation detailing the services for which the officer is proposed for promotion for distinguished service shall be published in the General Orders of the Army, and in the *Gazette* in which such promotion shall appear.

A Surgeon must have served ten years in our army, with a commission on full pay, of which period two years must have been passed, with the rank of Surgeon, in or with a regiment or depot battalion, before he can be promoted to the rank of Deputy Inspector-General of Hospitals.

All promotion from the rank of Surgeon or Surgeon-Major to that of Deputy-Inspector, and from the rank of Deputy-Inspector to that of Inspector, shall be given by selection for ability and merit, the selection being made from the whole rank of Surgeons, whether styled Surgeons or Surgeons-Major; and the grounds of such selection shall be stated to us in writing, and recorded in the office of our Commander-in-Chief.

A Deputy Inspector-General of Hospitals must have served five years at home, or three abroad, in that rank, before he can be promoted to the rank of Inspector-General.

Our Secretary of State for War in cases of emergency may shorten the several periods of service above mentioned, as he shall deem expedient for the good of our service.

Good service pensions shall be awarded to the most meritorious Medical officers of our Army, under such regulations as shall be from time to time determined by us, with the advice of our Secretary of State for War. Six of the most meritorious Medical officers of our Army shall be named our Honorary Physicians, and six our Honorary Surgeons.

Medical officers shall have the right to retire on half-pay after twenty years' service; Medical officers of the rank of Surgeon-Major, Surgeon, or Assistant-Surgeon, shall be placed on the retired list at the age of 55, and all Inspectors-General and Deputy Inspectors-General at the age of 65 years.

Our Secretary of State for War may, when he shall deem it fit, employ officers of the Medical branch of our Hospital Department in sundry situations, at such daily rates of pay, in addition to half-pay, as he shall from time to time determine.

A Medical officer who, having voluntarily resigned his Commission, has subsequently been permitted to re-enter the Army, shall not, except under very special circumstances to be approved by our Secretary of State for War, be allowed to reckon his former service.

An Apothecary shall have the right to retire on half-pay after 30 years' good service.

Non-effective Pay.—A Medical officer placed on half-pay by reduction of establishment, or on the report of a Medical Board, in consequence of wounds or ill-health caused in and by the discharge of his duties, or on account of age, shall be entitled to half-pay at the following daily rates:—Inspector-General, after 30 years' service, £1 17s. 6d.; 25 years', £1 13s. 6d.; 20 years', £1 10s. Deputy Inspector-General, after 30 years', £1 5s. 6d.; 25 years', £1 2s. 6d.; 20 years', £1 1s. Surgeon-Major, after 15 years', £1; 20 years', 16s. 6d. Surgeon, after 15 years', 13s. 6d.; 10 years', 11s. Assistant-Surgeon, after 10 years', 10s.; 5 years', 8s.; under 5 years', 6s.

The rate of half-pay awarded to officers retiring for their own convenience, after 20 years' service on full-pay, shall not exceed one-half of their full-pay at the time of retirement.

ARMY MEDICAL SCHOOL.

President of the Senate.—Sir T. Galbraith Logan, K.C.B., M.D., Director-General of the Army Medical Department.

Members of the Senate.—Sir Ranald Martin, C.B., Physician to the Indian Council; Inspector-General G. S. Beatson, M.D., C.B., Principal Medical Officer, Royal Victoria Hospital; Deputy-Inspector-General T. Longmore, C.B., Professor of Military Surgery; Deputy-Inspector-General W. C. Maclean, Professor of Military Medicine; William Aitken, M.D., Professor of Pathology; E. A. Parkes, M.D., F.R.S., Professor of Military Hygiene.

Assistant-Professors.—Staff Surgeons Major W. A. Mackinnon, C.B., and W. J. Fyffe, M.D.; Staff Surgeon F. S. B. F. De Chaumont, M.D.; and Staff Assistant-Surgeon V. Wearne.

Candidates for Commissions in the Army, and in the Queen's Indian Service, proceed to Netley after passing the Examination at Chelsea. At Netley they attend the Medical and Surgical Practice of the Royal Victoria Hospital, and learn the system and arrangements of Military Hospitals. During four months they attend the Lectures given by the Professors and Assistant-Professors, and go through a course of Practical Instruction in the Hygienic Laboratory and Microscopical Room. The Lectures and Practical Instruction are intended to explain the specialties of Military Medical Practice, attention being directed to gunshot and other wounds, Surgical arrangements in the field during action and sieges, means of transport, field Hospitals; tropical diseases and their means of investigation, service in India and in the various colonies, the sanitary arrangements in peace and war, and the means of carrying out the sanitary regulations. Every opportunity is taken of practising operations on the dead body and practical points of a like kind.

NAVAL MEDICAL DEPARTMENT, ADMIRALTY, SOMERSET HOUSE.

We are informed by the authorities of the Naval Medical Department that the Regulations for the Examination and Admission of Assistant-Surgeons in the Royal Navy are at present under revision. We are therefore unable to furnish them in the present number.

RULES AND REGULATIONS OF THE EXAMINING MEDICAL BODIES IN SCOTLAND.

UNIVERSITY OF EDINBURGH.

The Session 1869-70 will be publicly opened on Tuesday, November 2, 1869, when an Address will be delivered by the Principal.

GRADUATION IN MEDICINE—STATUTES OF THE UNIVERSITY OF EDINBURGH RELATIVE TO GRADUATION IN MEDICINE AND SURGERY.

Three Medical Degrees are conferred by the University of Edinburgh—viz., Bachelor of Medicine (M.B.), Master in Surgery (C.M.), and Doctor of Medicine (M.D.). The degree of Master in Surgery is not conferred on any person who does not also at the same time obtain the Degree of Bachelor of Medicine.

I. The preliminary branches of extra-professional education are English, Latin, Arithmetic, the Elements of Mathematics, and the Elements of Mechanics; and the proficiency of Students in these branches is ascertained by examination, prior to the commencement of their Medical study.

II. No candidate is admitted to a Professional Examination who has not passed a satisfactory Examination on at least two of the following subjects (in addition to the subjects mentioned above):—Greek, French, German, Higher Mathematics, Natural Philosophy, Logic, Moral Philosophy; and the examination on these latter subjects also takes place before the candidate has entered on his Medical Curriculum.

III. A Degree in Arts (not being an Honorary Degree) in any one of the Universities of England, Scotland, or Ireland, or in any Colonial or Foreign University, specially recognised for this purpose by the University Court, exempts from all preliminary Examination; and an examination in Arts by any corporate body, whose Examination has been recognised as qualifying for entrance on Medical study by resolution of the General Medical Council of the United Kingdom, provided the said Examination by the said corporate body shall be also approved by the University Court, shall exempt from preliminary Examination in Arts, on all subjects comprised in the said Examination of the said corporate body.

IV. No one is admitted to the Degree of Bachelor of Medicine or Master in Surgery who has not been engaged in Medical and Surgical study for four years—the Medical Session of each year, or *Annus Medicus*, being constituted by at least two courses of not less than one hundred lectures each, or by one such course, and two courses of not less than fifty lectures each; with the exception of the Clinical Courses, in which lectures are to be given at least twice a week during the prescribed periods.

V. Every Candidate for the Degrees of M.B. and C.M. must give sufficient evidence by certificates—

1. That he has studied each of the following departments of Medical Science—viz., Anatomy, Chemistry, Materia Medica, Institutes of Medicine or Physiology, Practice of

Medicine, Surgery, Midwifery, and the Diseases peculiar to Women and Children (two Courses of Midwifery of three months each being reckoned equivalent to a six months' Course, provided different departments of Obstetric Medicine be taught in each of the Courses), General Pathology (or, in Schools where there is no such Course, a three months' Course of Lectures on Morbid Anatomy, together with a Supplemental Course of Practice of Medicine, or Clinical Medicine), during Courses including not less than one hundred Lectures; Practical Anatomy, a Course of the same duration as those of not less than one hundred Lectures above prescribed; Practical Chemistry, three months; Practical Midwifery, three months at a Midwifery Hospital, or a Certificate of attendance on six cases from a registered Medical Practitioner; Clinical Medicine, Clinical Surgery, Courses of the same duration as those of not less than one hundred Lectures above prescribed, or two Courses of three months, Lectures being given at least twice a week; Medical Jurisprudence, Botany, Natural History, including Zoology, during Courses including not less than fifty Lectures.

2. That he has attended for at least two years the Medical and Surgical Practice of a General Hospital which accommodates not fewer than eighty patients, and possesses a distinct staff of Physicians and Surgeons.

3. That he has been engaged for at least three months, by apprenticeship or otherwise, in compounding and dispensing drugs at the Laboratory of an Hospital, Dispensary, Member of a Surgical College or Faculty, Licentiate of the London or Dublin Society of Apothecaries, or a member of the Pharmaceutical Society of Great Britain.

4. That he has attended for at least six months, by apprenticeship or otherwise, the out-practice of an Hospital, or the practice of a Dispensary, Physician, Surgeon, or Member of the London or Dublin Society of Apothecaries.(a)

VI. The studies of Candidates for the Degrees of Bachelor of Medicine and Master in Surgery are subject to the following Regulations:—

1. One of the four years of Medical and Surgical study required by Section IV. must be in the University of Edinburgh.

2. Another of such four years of Medical and Surgical study must be either in the University of Edinburgh or in some other University entitled to give the Degree of Doctor of Medicine.

3. Attendance during at least six winter months on the Medical or Surgical Practice of a General Hospital, which accommodates at least eighty patients, and, during the same period, on a course of Practical Anatomy, may be reckoned as one of such four years, and to that extent shall be held equivalent to one year's attendance on Courses of Lectures as above prescribed.

4. One year's attendance on the Lectures of Teachers of Medicine in the Hospital Schools of London, or in the School of the College of Surgeons in Dublin, or of such Teachers of Medicine in Edinburgh, or elsewhere, as shall from time to time be recognised by the University Court, may be reckoned as one of such four years, and to that extent shall be held as attendance on Courses of Lectures, as above prescribed.

5. Candidates may, to the extent of four of the Departments of Medical Study required by Section V., Sub-section 1, attend, in such year or years of their Medical and Surgical studies as may be most convenient to them, the Lectures of the Teachers of Medicine specified in the foregoing Sub-section 4.

6. All Candidates, not Students of the University, availing themselves of the permission to attend the Lectures of Extra-Academical Teachers in Edinburgh, must, at the commencement of each year of such attendance, enrol their names in a book to be kept by the University for that purpose, paying a fee of the same amount as the Matriculation Fee paid by Students of the University, and having, in respect of such payment, a right to the use of the Library of the University.

7. The Fee for attendance on the Lectures of an Extra-Academical Teacher in Edinburgh, with a view to Graduation, must be of the same amount as that exigible by Medical Professors in the University.(b)

8. No Teacher is recognised who is at the same time a teacher of more than one of the prescribed branches of study, except in those cases where Professors in the University are at liberty to teach two branches.

VII. Every Candidate must deliver, before the 31st day of March of the year in which he proposes to graduate, to the Dean of the Faculty of Medicine—

1. A declaration in his own handwriting, that he has completed his twenty-first year,(c) and that he will not be, on the day of Graduation, under articles of apprenticeship to any Surgeon or other master.

2. A statement of his studies, as well in Literature and Philosophy as in Medicine, accompanied with proper certificates.

VIII. Each Candidate is examined, both in writing and *viva voce*—*First*, on Chemistry, Botany, and Natural History; *Secondly*, on Anatomy, Institutes of Medicine, Materia Medica, and Pathology; *Thirdly*, on Surgery, Practice of Medicine, Midwifery, and Medical Jurisprudence; *Fourthly*, Clinically on Medicine and on Surgery in an Hospital. The examinations on Anatomy, Chemistry, Institutes of Medicine, Botany, and Natural History are conducted, as far as possible, by demonstrations of objects placed before the candidates.

IX. Students who profess themselves ready to submit to an examination on the first division of these subjects, at the end of their second year, may be admitted to examination at that time.

X. Students who have passed their examination on the first division of these subjects, may be admitted to examination on the second division at the end of their third year.

XI. The examination on the third and fourth divisions cannot take place until the candidate has completed his fourth *Annus Medicus*.

XII. Candidates may, if they choose, be admitted to examination on the first two of these divisions at the end of their third year, or to the four examinations at the end of their fourth year.

XIII. If any Candidate at these examinations be found unqualified, he cannot be again admitted to examination unless he has studied, during another year, two of the prescribed subjects, either in the University, or in some other School of Medicine.

XIV. The Degree of Doctor of Medicine may be conferred on any Candidate who has obtained the Degree of Bachelor of Medicine, and is of the age of 24 years, and has been engaged, subsequently to his having received the Degree of Bachelor of Medicine, for at least two years in attendance on an Hospital, or in the Military or Naval Medical Services, or in Medical and Surgical Practice: Provided always, that the Degree of Doctor of Medicine shall not be conferred on any person unless he be a Graduate in Arts of one of the Universities of England, Scotland, or Ireland, or of such other Universities as are above specified, or unless he shall, before or at the time of his obtaining the Degree of Bachelor of Medicine, or within three years thereafter, have passed a satisfactory Examination in Greek, and in Logic or Moral Philosophy, and in one at least of the following subjects—namely, French, German, Higher Mathematics and Natural Philosophy: And provided also that the Candidate for the Degree of Doctor of Medicine shall on or before the 31st day of March, in the year in which he proposes to graduate, submit to the Medical Faculty a Thesis, certified by him to have been composed by himself, and which shall be approved by the Faculty, on any branch of knowledge comprised in the Professional Examinations for the Degree of Bachelor of Medicine, which he may have made a subject of study after having received that Degree.

XV. The Medical Examiners for all Candidates for Graduation in Medicine are the Professors in the Faculty of Medicine, and, in addition, three persons appointed annually by the University Court.

XVI. The provisions of these Statutes came into operation on the 4th of February, 1861.

XVII. Persons who began their Medical studies before the 4th of February, 1861, are entitled to graduate under the system in force before or after that date, according as they may comply with the regulations in force in the University before or after that date.

Note.—In conformity with the desire expressed by the Privy Council, it has been resolved that any Candidate for a Degree in Medicine must produce, at his final Examination, a Certificate from a Dispensary or other Public Institution where Vaccination is practised, attesting that he has been practically instructed in the operation, and is acquainted with the appearances which follow its performance.

Notice to Candidates for Graduation in Medicine.—Candidates who commenced their Medical studies by attendance on qualifying classes before February 4, 1861, are entitled to appear for examination for the Degree of Doctor of Medicine, after four years' study, on completing their 21st year, and without having taken the Degree of Bachelor of Medicine. They are also exempted from the preliminary examinations mentioned in Sec-

(a) See Note as to Vaccination appended to Section XVII.

(b) The Fee must be paid at the commencement of the Course.

(c) Or that he will have done so on or before the day of Graduation.

tions I. and II., and require only to undergo an examination in Latin. They are also exempted from attendance on Practical Chemistry and Practical Midwifery, and require only three months of Clinical Surgery and eighteen months of Hospital attendance.

In University College, in King's College, in the Hospital Schools of London, in the extra-Academical Schools of Edinburgh, in the School of the College of Surgeons of Dublin, and in certain Medical Schools where at least two Lecturers have been qualified by the University Court, a candidate may make *two Anni Medici*, one of which must be constituted by Hospital attendance and Practical Anatomy, and the other by at least two courses of one hundred Lectures, or one such course, and two courses of fifty Lectures. The classes at these Schools only qualify to the extent of four, and one of the four must be Practical Anatomy. But the three-months' courses of Materia Medica, Pathology, and Midwifery do not qualify.

In Provincial Schools, where there are no Lecturers qualified by the University Court, a candidate can make *one Annus Medicus only*, and this is constituted by attendance on a qualified Hospital along with a course of Practical Anatomy.

The Edinburgh extra-Academical classes only qualify if the fee paid at the commencement of the Session is the same as that paid to the Professors in the University. Candidates settled for a period of years in foreign parts, and who, since receiving the Degree of M.B., have complied with all the required regulations for the Degree of M.D., but who cannot, without much inconvenience, attend personally, may, on satisfying the Senatus to that effect by production of sufficient official testimonials, have the Degree conferred on them in absence.

Preliminary Examinations in Arts, October 19 and 20, 1869; March 22 and 23, 1870. First Professional Examination, October 23, 1869; April 1, 1870. Second Professional Examination, April 8 and 9, 1870. Final Professional Examination, June, 1870. Graduation, August 1. Candidates who appear for examination must produce certificates of having attended *complete* courses of the subjects on which they are to be examined. A Degree in Arts of any University of the United Kingdom or of the Colonies, or of such other Universities as may be specially recognised by the University Court, exempts from Preliminary Examination.

The Preliminary Examinations in Arts accepted by the General Council are recognised *pro tanto*—that is to say, they exempt from examination in Arts on the subjects comprised in them, in so far as the examinations are of the same extent as those required by this University. Any subjects required by the Statutes, and not included in these examinations, or not carried out to the requisite extent, must be passed at the University.

N.B.—Theses are only required for the Degree of M.D., and none are now required for the Degree of M.B. Those who have under former regulations given in Theses when taking the Degree of M.B. require no Theses for M.D.

The fee for examination must be deposited with the Secretary at least ten days before the day of examination. In the event of the candidate not passing, the fee is not returned, but he may appear at one subsequent examination without paying an extra fee, and at any future examination on paying one-half of the fee. The fees are—For the Preliminary Examination, each Non-Matriculated Student pays a fee of 10s. This fee allows a candidate to appear at the Preliminary Examinations during one Academic year; for the Degree of M.B., three examinations, £5 5s. each, £15 15s.; for the Degree of C.M., £5 5s. additional; or the Degree of M.D., £5 5s., additional to that for M.B., exclusive of £10 Government stamp. The Graduation Fees must all be paid on or before July 15 in the year in which candidates propose to graduate.

Note.—Total fees and stamp for graduating as M.D. only, by Regulations, for Students commencing before February, 1861, £25.

Students are recommended to commence their Medical studies by attending a Summer Session.

MEDICAL DEGREES.—PRELIMINARY EXAMINATION IN ARTS, PROGRAMME FOR 1869-70.

I. In conformity with Section I. of the Statutes, examinations on the Preliminary Branches of extra-Professional Education will take place on Tuesday and Wednesday, October 19 and 20, 1869, and on Tuesday and Wednesday, March 22 and 23, 1870, at 10.30 o'clock a.m. Examination on Tuesdays—English, Arithmetic, Mechanics, Greek, Higher Mathematics, and German. Examination on Wednesdays—Latin, Elements of Mathematics, Natural Philosophy, French, Logic, and Moral Philosophy. 1. English.—A portion of an English author must be written to dictation; the grammatical construction of one or two sentences must be explained; the grammatical errors in a sentence ungrammatically composed must be pointed out and their nature explained, and the derivation and definition of a few English words in common use must be given. (See Bain's "English Grammar," and Angus "On the English Language.") 2. Latin.—Eighth Æneid of Virgil, an easy passage from a Latin prose author, and a single passage of English (translated from a Latin author) to be retranslated into Latin, the more difficult Latin words being given. 3. Arithmetic.—The Common Rules, including Decimals. 4. Elements of Mathematics.—Euclid, Books i., ii., and iii., and the Rudiments of Algebra, including Simple Equations. A knowledge of Euclid alone will not be sufficient. 5. Elements of Mechanics.—Elementary Mechanics and Hydrostatics.

II. At the same dates, examinations will take place in conformity with Section II. of the said Statutes, which enacts that no candidate shall be admitted to a Professional examination who has not passed a satisfactory examination on at least two of the following subjects (in addition to the subjects mentioned above):—1. Greek.—Third Book of Xenophon's Anabasis. 2. French.—First Half of Voltaire's "Charles XII." 3. German.—Schiller's Wallenstein. 4. Higher Mathematics.—Euclid, Books i. to vi.—Algebra, Trigonometry, and Conic Sections. 5. Natural Philosophy.—A general knowledge of the Elements of Natural Philosophy, as in Ganot's Physics, translated by Atkinson. 6. Logic.—Stewart's "Outlines of Moral Philosophy," Part I.; Fowler's "Elements of Deductive Logic." 7. Moral Philosophy.—Stewart's "Outlines of Moral Philosophy," Part II. (M'Cosh's edition), with M'Cosh's Notes. According to the regulations of the General Medical Council, no Medical student can be registered who has not passed English, Latin, Arithmetic, Mathematics, along with one optional subject, as French, German, Greek, Mechanics, and Natural Philosophy.

III. In Section XVII. of the said Statutes, it is enacted that the Degree of Doctor of Medicine shall not be conferred on any person unless he be a Graduate in Arts, or unless he shall, before or at the time of his obtaining the Degree of Bachelor of Medicine, or within three years thereafter, have passed a satisfactory examination on *three* of the subjects mentioned in Section II. Two of these must be Greek and Logic or Moral Philosophy, and the *third* may be any one of the following subjects—namely, French, German, Higher Mathematics, Natural Philosophy.

Examinations of the same extent, and on the same subjects, at other British Universities granting the Degree of M.D., will exempt from these preliminary examinations. Certificates of having passed such examinations must be produced with an official notice of the subjects on which the candidate has passed an examination.

Students who come under the Old Statutes, in consequence of having commenced their Medical Curriculum by attendance on Classes before February 4, 1861, will be examined in Latin on Wednesday, October 20, 1869, and Wednesday, March 23, 1870, at 10.30 a.m. For nature of examination, see Section I. of this programme.

The Medical Faculty have resolved that the written and oral examinations on Chemistry, Botany, and Natural History, in October, 1869, and April, 1870, shall be restricted in the following manner:—

1. *Chemistry.*—A knowledge of the general Laws of Affinity and Equivalents will be required. There must be a general acquaintance with the chief chemical properties of the more common elementary bodies and their compounds, especially those relating to Air and Water, and those commonly used in Medicine. In Organic Chemistry, the leading laws must be known, and the chief families of compounds, such as Ethers and Alcohols, must be familiar to the candidate. But special knowledge will be required of the Chemistry of the Nutritive and Digestive Fluids, the Excretions, and the Chemistry of Food.

2. *Botany.*—The Structure and Functions of Plants, the principles of Classification, Classes, Sub-Classes, and Sections of the Natural System—(see Balfour's "Class-Book," or his "Manual of Botany"). Botanical characters to be demonstrated on conspicuous specimens of the following Natural Orders:—Ranunculaceæ, Papaveraceæ, Cruciferæ, Caryophyllaceæ, Malvaceæ, Leguminosæ, Rosaceæ, Onagraceæ, Umbelliferæ, Dipsacaceæ, Compositæ, Boraginaceæ, Labiatæ, Scrophulariaceæ, Primulaceæ, Euphorbiaceæ, Amentiferæ, Coniferæ, Orchidaceæ, Amaryllidaceæ, Liliaceæ, Palmæ, Gramineæ, Filices. The student will be examined practically on the Microscopical Structure of Plants, and he will be required to describe the organs of fresh plants put into his hands.

3. *Natural History.*—The general principles of Zoological Classification. Characters depending on specialisation of organs, and on Morphological type. The general Morphology of the Primary Groups of the Animal Kingdom. The general Morphology of the Classes of the Vertebrata, and of the Orders of Amphibia, Reptilia, and Mammalia. The principal Morphological and Physiological characters of the following groups:—Insecta, Arachnida, Crustacea, Echinodermata, Cephalopoda, Gasteropoda, Lamellibranchiata, Brachiopoda, Tunicata, Polyzoa, Actinozoa, Hydrozoa, Infusoria, Rhizopoda.

Candidates who mean to appear at any of the above-mentioned Examinations must inscribe their names and addresses in a book which is kept at the Secretary's Office, College, and pay the fees; and for the Professional Examinations, must give in their Schedules, duly filled up, with their Matriculation Tickets, and Class Tickets and Certificates, all at least ten days before the date of examination.

UNIVERSITY OF ABERDEEN.

The regulations for granting Medical Degrees are framed in conformity with an Ordinance of the Universities' (Scotland) Commissioners, dated March 16, 1861, and approved by her Majesty in Council.

The following are the Degrees in Medicine granted by this University—namely, Bachelor of Medicine (M.B.), Master in Surgery (C.M.), and Doctor of Medicine (M.D.).

The Preliminary Examination and Professional Curriculum and Examination for the Degrees of M.B., C.M., and M.D., being in conformity with the Ordinances of the Scotch Universities' Commissioners, are nearly the same as those of the Universities of Edinburgh, Glasgow, and St. Andrews.

The studies of Candidates for the Degrees of Bachelor of Medicine and Master in Surgery are subject to these regulations:—

One at least of the four years of Medical and Surgical study must be in the University of Aberdeen.

Another of such four years must be either in this University or in some other University entitled to give the Degree of Doctor of Medicine.

FEES FOR GRADUATION.

1. Each Candidate for the degree of M.B. shall pay a fee of five guineas in respect of each of the three Professional Examinations.

2. If the Candidate desires to be admitted to the Degree of Bachelor of Medicine only, he shall not, on admission thereto, be required to pay any further fee in addition to the fifteen guineas so paid by him; but if he desires to be admitted to the Degree of Master in Surgery also, he shall, on being admitted to such Degree, pay a further fee of five guineas.

3. And every Candidate for the Degree of Doctor of Medicine shall pay, in addition to the fees paid by him for the Degree of Bachelor of Medicine, a fee of five guineas, exclusive of any stamp duty which may for the time be exigible.

EXEMPTION FROM THE FOREGOING REGULATIONS.

Students who shall have begun their Medical studies before the first Tuesday of November, 1861, are entitled to appear for examination for the Degree of M.D. after four years' study, one of which must have been at the University of Aberdeen.

Further information may be obtained from the Dean of the Medical Faculty, Professor Macrobin, M.D.

UNIVERSITY OF ST. ANDREWS.

The regulations for granting Medical Degrees are framed in conformity with an Ordinance of the Universities' (Scotland) Commissioners; they therefore generally correspond with those of the Universities of Edinburgh, Aberdeen, and Glasgow.

The Degrees in Medicine granted by the University of St. Andrews are those of Bachelor of Medicine (M.B.), Master in Surgery (C.M.), and Doctor of Medicine (M.D.).

The Preliminary Examination and Professional Curriculum and Examinations for these Degrees are generally the same as those of the Universities of Edinburgh, Aberdeen, and Glasgow. The following regulations, however, for Candidates for the Degrees of Bachelor of Medicine and Master of Surgery present some difference:—

No one shall be received as a Candidate for the Degree of Bachelor of Medicine or Master in Surgery unless two years at least of his four years of Medical and Surgical Study shall have been in one or more of the following Universities and Colleges, viz.:—The University of St. Andrews; the University of Glasgow; the University of Aberdeen; the University of Edinburgh; the University of Oxford; the University of Cambridge; Trinity College, Dublin; Queen's College, Belfast; Queen's College, Cork; and Queen's College, Galway.

The remaining years of Medical and Surgical Study may be either in one or more of the Universities and Colleges above specified, or in the Hospital Schools of London, or in the School of the College of Surgeons in Dublin, or under such private teachers of Medicine as may from time to time receive recognition from the University Court.

Attendance on the Lectures of any private teacher in Edinburgh, Glasgow, or Aberdeen, shall not be reckoned for graduation in St. Andrews, if the fee for such Lectures be of less amount than is charged for the like Course of Lectures in the University of Edinburgh, of Glasgow, or of Aberdeen, according as the teacher lectures in Edinburgh, Glasgow, or Aberdeen.

Every Candidate for the Degrees of Bachelor of Medicine and Master in Surgery shall be examined both in writing and *vivâ voce*—first, on Chemistry, Botany, Elementary Anatomy, and Materia Medica; secondly, on advanced Anatomy, Zoology, with Comparative Anatomy, Physiology, and Surgery; and, thirdly, on Practice of Medicine, Clinical Medicine, Clinical Surgery, Midwifery, General Pathology, and Medical Jurisprudence.

FEES FOR GRADUATION.

For the Degree of Bachelor of Medicine five guineas in respect of each of the three divisions of the Examination on Professional subjects; and if the Candidate desires to be admitted to the Degree of Bachelor of Medicine only, he shall not, on admission thereto, be required to pay any further fee in addition to the fifteen guineas so paid by him; but, if he desires to be admitted to the Degree of Master in Surgery also, he shall, on being admitted to such Degree, pay a further fee of five guineas; and every Candidate for the Degree of Doctor of Medicine, who has previously obtained the Degree of Bachelor of Medicine, shall pay, in addition to the fees paid by him as a Candidate for the Degree of Bachelor of Medicine, a fee of five guineas, exclusive of any stamp duty which may for the time be exigible.

N.B.—The Degree of Doctor of Medicine may be conferred by the University of St. Andrews on any registered Medical Practitioner above the age of forty years, whose Professional position and experience are such as, in the estimation of the University, to entitle him to that Degree, and who shall, on examination, satisfy the Medical Examiners of the sufficiency of his Professional knowledge; provided always, that Degrees shall not be conferred under this Section to a greater number than ten in any one year. Fee £52 10s.

REGULATIONS REGARDING THE EXAMINATION OF REGISTERED MEDICAL PRACTITIONERS ABOVE THE AGE OF FORTY YEARS.

Candidates for Graduation are enrolled in order of application, provided they have complied with the undermentioned conditions. Candidates shall lodge with the Professor of Medicine, the following Certificates and Deposit:—

I. Certificate of Age.

II. Certificates from three Medical men, of such acknowledged reputation in the Profession, or of such standing in the Medical Schools, as shall satisfy the Senatus of the Professional position and experience of the Candidate.

III. A certain portion (viz., £10 10s.) of the Graduation Fees; which sum shall be forfeited should the Candidate fail to appear at the time appointed for examination, or should he fail to graduate.

IV. The examination shall be conducted both in writing and *vivâ voce*, and shall include the following subjects:—(1) Materia Medica and General Therapeutics. (2) Medical Jurisprudence. (3) Practice of Medicine and Pathology. (4) Surgery. (5) Midwifery.

(As regards the last two subjects—viz., Surgery and Midwifery—a minute knowledge shall not be required from those who do not practise these branches of the Profession.)

UNIVERSITY OF GLASGOW.

Three Degrees in Medicine are granted, viz.:—Bachelor of Medicine (M.B.), Master in Surgery (C.M.), and Doctor of Medicine (M.D.). [The Preliminary Examination, Curriculum, and Professional Examinations for these Degrees, being in conformity with the Ordinance of the Scottish University Commissioners, are the same as for the Universities of Edinburgh, St. Andrews, and Aberdeen.]

Of the four years constituting the Curriculum, one at least shall have been passed in the University of Glasgow, and another either in that University or some other University entitled to give Degrees in Medicine.

These Statutes apply to all Candidates who commenced their Medical studies on or after October 1, 1861. Candidates who began their Medical studies before that date are entitled to obtain their Degrees according to the regulations existing at the time when they commenced their studies.

The annual term for conferring Medical and Surgical Degrees is the first day of May.

The fees for the Degrees are as follows:—For the Degree of M.B. (for each of three examinations, £5 5s.), £15 15s.; for that of C.M. (in addition to the fee for M.B.), £5 5s.; for the Degree of M.D. (in addition to the fee for M.B.), £5 5s.; and the Government stamp for the Diploma, &c., £10 3s.

The Preliminary Examinations of Medical Students in branches of General Education take place at the beginning and at the end of the Winter Session.

The regulations under which the above Degrees are granted, and the notices of the subjects of Examination, will be obtained by application to the Registrar of the University.

ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH.

REGULATIONS REGARDING THE MEMBERSHIP OF THE COLLEGE.

Any Licentiate of a College of Physicians, or Graduate of a British or Irish University, with whose knowledge of Medical and General Science the College may be satisfied, may be admitted a Member of the College, provided he shall have attained the age of twenty-four years. Every motion for the election of a Member shall be made at a quarterly meeting of Fellows by one of the Fellows present, and seconded by another; and this motion shall be determined by ballot at the next quarterly meeting,—a majority of three-fourths being necessary to carry it in the affirmative. Every Member on the Roll of Attendance, whose address has been communicated to the clerk, shall be summoned to attend all meetings of the Fellows and Members.

The fee to be paid by a Member shall be £31 10s. When a Licentiate shall be raised to the rank of Member, he shall pay £21. When a Member shall be raised to the rank of Fellow, he shall pay £31 10s., exclusive of Stamp-duty.(a) All Candidates for Fellowship or Membership must lodge their fees, and the amount of Stamp-duty payable at the time to Government, with the Treasurer, previously to presenting their petitions.

ABSTRACT OF REGULATIONS FOR THE LICENCE.

1. No one can obtain the Licence of the College until he has completed the age of 21 years.

2. Every applicant for the Licence must produce satisfactory evidence that he has been engaged in the study of Medicine during a period of at least four years, and that he has attended the following Courses at a University, or at some Medical School recognised by the College:—Anatomy, 1 course, six months; Practical Anatomy, six months; Chemistry, 1 course, six months; Practical Chemistry, three months; Materia Medica and Pharmacy, 1 course, three months; Physiology or Institutes of Medicine, 1 course, three months; Practice of Medicine, 1 course, six months; Clinical Medicine, six months; Principles and Practice of Surgery, 1 course, six months; Clinical Surgery, three months; Midwifery, 1 course, three months; Medical Jurisprudence, 1 course, three months;

(a) The Stamp-duty on the Fellowship payable to Government is £25

Pathological Anatomy, 1 course, three months; or General Pathology, 1 course, three months; Practical Pharmacy, three months.

The applicant must also produce evidence of having attended the practice of a public Hospital (containing not fewer than 80 beds) during a period of not less than twenty-four months, twelve of which must have been spent in attendance on the Medical wards.

The applicant must also have attended at least six cases of labour under the superintendence of a qualified Medical Practitioner, and must produce a certificate to that effect.

Every applicant for the Licence, before being admitted to the final Examination, will be required to produce a certificate that he has studied Vaccination under a competent and recognised teacher; that he has himself performed the operation successfully under the teacher's inspection; that he is familiar with the different stages of the vaccine vesicle, and with the methods of preserving lymph; and that he is thoroughly informed in every necessary part of the subject.

3. Every applicant for the Licence must have passed the Preliminary Examination in Literature and Science before he can be admitted to the Professional Examination.

The Examination will embrace the following subjects:—1. English: Grammar and Composition. 2. Arithmetic, including Vulgar and Decimal Fractions; Algebra, including Simple Equations. 3. Geometry: First Two Books of Euclid. 4. Latin: Translation into English, Cicero in Catilinam, Orat. I.; or Virgil. Æneid, Lib. II.—Parsing; Translation from English into Latin, the Latin words being supplied. 5. One of the following subjects, at the option of the Candidate:—1. Greek: Xenophon's Anabasis, Book III.—Homer's Iliad, Book I. 2. French: La Fontaine's Fables. 3. German: Schiller's "Wallenstein's Tod." 4. Natural Philosophy, including Mechanics, Hydrostatics, and Pneumatics.

4. Masters and Bachelors of Arts of any British or Foreign University, whose course of study may from time to time be approved of by the College, will be exempted from the Preliminary Examination; also those who have passed the Examination of the National Educational Bodies, or of any of the Licensing Boards recognised by the Medical Act.

5. The Professional Examination will be divided into two parts, according to the following arrangement of subjects:—(1) Anatomy, Physiology, Chemistry; (2) Materia Medica and Pharmacy, Pathology and Pathological Anatomy, Practice of Medicine, Midwifery, Medical Jurisprudence, Clinical Medicine, including the Examination of Patients, as well as of various Morbid Products. No Candidate will be admitted to the first Examination until he has completed two, or to the second until he has completed four, years of Professional study. The Examinations will be conducted partly *viva voce*, partly by written papers.

The following will be the dates of the Examinations for the Licence of the College during the year 1869 to 1870:—1. Preliminary Examinations—These will be held on the following days, commencing at 12 o'clock: Saturday, October 23, 1869; Saturday November 6, 1869; Saturday, April 23, 1870; Saturday, July 23, 1870; and on each occasion the Examination will be continued on the following Monday at 1 o'clock. 2. Professional Examinations—The First Professional Examinations will be held on Wednesday, October 20, 1869; Wednesday, January 19, 1870; Wednesday, March 30, 1870; Wednesday, May 4, 1870; Wednesday, July 6, 1870; Wednesday, July 20, 1870; Wednesday, October 19, 1870. The Second Professional Examinations will be held in each case on the following Thursday. 3. Examinations for Candidates holding a Qualification—Meetings for the Examination of Candidates who already possess a Qualification from a recognised Licensing Body, will be held on the first Wednesday of every month (with the exception of September and October), and, if necessary, on the following days.

6. Candidates for the Licence of the College who already possess a qualification from a recognised Licensing Body, or who have passed the first Professional Examination before a Qualifying Body (provided it be as extensive as that required by this College), will be at once admitted to the second part of the Examination.

7. Meetings for the Examination of Candidates who already possess a qualification from a recognised Licensing Body, will be held on the first Wednesday of every month (with the exception of September and October), and, if necessary, on the following days. Candidates are required to communicate with the Secretary to the College not less than eight days before the date of the Examination at which they propose to appear.

8. Candidates may be admitted to special Examination, on days other than those appointed above, on bringing forward reasons satisfactory to the Council, and on paying an extra fee of five guineas, which will not be returned in the event of the Candidate being unsuccessful.

9. No Candidate is admissible to Examination who has been rejected by any Licensing Board, within three months previous to his Examination.

10. The Fee payable by a Licentiate is ten guineas. In the event of a Candidate being unsuccessful at his Examination, the sum of two guineas will be retained to defray expenses.

ROYAL COLLEGE OF SURGEONS OF EDINBURGH.

REGULATIONS TO BE OBSERVED BY CANDIDATES FOR THE DIPLOMA.

These are the same as those given below for the conjoined qualification in Medicine and Surgery conferred by the Colleges of Physicians and Surgeons, with the following exceptions in Professional education:—

No third course of Medicine and no course of Pathological Anatomy are required.

A certificate of three months' instruction in Pathological Anatomy at the post-mortem room of a recognised Hospital will be required from Candidates commencing Professional study after October 1, 1861.

The following order of study is recommended as a guide to the Student, though not enjoined:—First Year: Anatomy, Practical Anatomy, Chemistry, Practical or Analytical Chemistry, Hospital. Second Year: Anatomy, Practical Anatomy, Physiology, Surgery, Materia Medica (the last either in this or the Third Year), Hospital. Third Year: Practice of Physic, Clinical Surgery, Practical Anatomy, Practical Pharmacy, Pathological Anatomy, Hospital. Fourth Year: Surgery, or Clinical Surgery, Midwifery and the Diseases of Women and Children, Clinical Medicine, Medical Jurisprudence, Practical Midwifery, Hospital.

It is strongly recommended to Students to avail themselves of any opportunities which they may possess of attending Lectures on Ophthalmic and Mental Diseases; also on Botany, Zoology, Comparative Anatomy, and the use of the Microscope, in addition to the Courses of Lectures which are absolutely prescribed.

The Regulations for the Preliminary Examination in General Education generally correspond with those to be observed by Candidates for the joint qualifications of the Royal Colleges of Physicians and Surgeons, Edinburgh.

PROFESSIONAL EXAMINATIONS FOR THE DIPLOMA OF THE COLLEGE.

The Regulations are generally the same as those for the Professional Examinations for the joint Diploma of the two Colleges, with the following exceptions:—

The sum of £4 must be paid to the Treasurer of the College for the First Examination, not later than 10 a.m. of the day preceding it. This sum will be considered as paid to account of the entire fee of £10 payable for the Diploma.

In the case of a Candidate being unsuccessful at this Examination, £2 will be returned to him, the remaining £2 being retained to meet the expenses of the Examination.

Registered Medical Practitioners, whose Degree or Licence in Medicine is dated prior to October 1, 1861, are exempt from the first Professional Examination. The Examinations under this regulation may take place on the first and third Tuesdays of each month.

(§ 7) The Second Examination embraces Surgery and Surgical Anatomy; also Medicine, Midwifery, Materia Medica, and Medical Jurisprudence; and shall not take place before the termination of the Winter Session of the last year of Study.

Applications for Examination must be made to the Secretary not later than the Monday previous to the day of the first examination.

Every Candidate must produce to the Secretary—(1) Satisfactory evidence of his having attained the age of 21 years; (2) the tickets and the Certificates of his classes; (3) the Certificate of his having passed the first Professional Examination; (4) a tabular statement (for which a printed form will be furnished by the officer) exhibiting the full amount of his Professional education, and distinguishing the Classes, Hospitals, and Dispensaries attended during each session of his studies. If he have been an apprentice, he must also insert the name of his master, the date of his indenture, and the length of time for which he was bound. This statement, accurately filled up, must be attested by his signature, and will be preserved by the College as a record.

If the Candidate have been an Apprentice to a Fellow of the College, he must also produce his discharged indenture.

The remaining fee payable to the College (being £6), together with the receipt for the fee paid for the first Professional Examination, must be lodged not later than 10 a.m. of the day preceding the Examination-day, in the hands of the Treasurer, who will certify this upon the Secretary's letter. The sum of £4 will be returned to unsuccessful Candidates.

Candidates who have passed the first Examination in Anatomy, Physiology, and Chemistry, at any of the Licensing Boards recognised by the Medical Act, will be admissible to the second Professional Examination on producing Certificates of the whole Course of Study and of having passed their Preliminary and first Professional Examinations. If any of the three subjects of the first Examination have been omitted, such Candidates will have to undergo an Examination on the omitted subjects; and none of the subjects set down in (§ 7) will be omitted at the second Examination, even if some of them should have formed part of the first Examination by another Board. The fee will be £10. Unsuccessful Candidates under this regulation will receive back £8.

Unsuccessful Candidates at either the first or second Examination will be remitted to their studies for a period to be determined by the judgment of the Examiners, but not in any case less than three months.

No Candidate shall be admissible to examination who has been rejected by any other Licensing Board within the three months preceding his application to be examined.

The following will be the periods of Examination for the year 1869-70:—Preliminary Examinations in General Education will take place on Saturday, October 23, 1869; on Saturday, November 6, 1869; on Saturday, April 23, 1870; on Saturday, July 23, 1870. First Professional Examinations will take place on Tuesday, October 19, 1869; on Tuesday, January 18, 1870; on Tuesday, March 29, 1870; on Tuesday, April 26, 1870; on Tuesday, July 5, 1870; on Tuesday, July 19, 1870; on Tuesday, October 18, 1870. Second Professional Examinations will take place immediately after the conclusion of the First Professional Examinations, at each of the above-mentioned periods. They will generally be begun on the Thursday succeeding to the day of the First Examination, and in no case on any earlier day.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS, EDINBURGH.

The Royal College of Physicians of Edinburgh, and the Royal College of Surgeons of Edinburgh, while they still continue to give their Diplomas separately, under separate regulations, have made arrangements by which, after one series of Examinations, the Student may obtain the Diplomas of both Colleges.

The general principle of this joint examination is, that it shall be conducted by a board in which each body is represented in those branches which are common to both Medicine and Surgery; but that the College of Physicians shall take exclusive charge of the examination in Medicine, and the College of Surgeons of the examination in Surgery.

The object of the joint examination is to give to students facilities for obtaining from two separate bodies, and at less expense, a qualification in Medicine and a qualification in Surgery. Students passing that examination successfully will be enabled to register two qualifications under the Medical Act —Licentiate of the Royal College of Physicians of Edinburgh, and Licentiate of the Royal College of Surgeons of Edinburgh.

The arrangement for thus conferring a double qualification by the co-operation of the two Colleges is in conformity with Section XIX. of the Medical Act, and received the special sanction of the General Council of Medical Education and Registration, at a meeting held August 7, 1859.

SCHOOLS OF MEDICINE.

1. Every Candidate must have followed his course of study in a University, or in an established School of Medicine, as defined below; or in a Provincial School specially recognised by the Colleges of Physicians and Surgeons of that division of the United Kingdom in which it is situate.

2. Under the title Established School of Medicine are comprehended the Medical Schools of those cities of Great Britain and Ireland in which Diplomas in Medicine or Surgery are granted, and such colonial or foreign schools as are similarly circumstanced in the countries in which they exist.

PROFESSIONAL EDUCATION.

1. Candidates commencing Professional study after Sept. 16, 1866, must have been engaged during Four years after the examination in General Education, in Professional Study, which shall include not less than Four Winter Sessions' or Three Winter and Two Summer Sessions' attendance at a recognised Medical School. (Candidates commencing study prior to the above date, will be admitted to Examination after Four Winter Sessions' or Three Winter and Two Summer Sessions' attendance on Classes at a regular Medical School.)

2. The Candidate must produce certificates of having attended the following separate and distinct Courses of Lectures:—

Anatomy, Two Courses,(a) Six Months each; Practical Anatomy, Twelve Months. Or, in the option of the Candidate, Anatomy, One Course, Six Months; Practical Anatomy, Eighteen Months. Chemistry: One Course, Six Months. Practical or Analytical Chemistry: One Course, Three Months. Materia Medica: One Course, Three Months. Physiology: Not less than Fifty Lectures.(b) Practice of Medicine: One Course, Six Months. Clinical Medicine: Six Months.(c) A Third Course of Medicine, which may either be Practice of Medicine or Clinical Medicine, at the option of the Student: One Course, Six Months.(c) Principles and Practice of Surgery: One Course, Six Months. Clinical Surgery: One Course, Six Months.(c) A Third Course of Surgery, which may either be Principles and Practice of Surgery or Clinical Surgery, at the option of the Student: One Course, Six Months.(c) Midwifery and Diseases of Women and Children: One Course, Three Months. Medical Jurisprudence: One Course, Three Months. Pathological Anatomy: One Course, Three Months.(d) The Six Months' Courses delivered in Scotland must consist of not fewer than one hundred Lectures, with the exception of Clinical Medicine and Clinical Surgery. The Three Months' Courses must consist of not fewer than fifty Lectures.

The Candidate must also produce the following certificates:—1. Of having attended six cases of labour under the superintendence of the Practitioner who signs the certificate, who must be a registered Medical Practitioner. 2. Of having attended, for three months, instruction in Practical Pharmacy; the certificate to be signed by the Teacher, who must be a Member of the Pharmaceutical Society of Great Britain, or a Chemist and Druggist recognised by either College on special application, or the Superintendent of the Laboratory of a Public Hospital or Dispensary, or a Registered Practitioner who dispenses medicines to his patients.

3. Of having attended for twenty-four months a public General Hospital containing on an average at least eighty patients.

4. Of having attended, for six months, the Practice of a Public Dispensary specially recognised by either College; or of having been engaged for six months as visiting Assistant to a Registered Practitioner.

5. Of having been instructed in Vaccination. The Certificate to be signed by the Teacher, who must be a Registered Practitioner.(e)

6. The following Order of Study is recommended as a guide to the Student, though not enjoined:—First year: Anatomy, Practical Anatomy, Chemistry, Practical or Analytical Chemistry, Hospital. Second year: Anatomy, Practical Anatomy, Physiology, Surgery, Materia Medica (the last either in this or the third year, Hospital). Third year: Practice of Medicine, Clinical Surgery, Practical Anatomy, Practical Pharmacy, Clinical Medicine, Pathological Anatomy, Hospital. Fourth year: Surgery or Clinical Surgery, Midwifery and the Diseases of Women and Children, Practice of Medicine or Clinical Medicine, Medical Jurisprudence, Practical Midwifery, Hospital.

7. It is strongly recommended to Students to avail themselves of any opportunities which they may possess of attending Lectures on Ophthalmic and Mental Diseases, also on Natural His-

(a) The two Courses must not be attended in the same Session.

(b) In those Schools of England and Ireland in which two separate Courses of Lectures are delivered at separate hours—one on Anatomy, the other on Anatomy and Physiology—the former of these courses will be received as a Course of Anatomy, and the other as a Course of Physiology.

(c) Two Courses of Clinical Medicine, of three months each, if not simultaneous, will be held equivalent to one Course of six months. They must be attended during the period of attendance at the Hospital where they are delivered. The same rules will apply to Clinical Surgery.

(d) A certificate of attendance on the Post-mortem Examinations at a General Hospital will be accepted in lieu of this Course.

(e) By a Regulation of the Privy Council, of date December 1, 1859, no one can be appointed as a contractor for Vaccination under the English Poor-law, who does not produce a certificate of proficiency in Vaccination from a person authorised by the Privy Council to grant the same. A Certificator in Vaccination has been appointed in Edinburgh by the Privy Council.

tory and Comparative Anatomy, and of obtaining practical instruction in the Use of the Microscope, in addition to the Courses of Instruction which are absolutely required.

PRELIMINARY EXAMINATION IN GENERAL EDUCATION.

1. All Students who intend becoming Candidates for the Diplomas of the Colleges must have passed the complete Examination in General Education, and have had their names inscribed in the Register of Medical Students instituted by the General Medical Council, at the commencement of their Professional studies.

2. The following will be the Preliminary Examination in General Education for the Double Qualification in Medicine and in Surgery conferred conjointly by the Royal Colleges of Physicians and Surgeons, and also for the separate Diploma of each College during the year 1869-70:—The Examination will embrace the following subjects:—1. English Language, including Grammar and Composition. 2. Arithmetic, including Vulgar and Decimal Fractions; Algebra, including simple Equations. 3. Geometry: First two Books of Euclid. 4. Latin: Translation from one of the two following Books at the option of the Candidate—viz., Cicero in Catilinam, Orat. I.; Virgil, Æneid, Lib. II.; and of an easy passage from a book not prescribed; Exercises in Parsing, and in rendering English correctly into Latin, the Latin words being supplied. 5. One of the following subjects at the option of the Candidate:—(1) Greek: Xenophon's Anabasis, Book III.; Homer's Iliad, Book I. (2) French: La Fontaine's Fables. (3) German: Schiller's "Wallensteins-Tod." (4) Natural Philosophy, including Mechanics, Hydrostatics, and Pneumatics. N.B.—In Greek, French, and German, parsing of words from the passages given to be translated will be required; also translation of short sentences from English into the respective languages.

3. Testimonials of proficiency granted by certain Educational Bodies, will be accepted as sufficient evidence of General Education, and will exempt from the Preliminary Examination.

4. The Preliminary Examinations shall take place at stated periods, and shall be conducted by a special Board of Examiners in Arts, to be chosen from time to time by the Royal College of Physicians of Edinburgh, and the Royal College of Surgeons of Edinburgh.

5. Students who intend to undergo the Preliminary Examination, shall give in their names, addresses, and places of birth to the officer of either College, not later than three days before the day of Examination, and shall pay a fee of 10s., not to be returned in case of rejection; but will be admissible to re-examination at a future period without paying another fee.

6. Candidates, the commencement of whose Professional Studies was prior to September 17, 1866, may pass the Preliminary Examination in General Education at any of the periods previous to the First Professional Examination, but are recommended to do so at the earliest possible period. Candidates under this Regulation who have not passed a Preliminary Examination in General Education, will be admitted to a special Examination in General Education previously to their First Professional Examination. For this they shall pay a fee of £1.

The Examinations will be held on the following days, commencing at 12 o'clock: Saturday, October 23, 1869; Saturday, November 6, 1869; Saturday, April 23, 1870; Saturday, July 23, 1870; and on each occasion the Examination will be continued on the succeeding Monday at 1 o'clock.

PROFESSIONAL EXAMINATIONS.

1. Candidates for the Double Qualification shall be subjected to two Professional Examinations, to be conducted at separate times, partly in writing and partly orally.

2. The First Examination shall embrace Anatomy, Physiology, and Chemistry, and shall take place not sooner than the end of the second Winter Session.

3. Opportunities for both Examinations will be presented six times in each year. On each of these occasions the Candidates shall assemble for the purpose of writing answers to the questions proposed. The Oral Examinations will be conducted on the days immediately succeeding. The periods of both Examinations for the next twelve months will be found in the Appendix.

4. Candidates who desire to pass the First Professional Examination must apply to the Inspector of Certificates on or before the Saturday preceding the day of Examination,(f) and must produce tickets, and also certificates of attendance in regard to all those of the Courses of Lectures previously enumerated, which have reference to the subjects of that Examination. They must also produce a certificate of having passed the Preliminary Examination.

5. The sum of £6 must be paid to the Inspector of Certificates for this Examination, not later than 10 a.m. of the day preceding it. This sum will be considered as paid to account of the entire fee of £16 payable for the two Diplomas.

6. In the case of a Candidate being unsuccessful at this Examination, £4 will be returned to him; the remaining £2 being retained to meet the expense of Examination.

7. The second Examination shall embrace Medicine, Surgery and Surgical Anatomy, Midwifery, Pathological Anatomy, Materia Medica and Pharmacy, and Medical Jurisprudence; and shall not take place before the termination of the Winter Session of the last year of Study. In the case of Candidates who began their course of study after September 16, 1866, it will not take place till four years after the Examination on General Education.

8. Applications for Examination must be made to the Inspector of Certificates not later than the Monday previous to the day of Examination.

9. Every Candidate must produce to the Inspector—1st, satisfactory evidence of his having attained the age of 21 years; 2nd, a Certificate of his having passed the Preliminary Examination, unless this Certificate have already been seen by the Inspector of the Colleges; 3rd, a Certificate of his registration in the books of the General Medical Council; 4th, a Certificate of his having passed the first Professional Examination; 5th, the Certificates of his classes, and the other Certificates enumerated under the head of Professional Education; and 6th, a tabular statement (for which a printed form will be furnished by the Inspector), exhibiting the full amount of his Professional Education, and distinguishing the Classes, Hospitals, and Dispensaries attended during each Session of his Studies. The tabular statement, accurately filled up, must be attested by his signature, and will be preserved by the Colleges as a record.

10. The fee payable for this Examination, which shall be £10, must be lodged with the Inspector not later than 10 a.m. of the day preceding the Examination-day.

11. On the production of the above documents, and after receiving the fees, the Inspector shall give the Candidate a letter authorising the Examiners to take him on trial.

12. Unsuccessful Candidates at either the First or Second Examination shall be remitted to their Studies for a period to be determined by the judgment of the Examiners, but not in any case less than three months.

13. In case of a Candidate being unsuccessful at the Second Examination, £8 will be returned to him; the remaining £2 being retained to meet the expense of the Examination.

14. Candidates who have passed the First Professional Examination in Anatomy, Physiology, and Chemistry, at any of the Licensing Boards recognised by the Medical Act, will be admissible to the Second Professional Examination, on producing certificates of the whole Course of Study prescribed and of having passed their Preliminary and First Professional Examinations. If any of the three subjects of the First Examination have been omitted, such Candidates will have to undergo an Examination on the omitted subjects; and none of the subjects set down in Section 7 will be omitted at the Second Examination, even if some of them should have formed part of the First Examination by another Board. The fee payable by such Candidates is £16, and unsuccessful Candidates will receive back £14.

15. In addition to the Written and Oral Examinations, all Candidates shall be subjected to a Practical Clinical Examination in Medicine and Surgery, which shall include the Examination of Patients, Physical Diagnosis, the Use of the Microscope, Surgical Appliances, Bandages, etc.

16. Candidates desirous of Special Examinations on other days than those fixed by the Regulations, must prepare a case to be submitted for the consideration of the authorities of the Colleges, with evidence to show why it was and is impossible for them to avail themselves of the ordinary examinations, past or future. They must at the same time produce Certificates of the whole of the prescribed Course of Study and of the Preliminary Examination, and state the earliest and the latest days within which they can present themselves. It is very desirable that all such Candidates, and especially those who are at a distance from Edinburgh, should present their applications as long beforehand as possible.

The fees for Special Examinations are as follows, viz.:—

(f) Candidates at a distance are requested to send their Certificates much earlier, so as to give sufficient time for the exchange of one or two explanatory letters; as much disappointment has been occasioned by the discovery of defects in their Course of Study when it was too late to rectify them by the production of documents.

£28 for First and Second Examinations, of which £22 will be returned to Candidates remitted on the First Examination, and £10 to Candidates successful in the First, but unsuccessful in the Second Examination. £25 for Second Examination when the Candidate has passed the First under the conditions of Sect. 14. Of this £16 will be returned to the Candidate if unsuccessful. £19 for Second Examination when the Candidate has passed the First before the Examiners of the Colleges. Of this £10 will be returned to the Candidate if unsuccessful.

17. No Candidate shall be admissible to Examination who has been rejected by any other Licensing Board within the three months preceding his Examination.

FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.

ABSTRACT OF REGULATIONS FOR THE LICENCE, 1869-70.

Course of Study.—(1). Anatomy, two courses, six months each. (2). Practical Anatomy, twelve months. (3). Chemistry, one course, six months. (4). Practical or Analytical Chemistry, one course, three months. (5). Physiology, not less than fifty Lectures. (6). Practice of Medicine, one course, six months. (7). Clinical Medicine, one course, six months. (8). Principles and Practice of Surgery, one course, six months. (9). Clinical Surgery, one course, six months. (10). In addition to the above courses of Surgery and Clinical Surgery, one six months' course of either of these at the option of the student: Materia Medica, one course, three months. (11). Midwifery and the Diseases of Women and Children, one course, three months. (12). Medical Jurisprudence, one course, three months. (13). Practical Midwifery, attendance on at least six cases of labour. (14). Pathological Anatomy, three months' instruction in the post-mortem room of a recognised Hospital. (15). Practical Pharmacy, three months' practical instruction. (16). Hospital and Dispensary Practice, twenty-four months' attendance on the practice of a public General Hospital, containing on the average at least eighty patients.

A Certificate of Proficiency in Vaccination, from a Vaccine Institution recognised by the Faculty, will be required of every Candidate. Candidates commencing Professional study after October 1, 1866, must have been engaged in Professional study during four years, which shall include not less than four Winter Sessions' or three Winter and two Summer Sessions' attendance at a recognised Medical School.

(Candidates commencing Professional study prior to the above date are admitted to Examination after four Winter Sessions' or three Winter and two Summer Sessions' attendance at a regular Medical School.)

Candidates are subjected to two Professional Examinations. The First Examination embraces Anatomy, Physiology, and Chemistry, and cannot be undergone before the end of the Second Winter Session of Study.

The Second Examination embraces Surgery and Surgical Anatomy, Medicine, Materia Medica, Midwifery, and Medical Jurisprudence, and cannot be undergone before the termination of the full period of Study.

Intending Candidates for the Second Examination must produce evidence—1st, of being 21 years of age; and 2nd, of having passed the First Examination. They will also present to the Secretary for inspection their Class and Hospital Certificates, and write out a tabulated statement of their whole course of Study, for which the Secretary, on application, will supply Candidates with printed forms.

The Fee for the Diploma is £10—£4 for the First and £6 for the Second Examination.

First Examinations will be held on the second Tuesday of every month. Second Examinations will take place, the written part on each of the above days, and the oral and Clinical parts on the succeeding day. A Candidate, on showing a sufficient reason, may be admitted to Examination on a day specially arranged, by paying an extra fee of £3.

All applicants for the Licence must be registered on the form prescribed by the General Medical Council at the commencement of Professional study.

Candidates who possess a qualification to practise, or who have passed the Examination in Anatomy, Physiology, and Chemistry before any of the Licensing Boards, will be admitted to the Second Examination on producing evidence of having attended the full Curriculum, and paying the Fee of £10.

DOUBLE QUALIFICATION.

The Faculty of Physicians and Surgeons of Glasgow, and the Royal College of Physicians of Edinburgh, while they still continue to give their Diplomas separately, under separate regulations, have made arrangements by which, after one series of Examinations, the Student may obtain two separate Licences—one in Medicine and one in Surgery.

The Fee for the two diplomas granted conjointly is £16—£6 for the First and £10 for the Second Examination.

The First Examination for the Double Qualification will be held in the Faculty Hall, Glasgow, on October 14, 1869, January 13, April 7, May 5, and July 7, 1870, and on each occasion it will be continued on the succeeding day. The Second Examination will be held, the written part on each of the above days, and the oral part on the succeeding day. Applications to be admitted, either to the First or the Second Examination, must be made to the Secretary of the Faculty not later than the Monday preceding the Examination.

PRELIMINARY EXAMINATIONS CONDUCTED BY THE FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW, SESSION 1869-70.

1. Preliminary Examinations in General Literature in accordance with the regulations of the General Medical Council will be held in the Faculty Hall during the Session 1869-70 on the following days, commencing at eleven o'clock, viz.:—Friday, October 22, and Friday, November 5, 1869; Friday, April 29, and Friday, July 22, 1870; and on each occasion the Examination will be continued on the succeeding day.

The Examination will embrace the following subjects:—1. English language. 2. Latin. 3. Arithmetic; Algebra. 4. Geometry. 5. One of the following subjects at the option of the Candidate:—(1). Natural Philosophy—Mechanics, Hydrostatics, and Pneumatics. (2). Greek. (3). French. (4). German.

The Fee for the Examination and Certificate is 10s., payable to the Secretary previous to the Examination.

FACULTY OF MEDICINE IN IRELAND.

UNIVERSITIES, COLLEGES, COURSES OF STUDY, DEGREES, AND LICENCES TO PRACTISE.

The following Bodies grant one or more Degrees or Licences to practise Medicine or Surgery, and provide courses of instruction in the Medical Sciences:—The University of Dublin grants the Degrees of M.B. or Bachelor of Medicine; M.D. or Doctor of Medicine; M.C. or Master of Surgery; also Licences in Medicine (L.M.) and Surgery (L.S.). The Queen's University in Ireland, with its Provincial Colleges at Belfast, Cork, and Galway; this University confers the Degrees of M.D. and M.Ch. The King and Queen's College of Physicians in Ireland, granting a Licence and a Fellowship. This Institution, in connexion with the Medical Faculty of the University of Dublin, constitutes the School of Physic in Ireland. The Royal College of Surgeons in Ireland, which grants Letters Testimonial qualifying to practise Surgery as a Licentiate, and also confers a Fellowship. Fellows and Licentiates of the Colleges of Physicians and Surgeons may obtain from their respective Colleges a Diploma in Midwifery. The Rotundo and Coombe Lying-in Hospitals grant Diplomas in Midwifery, which are, however, not recognised under the Medical Act. The Governor and Company of the Apothecaries' Hall of Ireland also confer a Diploma.

The Medical Session in Ireland commences about the first week in November.

UNIVERSITY OF DUBLIN.

SCHOOL OF PHYSIC.

The School of Physic in the University of Dublin is under the joint control of the Board of Trinity College and of the President and Fellows of the College of Physicians.

MATRICULATION.

All students of the School of Physic must be matriculated by the Senior Lecturer of Trinity College, for which a fee of five shillings is payable. No student can be admitted for the Winter Courses after November 25.

DEGREES AND LICENCES IN MEDICINE AND SURGERY.

The Act 21 and 22 Vict., c. 99, recognises, as qualifications for Medical and Surgical Practitioners, the Degrees and Licences in Medicine and Surgery granted by the University. The Degrees are—1. Bachelor of Medicine. 2. Doctor of Medicine. 3. Master in Surgery.

UNIVERSITY DEGREES.

1. *Bachelor in Medicine.*—A Candidate for the Degree of Bachelor in Medicine must be a Graduate in Arts, and may obtain the Degree of Bachelor in Medicine at the same

Commencement as that at which he receives his Degree of B.A., or at any subsequent Commencement, provided the requisite Medical education shall have been completed. The Medical education of a Bachelor in Medicine is of four years' duration, and comprises attendance on the following Courses of Lectures, viz.:—Courses of five months' duration (November to April)—Anatomy, Practical Anatomy, with Dissections, Surgery, Chemistry, Practice of Medicine, Midwifery. Courses of three months' duration (April to July)—Botany, Practical Chemistry, Medical Jurisprudence, Materia Medica and Pharmacy, Institutes of Medicine.

Hospital Attendance.—1. Nine months' attendance on the Clinical Lectures of Sir Patrick Dun's Hospital. 2. Nine months' additional attendance on the Clinical Lectures of any Hospital recognised by the Board. 3. Instruction in Practical Midwifery, including not less than six deliveries.

Any of the above-named six or three months' Courses may be attended at any Medical School in Dublin, recognised by the Provost and Senior Fellows (and three of them, at the discretion of the Candidate, may be attended in the University of Edinburgh), provided the Candidate have kept an *Annus Medicus* in the School of Physic.

The Schools recognised are—1. The School of the Royal College of Surgeons in Ireland. 2. The Carmichael School. 3. The School of Dr. Steevens' Hospital. 4. The St. Peter-street School. 5. The School of the Catholic University. The recognition of these schools is conditional on their students being furnished with *bona fide* certificates of an amount of regular attendance equivalent to that required by the University—viz., three-fourths of the entire number of Lectures in each Course.

An *Annus Medicus*, or a year's attendance in the School of Physic, may be kept in three ways—1. By attending at least two, or not more than three, of the foregoing Courses, which are of six months' duration. 2. By attending one Course of six months' and two of three months' duration. 3. By nine months' attendance on Sir Patrick Dun's Hospital and Clinical Lectures; together with one course of six months, or, in lieu thereof, two courses of three months' duration.

The Fee for nine months' attendance at Sir Patrick Dun's Hospital is twelve guineas. The fee for each Course of Lectures is three guineas. The Fee for the *Liceat ad Examinandum* is £5. The Fee for the Degree of M.B. is £11.

2. *Doctor in Medicine.*—A Doctor in Medicine must be M.B. of at least three years' standing, or have been qualified to take the Degree of M.B. for three years, and must perform exercises for the Degree before the Regius Professor of Physic, in accordance with the rules and statutes of the University. Total amount of Fees for this Degree, £13.

3. *Master in Surgery.*—The Degree of Master in Surgery can only be obtained by Students who are Bachelors of Arts, and who have completed the Professional Curriculum and passed the examinations required. The Curriculum extends over a period of four years, and comprises attendance upon the following Courses of Lectures—viz.: Anatomy, one Course; Demonstrations, three Courses; Dissections, three Courses; Theory and Practice of Surgery, two Courses; Practice of Medicine, one Course; Chemistry, one Course; Materia Medica, one Course; Midwifery, one Course; Practical Chemistry, one Course; Botany, one Course; Medical Jurisprudence, one Course.

Hospital Attendance.—Three Sessions, each of nine consecutive months' duration, in any recognised Hospital, together with attendance on the Clinical Lectures on Medicine and Surgery there delivered. Any of the above-named Courses may be attended at any of the Medical Schools of Dublin recognised by the Board, provided the Candidate has kept an *Annus Medicus* in the School of Physic. The following Hospitals are recognised by the Board:—1, Sir Patrick Dun's School of Physic Hospital; 2, Meath Hospital; 3, Richmond, Whitworth, and Hardwicke Hospitals; 4, Dr. Steevens' Hospital; 5, Jervis-street Infirmary; 6, City of Dublin Hospital; 7, Mercer's Hospital; 8, St. Vincent's Hospital; 9, Adelaide Hospital; 10, Mater Misericordiæ Hospital. Of the Courses of Lectures, which are of five months' duration, not more than three can be attended during any one Session. Candidates will also be required to perform Surgical operations on the dead subject. Candidates for the Degree of Master in Surgery, who have already passed the Examination for the Degree of Bachelor of Medicine, will be examined in Anatomy and Surgery only. Fee for the *Liceat ad Examinandum*, £5. Fee for the Degree of M.Ch., £11.

UNIVERSITY LICENCES.

Candidates for the Licences in Medicine or Surgery must be matriculated in Medicine, and must have completed four years in Medical Studies. Candidates for the Licences in Medicine or Surgery must pass the following Examination in Arts, unless they be Students in the Senior Freshman or some higher class:—Homer's Iliad, Books I., II. (omitting Catalogue of ships), III.; Lucian's Dialogues (Walker's edition); Xenophon's Anabasis, Books I., II., III.; Virgil, Æneid, Books I., II., III.; Sallust; Horace, Satires; Latin Prose Composition; English Prose Composition; English History, Modern Geography; Arithmetic; Algebra to the end of Simple Equations; Euclid, Books I., II., III. In case the Student should wish to continue the Undergraduate Course in Arts, with a view to the Degree of B.A., his answering in the above will be reckoned as equivalent to the Entrance Examination, and the Hilary Examination of the Junior Freshman year. Students who have passed the foregoing Examination will be required to pay the admission fee of £15.

1. *Licentiate in Medicine.*—The Medical Course and Examination necessary for the Licence in Medicine is the same as for the Degree of M.B., with the exception that any general Hospital approved by the Board of Trinity College may be substituted for Sir Patrick Dun's. Candidates who are already Licentiates in Surgery of the Royal College of Surgeons in Ireland, or Members of the College of Surgeons of England, on passing the foregoing Arts Examination, will be admitted to Examination for the Licence in Medicine. Fee for the *Liceat ad Examinandum*, £5. Fee for the Licence in Medicine, £5.

2. *Licentiate in Surgery.*—The Surgical Course and Examination necessary for the Licence in Surgery are the same as for the Degree of Master in Surgery. Fee for the *Liceat ad Examinandum*, £5. Fee for the Licence in Surgery, £5.

PREVIOUS MEDICAL EXAMINATION.

Candidates for Degrees and Licences in Medicine and Surgery are expected to pass two Examinations, the first of which will be held at the close of the second year of Medical Study, and the other, as heretofore, after the full Curriculum has been completed. The subjects required at the Previous Examination are the following:—Descriptive Anatomy, Botany, Materia Medica and Pharmacy, Chemistry, Theoretical and Practical, with Chemical Physics.

At a Board meeting, held June 17, 1863, it was resolved:—"Students who shall have passed the Previous Examination, and whose answering in any of the following subjects—viz., Botany, Chemistry, Descriptive Anatomy, and Materia Medica—shall have satisfied the respective Examiners, shall be exempted from answering in such subject or subjects at the final Examination for Medical Degrees and Licences."

MEDICAL SCHOLARSHIPS.

Two Medical Scholarships will be given annually, tenable for two years, with a salary of £20 per annum, on the condition of the successful Candidates proceeding regularly for two years with the Medical Course in the University.

MEDICAL SCHOOL EXHIBITIONS.

The Professors of the School of Physic give three Exhibitions annually—two senior Exhibitions, value respectively £15 and £10, to be competed for by Students who have attended the School of Physic for three years; and a Junior Exhibition, value £15, to Students who have attended two years.

Total Expense of obtaining the Degrees of Bachelor in Medicine and Master in Surgery.—I. Lectures: 1. Anatomy (one Course), £3 3s. 2. Practical Anatomy (three Courses), £9 9s. 3. Dissections (three Courses), £12 12s. 4. Surgery (two Courses), £4 4s. 5. Practice of Medicine, £3 3s. 6. Chemistry, (two Courses), £4 4s. 7. Materia Medica and Pharmacy, £3 3s. 8. Midwifery, £3 3s. 9. Botany. 10. Medical Jurisprudence, £3 3s. 11. Institutes of Medicine, £3 3s.—II. Hospitals: 1. Sir P. Dun's (first year), £12 12s. 2. Second and third years' attendance, £15 15s. Practical Midwifery, £3 3s. III. Degrees: 1. *Liceat ad Examinandum in Medicina*, £5. 2. *Liceat ad Examinandum in Chirurgia*, £5. 3. M.B. Degree, £11. 4. M.Ch. Degree, £11.—Total Expenses: 1. Lectures, £49 12s. 2. Hospitals, £31 10s. 3. Degrees, £32. 4. Private Tuition, £20. Total, £133 2s. N.B.—As no Degrees in Medicine or Surgery are conferred except upon Graduates in Arts, the expense of the Degree of Bachelor in Arts, amounting altogether to £82 4s., should be added to the foregoing, making the total cost something over £200.

THE QUEEN'S UNIVERSITY IN IRELAND,

granting the Degrees of Doctor in Medicine and Master in Surgery, includes three Colleges—the Queen's Colleges of

Belfast, Cork, and Galway, each of which possesses a Faculty of Medicine. The curriculum of Medical Study extends over a period of four years, and is divided into two periods of two years each. The first period comprises attendance on Chemistry, Natural History, Anatomy, and Physiology, Practical Anatomy, Materia Medica and Pharmacy. The second period comprises attendance on Anatomy and Physiology, Practical Anatomy, Theory and Practice of Surgery, Midwifery and Diseases of Women and Children, Theory and Practice of Medicine, Medical Jurisprudence. At least two of the above Courses of Lectures must be attended in some one of the Queen's Colleges; the remainder may be taken, at the option of the Candidate, in any University, College, or School recognised by the Senate of the Queen's University. Candidates are required before graduating to have also attended in one of the Colleges of the Queen's University Lectures on Experimental Physics, and on one Modern Language, and to have passed the Matriculation Examination. They are further required to attend, during the first period, Practical Chemistry in a recognised Laboratory, and the Practice during six months of a recognised Medico-Chirurgical Hospital, containing at least sixty beds, together with Clinical Lectures delivered therein; during the second period at a recognised Midwifery Hospital, with the Clinical Lectures therein delivered, for a period of three months; or a Midwifery Dispensary for the same period; or ten cases of Labour, under the superintendence of the Medical officer of any Hospital or Dispensary where cases of labour are treated; and eighteen months' Practice of a recognised Medico-Chirurgical Hospital, containing at least sixty beds, and in which Clinical Instruction is delivered. There are two University Examinations; one comprising the subjects of study in the first period, the other the subjects of the second period. The University Examinations are held twice in each year, in June and September. Further information will be found in the "Queen's University Calendar," or may be obtained by application to the Secretary, Queen's University, Dublin Castle.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.

REGULATIONS RESPECTING THE EDUCATION, EXAMINATION, AND ADMISSION OF CANDIDATES FOR THE LICENTIATESHIP IN MEDICINE.

Candidates for the Licentiateship in Medicine are required to give proof of their having attained the age of 21 years, of having been engaged during a period of four years in the study of Medicine at a School or Schools recognised by the College, and shall also produce evidence of having studied the following subjects, viz.:—Anatomy, Physiology, Practical Anatomy, Chemistry, Practical Chemistry, Materia Medica and Botany, Medical Jurisprudence, Practice of Medicine and Pathology, Surgery, Midwifery—and of having attended a Medico-Chirurgical Hospital, in which regular Courses of Clinical Lectures are delivered, together with Clinical Instruction, for twenty-seven months, or such Hospital for eighteen months, with nine months' attendance on a Medical Hospital, and similar Courses of Clinical Lectures and Clinical Instruction, the attendance in each case being for not more than nine months in any year—namely, for six winter and three summer months—and the attendance on a Medico-Chirurgical Hospital and Medical Hospital not being taken out in the same year, and of having attended Practical Midwifery.

Candidates who are not personally known to any Fellow of the College are required to transmit testimonials of character from registered Physicians or Surgeons.

The Examination is divided into two parts—

First Part.—Anatomy, Physiology, Botany, and Chemistry.

Second Part.—Materia Medica, Practice of Medicine, Medical Jurisprudence, and Midwifery.

Students may be examined in the subjects of the first part at the termination of the first period of study, or in all the subjects of their education on the completion of their Medical studies.

Candidates are required to have passed an Examination in General Education held by some of the Qualifying Bodies, or by some one of the National Education Bodies approved by the College.

Students in Arts of one year's standing, of any University in the United Kingdom requiring Examinations in the first year; Graduates or Licentiates in Medicine or Surgery of any University or College of Great Britain or Ireland, will be exempt from the Preliminary Examination.

The above regulations respecting Preliminary Examination will not apply to Candidates who commenced their Professional education previously to January 1, 1861.

Candidates qualified as follows are required to undergo the second part of the Professional Examination only, viz.:—1. Graduates in Medicine of a University in the United Kingdom, or of any foreign University approved by the College. 2. Fellows, Members, or Licentiates of the Royal Colleges of Physicians of London or Edinburgh. 3. Graduates or Licentiates in Surgery. 4. Candidates who, having completed the Curriculum laid down above, shall have passed the previous Examinations of any of the Licensing Corporations in the United Kingdom.

Licence in Midwifery.—Members of the College who may desire to obtain the Licence in Midwifery will be required to undergo a special Examination.

Candidates for the Licence in Midwifery, who are not Members of the College, will be admitted to examination for such Licence in Midwifery, on the following qualifications:—The Degree or Licence in Medicine or Surgery from any University or College of Physicians or Surgeons in the United Kingdom, together with a certificate of having attended a six months' Course of Lectures on Midwifery, with the attendance for six months at a recognised Lying-in Hospital, or of having attended Practical Midwifery for six months.

Fees for Licence and Examinations.—The fee for the Licence is £15 15s., which may be divided as follows, viz.:—For Examination at the termination of the first period of study, £5 5s. The final Examination for the Licence, £10 10s. Fee for the Midwifery Diploma, £3 3s. Fee for the Licences in Medicine and Midwifery, if taken out at the same time, £16.

The admission fee, with the exception of two guineas deducted to meet the expense of Examination, will be returned to any Candidate who may be rejected.

Examinations are held on the second Wednesday in each month, except August and September.

At all Examinations for the Licences of the College, Candidates will be examined as follows:—1. By written questions; 2. By oral questions.

Candidates qualified as follows, and of above five years' standing as such, will be exempted from the written examination, viz.:—1. Graduates in Medicine of a University in the United Kingdom, or of any foreign University approved by the College. 2. Fellows, Members, or Licentiates of the Royal Colleges of Physicians of London or Edinburgh, who have been admitted upon Examination. 3. Graduates or Licentiates in Surgery.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

I.—REGISTRATION OF PUPILS.

Every person requiring to be registered as a Pupil on the College books shall, if the Council think fit, be so registered if he shall have laid before the Council a receipt showing that he has lodged, to the credit of the President, and for the use of the College, in the Bank of Ireland, a registry fee of five guineas.

II.—QUALIFICATIONS OF CANDIDATES FOR LETTERS TESTIMONIAL.

Every Registered Pupil shall be admitted to an Examination for Letters Testimonial if he shall have laid before the Council the following documents:—

a. A receipt showing that he has lodged a sum of twenty guineas in the Bank of Ireland to the credit of the President and for the use of the College.

b. A Certificate that he has passed an Examination as to his acquaintance with the Greek and Latin Languages.

c. Certificate showing that he has been engaged in the study of his Profession for not less than four years.

d. Certificates of attendance on an Hospital recognised by the Council, where Clinical Instruction is given during three years.

e. Certificates of attendance on three courses of Lectures on Anatomy and Physiology; three Courses of Lectures on the Theory and Practice of Surgery; and of the performance of three courses of Dissections, accompanied by demonstrations; also certificates of attendance on two courses of Lectures on Chemistry, or one course of Lectures on General and one on Practical Chemistry; one course of Lectures on Materia Medica; one course of Lectures on the Practice of Medicine; one course of Lectures on Midwifery; one course of Lectures on Medical Jurisprudence; and one course of Lectures on Botany.

QUARTERLY EXAMINATION.

1st. Examinations are held Quarterly, on the second Tues-

day in February, May, August, and November, at which Candidates shall be divided into two classes—Junior and Senior.

2nd. The Junior Class shall produce Certificates of having attended three courses of Lectures on Anatomy and Physiology, three courses of Lectures on Practical Anatomy, with Dissections; two courses of Lectures on Chemistry, one course of Lectures on Materia Medica, one course of Lectures on Botany, and one course of Lectures on Forensic Medicine.

3. This Class shall be examined in Anatomy, Physiology, and Materia Medica.

4. The Fee for this Examination shall be five guineas; not to be returned in case of rejection, but to be allowed in the fee for the Second Examination.

5. The Senior Class shall produce certificates of having attended three courses of Lectures on the Theory and Practice of Surgery, one course of Lectures on the Practice of Medicine, and one course of Lectures on Midwifery; also certificates of attendance on a recognised Hospital for three Winter and three Summer Sessions.

6. This Class shall be examined in Surgery, Operative Surgery, the Practice of Medicine, and form of Prescription.

7. Both these Examinations shall be partly written and partly oral.

8. The fee for this examination shall be fifteen guineas.

Fees to be paid by Candidates for Letters Testimonial.—1. The Candidate pays ten shillings for his Preliminary Examination.

2. Five guineas as Registered Pupil of the College.

3. Five guineas for the Junior Class Examination, which is not returned in case of rejection, but is allowed in the fee for his Second Examination.

4. Fifteen guineas for the Senior Classs Examination—total, £26 15s.

5. In addition to the foregoing, a fee of one guinea is to be paid to the Registrar, on handing each Licentiate his Diploma.

6. Every Candidate rejected at the Quarterly Examination shall be required to pay to the College the sum of two guineas on applying for re-examination, so as to recompense the College for the necessary expense.

III.—QUALIFICATIONS OF CANDIDATES FOR THE FELLOWSHIP.

Every Registered Pupil or Licentiate shall be admitted to Examination for the Fellowship if he shall have laid before the Council the following documents:—

a. A receipt showing that he has lodged in the Bank of Ireland, for the use of the College, if he be a Licentiate, the sum of twenty guineas, or thirty-five in case he be a Registered Pupil; provided in either case he intends to reside beyond ten miles from Dublin. Should the candidate intend to reside in Dublin, or within ten miles thereof, he shall lodge, if he is a Licentiate, thirty guineas: or if he be a Registered Pupil, forty-five guineas. Fellows entering on the country list, who may subsequently settle as Practitioners in Dublin, or within ten miles thereof, shall pay ten guineas to the College.

b. A certificate that he is twenty-five years of age.

c. A certificate that he is a Bachelor of Arts of some University, or that he has been examined in such manner as the Council may from time to time direct, with a view to ascertain that he has obtained a liberal preliminary education.

d. A certificate, signed by two or more Fellows of the College, of good general conduct during his Professional education.

e. Certificates that he has been engaged in the acquisition of Professional knowledge for a period of not less than six years, during three of which he must have studied in one or more of the Schools and Hospitals recognised by the Council. He may have studied for the other three years in any School or Schools of the United Kingdom which shall be approved by the Council, or in any foreign School of repute. It is also required that the Candidate shall have had opportunities of practical instruction as House-Surgeon or Dresser in a recognised Hospital.

f. Certificates of attendance on the several courses of Lectures required to be attended by Candidates for Letters Testimonial, together with one course of Lectures on Comparative Anatomy and one course on Natural Philosophy.

g. A thesis on some Medical subject or Clinical reports, with observations of six or more Medical or Surgical cases taken by himself.

h. Candidates of the required age, who shall have taken the degree of Bachelor of Arts in a British or Irish University, and have complied with the foregoing regulations in other respects, will be admitted to examination at the end of five years of Professional study, of which three years must have been passed in one or more of the recognised Schools or Hospitals.

i. Licentiates of the College, who may not be able to show that they have followed the course of study specified in the preceding regulations, may, at the expiration of ten years from the date of their diploma, be admitted to the examination required for the Fellowship, provided they produce such evidence as shall be satisfactory to the Council that they have conducted themselves honourably in the practice of their Profession.

IV.—QUALIFICATIONS OF CANDIDATES FOR THE DIPLOMA IN MIDWIFERY.

Any Fellow or Licentiate of the College shall be admitted to an examination for the Diploma in Midwifery upon laying before the Council the following documents:—

a. A certificate showing that he has attended one Course of Lectures on Midwifery and Diseases of Women and Children, delivered by a Professor or Lecturer in some School of Medicine or Surgery recognised by the Council.

b. A certificate showing that he has attended the practice of a Lying-in Hospital, recognised by the Council, for a period of six months; or the Practice of a Dispensary for Lying-in Women and Children, recognised by the Council, and devoted to this branch of Surgery alone.

c. A certificate showing that he has conducted thirty labour cases at least.

Candidates for the Midwifery Diploma, shall be publicly examined on the Organisation of the Female, the Growth and Peculiarities of the Fœtus, the Practice of Midwifery, and the Diseases of Women and Children, and, if approved of, shall receive a Licence or Diploma certifying the same. The Candidate pays £1 6s. for the Midwifery Diploma provided he takes it out within one month from the date of his Letters Testimonial; after that date the Fee will be Two Guineas.

PRELIMINARY EXAMINATION, REGISTRATION, AND MATRICULATION.

Registered Pupils are admitted to answer the Preliminary Examination at any period previous to the final Examination for Letters Testimonial.

Students who are not Registered Pupils are also admitted to answer the Preliminary Examination at any period previous to the final Examination for Letters Testimonial, upon payment of a matriculation fee of ten shillings; but they are not enrolled as Registered Pupils, or entitled to the privileges reserved for such pupils, until they have paid the full Registration fee of five guineas.

The following are the subjects upon which each Candidate for the Preliminary Examination will be examined, viz.—The English Language, including Grammar and Composition. Arithmetic, including Vulgar and Decimal Fractions. Algebra, including Simple Equations. Geometry, first two books of Euclid. Latin and Greek, including Translation and Grammar. In Greek—The Gospel of St. John, the Menippus of Lucian, or the First Book of Xenophon's Anabasis. In Latin—The First and Second Books of the Æneid of Virgil, the Jugurthine War of Sallust, or the Third Book of Livy. These Examinations are held quarterly, viz.:—On the third Wednesday in January, April, July, and October in each year. Fee, ten shillings.

Candidates are requested to enter their names, and pay the fee to the Registrar, at least three days previous to the day of Examination.

THE APOTHECARIES' HALL OF IRELAND.

BYLAWS AND REGULATIONS.

Every Candidate for the Licence to practise is required to undergo a Preliminary and a Professional Education and Examination.

THE PRELIMINARY EDUCATION AND EXAMINATION IN ARTS.

Compulsory.—1. English: Grammar, Composition, and the leading events of English History. 2. Arithmetic and Algebra: The Ordinary Rules of Arithmetic, Vulgar and Decimal Fractions; Algebra, to Simple Equations. 3. Geometry: First Two Books of Euclid. 4. Latin: The Catiline War of Sallust, and the first three Books of the Æneid of Virgil. 5. Greek: The Gospel of St. John, and the first twenty Dialogues of Lucian, or the first two Books of The Iliad of Homer. 6. French: Telemachus or Charles XII.

Optional.—1. Natural Philosophy: Mechanics, Hydrostatics, and Pneumatics. 2. Natural History: The Classification and Elementary Structure of Vegetables and Animals.

THE ARTS EXAMINATIONS

will be held at the Hall four times in the year—viz., the third Friday in the months of January, April, July, and October, at

the hour of two o'clock p.m. It will be conducted by means of printed Papers and by Special Examiners (Graduates in Arts of the University of Dublin), with Assessors from the Court of the Hall; the Answers to the Papers will be required in Writing.

Numerical values will be attached to the Answers, and only Candidates who attain a certain proficiency will obtain "the Certificate in Arts," or "the Certificate of Apprentice."

Unsuccessful Candidates will be remitted to their Studies for a period of six months.

THE PROFESSIONAL EDUCATION AND EXAMINATIONS.

Every Candidate for the Licence to practise must produce Certificates to the following effect:—

1. Of having passed an Examination in Arts previously to entering on Professional study.

2. Of being at least twenty-one years of age, and of good moral character.

3. Of Apprenticeship to a qualified Apothecary, or of having been engaged at Practical Pharmacy with an Apothecary for a period of three years subsequent to having passed the Examination in Arts.

4. Of having spent four years in Professional Study.

5. Of having attended the following Courses, viz.:—Chemistry, during one winter session; Anatomy and Physiology, during two winter sessions; Demonstrations and Dissections, during two winter sessions; Botany and Natural History, during one summer session; Materia Medica and Therapeutics, during one summer session; Practical Chemistry (in a recognised Laboratory), during three months; Principles and Practice of Medicine, during one winter session; Midwifery and Diseases of Women and Children, during six months; Practical Midwifery at a recognised Hospital (attendance upon twenty cases); Surgery, during one winter session; Forensic Medicine, during one summer session; Instruction in the Practice of Vaccination.

6. Of having attended, at a recognised Hospital or Hospitals, the Practice of Medicine and Clinical Lectures on Medicine, during two winter and two summer sessions; also the Practice of Surgery and Clinical Lectures on Surgery, during one winter and one summer session.

7. Of having performed the operation of Vaccination successfully, under a recognised Vaccinator.

The Examination for the Licence to practise is divided into two parts:—The First Part comprehends Chemistry, Botany, Anatomy, Physiology, Materia Medica, and Pharmacy. The Second—Medicine, Surgery, Pathology, Midwifery, Forensic Medicine, and Hygiene. The First Part may be undergone at the close of the second Winter Session, and after the Candidate has attended the Courses upon the several subjects named for this Examination; and the Second after the completion of his studies at the termination of the fourth Winter Session.

The Professional Examinations will be held quarterly, and will commence on the first and second Mondays in the months of January, April, July, and October. They will be carried on as follows:—The First Part, for Junior Students, by papers, on the first Monday, at twelve o'clock, noon; and orally, on the Tuesday and Wednesday succeeding, at the same hour. The Second Part, or Pass Examination for Senior Students, by papers, on the second Monday, at twelve o'clock, noon; and orally, on the Tuesday and Wednesday succeeding, at the same hour.

Candidates who fail to pass the First Part of the Professional Examination will be remitted to their studies for three months, and unsuccessful Candidates at the Pass Examination will not be readmitted until after the expiration of six months.

Numerical values will be assigned to the Answers, both written and oral, in the several Examinations, and only Candidates who possess a proficiency of Medical knowledge in *all* the subjects will obtain "*The Licence to practise.*"

In case a Candidate is rejected for failure in any one subject, he will be re-examined in all.

Doctors of Medicine of any of the Universities of the United Kingdom, or Surgeons of any of the Royal Colleges of Surgeons, whose qualifications as such appear in the Medical Register, and who, having first passed an Examination in Arts, have also served an apprenticeship, or the required term, at Practical Pharmacy, to a qualified Apothecary, may obtain the Licence of the Hall by undergoing an Examination—the former in Pharmacy(a) and the latter in Medicine and Pharmacy.

(a) The Examination in Pharmacy will include Practical Pharmacy, Pharmaceutic Chemistry, Toxicology, Medical Botany, and the British Pharmacopœia.

Candidates for the Licence must lodge their testimonials, and enrol their names and addresses with the Clerk at the Hall, in Dublin, a week prior to the day of Examination.

An Honour Examination of Apprentices is held at the Hall in the first week in May annually, upon some subject of Medical or Pharmaceutical Chemistry, which is announced by the Council of the Hall at the commencement of the previous Winter Session, and a prize of Five Guineas is awarded to the successful competitor.

TO CORRESPONDENTS.

We beg to return our best thanks to the Registrars and Secretaries of the various Universities, Colleges, and Schools for their prompt replies to our Circular, and for the trouble they have taken in supplying the latest Regulations of the Institutions with which they are connected.

In order to confine the whole of this week's Number to information specially important to Students, we are compelled to defer answers to several Correspondents, together with all notices of passing events, until next week.

NOTICE.

The following Lectures and Communications by eminent Continental Professors will appear at an early date in the MEDICAL TIMES AND GAZETTE.

The Lectures have been specially reported for this Journal, and are revised by their Authors.

Professor FRERICHS,
Professor of Clinical Medicine at Berlin,
ON DIABETES.

Professor LEBERT,
Professor of Clinical Medicine at Breslau—

1.—Introductory Lecture,
ON CLINICAL PRACTICE IN THE IN-PATIENT AND OUT-PATIENT DEPARTMENTS,
Its Bearing on Medical Teaching and on Public Health.

2.—Two Lectures
ON CONGENITAL PULMONARY STENOSIS.

3.—ON INFANTILE SYPHILIS, AND THE INFLUENCE OF SYPHILIS ON TUBERCULOSIS.

4.—ON THE MILK-AND-WHEY TREATMENT, AND ON HEALTH RESORTS.

Professor NIEMEYER,
Professor of Clinical Medicine at Tübingen—

1.—ON HEMIPLEGIA AND APHASIA CAUSED BY EMBOLISM.

2.—ON EMPHYSEMA.

Professor BILLROTH,
Professor of Clinical Surgery in Vienna,
ON EPISPADIAS AND HYPOSPADIAS.

Dr. EULENBURG,
Lecturer on Clinical Medicine in Berlin,
ON DISEASES OF THE NERVOUS SYSTEM.

Medical Times and Gazette.

SATURDAY, SEPTEMBER 11, 1869.

TO STUDENTS.

It is the custom, and we think it a good one, annually to address a few words of counsel and advice to the cadets of our Profession—to those who are entering as to those who have already entered upon the course of training which is to fit them for its high if heavy duties. It is too much the fashion to contemn this sort of thing; but we are inclined to believe that a young man leaving home for the first or even second time is none the worse for that last word of counsel from his

mother, nor for the last hearty grip of his father's hand. We are anxious to let such men know that if they are entering upon a path which may be very toilsome, they may be assured of a word of sympathy and a hand of help from those who have already trodden that path and who well know its difficulties and dangers. As a rule, especially in our London schools, there is a hearty good feeling between teachers and taught which goes far to lighten the labours of both, and to encourage this is ever one of our main objects. Still further to advance this good end, we would seek to impress on those who are about to enter on their studies the benefit and the duty of cultivating a true manliness of character. Let them be Bayards in their calling, without fear and without reproach. All men, and we might add women too, shrink instinctively from a milksop; but to avoid this failing, it is not at all necessary to be either rough, rude, or impertinent. One might almost think we were addressing boys instead of men, but we have seen examples of both classes only too frequently in our Schools of Medicine. On the whole, however, we may say that in no class of the community is manliness of character more manifest than among our Medical students; only it is a little apt to assume strange and *outré* forms. Not that we have nowadays to deal with the Medical student of the past, the man who dressed in strange shaggy coats, and carried enormously big sticks, who smoked a great deal, and drank far more beer than was good for him. The Medical student of the present time is a being much like other men of the same age, perhaps in some instances rather finer. But the character of a fine gentleman is out of all keeping with the calling of a Medical student; and we would earnestly advise the man entering on his studies to eschew it as much as possible: it is not manly. If it were desirable we could give a score of instances where this line has failed. Men once famous for the cut of their trousers have been glad to get anything to wear at all, and in some instances have obtained the means not over-scrupulously. For, as a rule, fine gentlemen make bad students; they do not care to dirty their fingers by bedside work; and we most earnestly assure beginners that men who shirk bedside and dissecting-room work will never come to much. On the other hand, there are Medical slovens, who are in certain respects more disagreeable than the fine gentlemen; for, after all, if a man does dirty his fingers, he may wash them again. In this, as in other matters, avoid extremes.

Most Medical students enter upon their studies with a true and earnest desire to fit themselves for the practice of their chosen profession. It is in a falling away from this honest and honourable aspiration that a want of true manliness is most frequently visible. Some schools have evil traditions to the effect that—Hospital men don't work, just like the conceited officers of the conceited regiment who went to parties and "didn't dance." We counsel all men to strenuously strive against such traditions. The majority of the men who enter on our Profession are not rich: very often their parents have to economise to enable them to pursue their expensive studies. And what *man* is there who, knowing this—knowing, it may be, that his sisters are not receiving their due that the hope of the family may obtain the fullest advantages—what *man*, we repeat, would hesitate for one moment before buckling to the work which lies before him? And yet it is done. At the time when men enter themselves as Medical students, four years looks a long time, in which much may be done; but *very much* has to be done to fit a man for the Profession of Medicine, and if the proper period for studying any subject be allowed to pass by, a more convenient period will certainly never come. This we most earnestly urge on all men: to act differently is one of the grand mistakes students make. Again and again we hear men now in practice saying, "What fools we were when students! What splendid opportunities we allowed to slip by us unheeding!" and they regret it. Every session brings its appointed duties, and the work of two cannot be condensed into one. Teachers are anxious to teach, but men are often not at all anxious to be taught. And in Medicine, of all callings in the world, genius, or insight if you like to call it, is least adapted to take the place of training. For it must be remembered how serious are our duties, that in our hands rest the lives of our fellow-men, and we do not envy the feelings of any *man* who knows within himself that a life has been lost through his carelessness—that, had he paid more attention to his studies, another human being, dear, no doubt, to somebody, might be then alive.

Another phase which earnestness of manly purpose will assume is regularity and punctuality. As matters now stand, it is ordained that students shall attend certain courses of lectures, and shall see or do so much work in the wards. We have nothing to do with the question whether this should be so or not. We know that it is so now. Men ought to cultivate habit as much as possible. The habit of regularity is easily acquired, and the habit of missing lectures is an excessively bad one. We do not speak of the results of this habit on after-life, but we can show how foolish it is for students to acquire it. As a rule, a man will learn more in an hour from a good teacher than he could teach himself, even were he capable of so doing, in twice or thrice the time. Every lecture which a man misses implies the loss of some knowledge necessary to a true understanding of other portions of the course, whereby the loss is greatly intensified. The impression conveyed by a good teacher, assisted by the various devices he has at hand, is much clearer than can be obtained by reading a book, however excellent. For the sake, therefore, of the actual gain in time, which nowadays is money—to say nothing of the good habits thus obtained—we counsel all men to be regular and punctual in their attendance, both on lectures and on practice.

Some men who enter on the study of our Profession can never rise above the level of the shop; they have no manly individuality of character; they are obsequious to their teachers; they are obsequious to their employers; in after life they are obsequious to their patients. Such men are unpleasant, and they do much harm to our Profession. Some may have heard the story of one of our great Surgeons who, having to canvass the governors of one of our Medical charities for an appointment, had occasion to call upon a snobbish grocer. The grocer desired to give himself airs over his little bit of authority, but was recalled to his due position by the Surgeon demanding a pennyworth of figs, and telling him to be quick about it. An obsequious man would not have done this. A manly independence is at all times respectable and respected by those whose good opinion is worth having, for there are men by whom it is much the best thing to be despised and detested.

We have no wish to weary our young readers with oceans of good advice. Let us hope we have said enough to induce them to cultivate a true manly earnestness of character—in the words of Holy Writ, "to quit them like men, and be strong."

HOW TO SUCCEED.

Last year, in the course of those few words of advice which we feel it our duty to offer to students of Medicine at the outset of their career, we said that five kinds of study were essential for making up the perfect Physician or Surgeon. First, he must have the education of a gentleman. Secondly, he must know the elements of general science, as Physics and Chemistry; and these two branches ought to be achieved before Medical study, in the proper sense of the word, begins. Thirdly, he ought to know Anatomy and Physiology, or the structure and actions of living beings in health; and fourthly Pathology, or the science of the perversions which structure and functions undergo in disease; and with the science of Pathology should be combined the acquisition of the *art* of healing the sick—an art which can only be acquired by long practice, and many of the procedures of which are founded on instinct,

custom, or, in other words, are *empirical*, and not yet to be accounted for on scientific principles.

But there is yet another art which the Medical student ought to acquire, or rather to keep the acquisition of it before his eyes, and that is the art of getting on in the world. It, like the art of healing, is an empirical art, and can only be learned effectually by the lessons of daily experience. Yet some palpable rules may be given; or at least, if we cannot absolutely lay down, as on a chart, the course which will lead to the Haven of Success, we may point out some of the hidden shoals and quicksands on which some men make shipwreck, spite of talents, industry, and a fair start in the world.

We need not point out the *infames scopulos*—the notorious causes of ruin—idleness, beer, betting, women, and the other pleasures of a fast life—for we do not want to preach, and there is nothing we could say that our readers do not know already. There are sometimes, in a large Medical school, a set of low fast men fond of beer, and a set of exquisite fast men of kid-glove and *eau-de-Cologne* propensities; but personages of this sort can hardly be said to fail in Medical life, for a man cannot well be said to fail in what he does not attempt. No; there are men who fail though they are neither dunces nor reprobates, but who have faults in their mental constitution, which, perhaps, they pique themselves on as it they were virtues. It is these, the hidden, unsuspected causes of failure, that we would point out whilst there is a chance of avoiding them.

First amongst these we would place an ill-directed and ill-balanced method of study, leading to what may be called pedantry. Now, a pedant is to a well-informed man what a miser is to a liberal man. He values the possession of knowledge more than the use of it. And pedantry of all kinds is most odious to the present generation, and rightly so. There is not much temptation just now to excess in the cultivation of ancient classical learning. On the contrary, Greek and Latin are very much at a discount, and we are in danger of losing that bond of connexion with general scholarship which existed so long as Physicians delighted in being called *learned*. We would most urgently advise our young friends nowadays to keep up their acquaintance with Horace; but it must be for the private solace of the gentleman, not for the use of the Practitioner, for certainly, as things are now, we fear that the reputation of being a good classical scholar would do but little towards bringing a practice. *Laudatur et alget*.

The peculiar form of pedantry or of ill-regulated study which some Medical students require to be cautioned against, is the acquisition of bookish lore, such as may enable them to gain a medal in some particular class, or to answer unlimited questions at a paper examination, but which does not include a familiar practical knowledge of the objects and processes themselves which can be so glibly described on paper. It is the kind of knowledge which a barrister *gets up* when he holds a brief on a scientific case, and describes scientific details to a jury as if he had been all his life conversant with them. But the moment the cause is over, the scientific knowledge, like seed sown on a stony ground, soon withers. It neither wears nor washes. It is an observation frequently made that many men of great early promise, who attained medals and distinctions at their schools twenty years ago, have not met with success in life to match their first start. One thing is clear—that many medallists have done well. But it is equally clear that the peculiar talent alone which enables a man to win a medal will not enable him to gain a large practice. Take the medal, we would say to the student, if you can consistently with the healthy prosecution of your studies; but do not become a bookworm, a recluse, a reader at night. The education of the successful Practitioner must be got from *object lessons*, not from books—from the laboratory, the dissecting-room, the natural history museum, the wards and the pathological museum at the Hospital. Object knowledge is real; book lore is a sham; and, as time is limited, the man who devotes himself to the counterfeit cannot find time for the real thing.

Some men carry on their general or special scientific pursuits so long that they neglect practice. Again, the demon of Professional jealousy sometimes incites men to say of others who have distinguished themselves in science that they know nothing of the practice of their Profession. This topic belongs rather to the finish than to the beginning of a Medical career; but the sagacious student will be wise in time.

The life of a Medical Practitioner is spent in contact with his fellow-creatures of all grades and all shades of character; and these he must learn to guide and dominate. Sick men are feeble, doubtful, and dependent. In their Medical adviser they look for strength, certainty, and hope. It is not the pale-visaged consumer of midnight oil, nor the irresolute and timid, whom they care to seek help from. It is the strong man, who believes in himself, and seems to know what he is about, that inspires confidence. Mental strength must have bodily strength and health as a basis. Both are created and fostered by steady, slow, regular habits of life and work; not by spasmodic efforts with intervals of idleness, but by the policy of the tortoise, and not that of the hare, in the fable. Self-distrust is fatal to the Practitioner; but it often means simply an ill-nourished brain, or a brain not used to be well nourished. Early hours, abundant sleep, and a hearty breakfast—not the mere tea and bread-and-butter, but a substantial meal early in the day—with habits of study and never excessive work, lay the foundation for the cheerful, active, helpful, unirritable temper which is generally the characteristic of the successful Practitioner.

CHANGES IN THE METROPOLITAN MEDICAL SCHOOLS.

The following are the principal changes in our Metropolitan Schools, beginning alphabetically with St. Bartholomew's:—Mr. Paget has retired from the Chair of Surgery, which he held in conjunction with Mr. Holmes Coote, who now shares it with Mr. Savory. Mr. Morrant Baker has given up the dissecting-room for Physiology, vacated by Mr. Savory. Messrs. Marsh and Langton now preside over the practical work in the dissecting-room. Dr. Odling, assisted by Mr. Matthiessen, who also takes the Chair of Practical Chemistry. Dr. Andrew is promoted to the post of Physician, in room of the late Dr. Edwards, and Dr. Dyce Duckworth has been appointed Assistant-Physician. Mr. Vernon now lectures on Diseases of the Eye.

At Charing-cross, Dr. T. H. Green has been appointed an additional Assistant-Physician, and Dr. Tilbury Fox has given up the post of Physician for Skin Diseases for a similar appointment in University College Hospital. Dr. A. J. Pollock succeeds Dr. Alexander Silver in the Chair of Forensic Medicine, the latter having been transferred to the Chair of Physiology. The Chairs of Midwifery and Botany are at this moment vacant. Dr. W. Hunt will lecture on Psychological Medicine.

At St. George's the changes are not great. Mr. Brodhurst has resigned his Assistant-Surgeoncy for the appointment of Orthopædic Surgeon to the Hospital. Mr. T. P. Pick succeeds him as Assistant-Surgeon. Mr. Bryan and Mr. Baber are the present Demonstrators of Anatomy at Guy's. Dr. Braxton Hicks succeeds Dr. Oldham as Obstetric Physician, Dr. J. J. Phillips taking the place vacated by Dr. Hicks. Mr. Bankart and Dr. Phillips have resigned their appointments as Demonstrators of Anatomy, Mr. Davies Colley coming in with those formerly in office as Assistant-Demonstrator.

At King's, Dr. Lionel Beale has given up the Chair of Physiology, in which he is succeeded by Dr. Rutherford. Dr. Beale still retains the Chair of Pathology. Dr. Morris Tonge has retired from the Hospital. Dr. Yeo and Dr. Kelly have been appointed Assistant-Physicians.

At the London Hospital, Mr. John Adams has given up his connexion with the School, and has been appointed Consulting-Surgeon to the Hospital, on the occasion of his resigning the office of Surgeon. Mr. Curling and Mr. Little have also resigned their posts as Surgeons. The new Assistant-Surgeons are Mr. James Adams and Mr. Waren Tay. Dr. Langdon Down has been made Physician, and Dr. Fenwick an Assistant-Physician. In the place of Dr. Morell Mackenzie, the latter now shares the chair of Physiology with Dr. Hughlings-Jackson. Mr. Baker succeeds Dr. Silver in the chair of Botany, and Dr. Woodman Dr. Fenwick in that of Comparative Anatomy.

At St. Mary's, Mr. E. Hart has resigned his post as Ophthalmic Surgeon; Mr. Haynes Walton, already full Surgeon to the Hospital, succeeds him. Messrs. Gascoyen and Norton succeed Mr. James Lane as Teacher of Operative Surgery.

At Middlesex Hospital Mr. Shaw has ceased to be Senior Surgeon, and has given up his share in the Chair of Surgery. Mr. Moore succeeds him in the Chair of Surgery.

St. Thomas remains *in statu quo*.

At University College Dr. Corfield has been appointed to the Chair of Hygiene, and Mr. F. T. Roberts succeeds the unfortunate Mr. Clough as Demonstrator of Anatomy. Dr. Tilbury Fox's appointment has already been mentioned.

At Westminster Mr. Mason has succeeded the late Mr. Bruce in the Chair of Anatomy, Mr. Pearce taking the place as Assistant-Surgeon. Mr. Carter Blake now lectures on Comparative Anatomy.

THE MODERN MEDICAL STUDENT.

There is probably no profession which renders such benefits to society as that of Medicine, and there is certainly no class of men of whom the public knows less than of ourselves. The world in general are in the habit of looking on the Doctor as a respectable, middle-aged, gentlemanly man; but how he became so, of his education, or of his antecedents, they know nothing, and apparently do not in any way interest themselves about them. They wish to forget he ever was a Medical student, so little do they know of the real as contradistinguished from the traditional pursuits of that individual. Whatever ideas may have been held as to Medical students as a class, we are at a loss to know why we still hear disparaging remarks when those engaged in this most noble and self-devoted study are mentioned. If the lay public draws its opinions from Albert Smith's "Medical Student," or from accounts of the exploits of persons of the Bob Sawyer type, they are in error, and do us a great wrong. Amongst large bodies of young men there must of necessity be black sheep, but from our own personal experience we can honestly say there are proportionally fewer in our own than in several professions on whom, fortunately for them, the stigma, however unfounded, has not fallen.

The London Medical student of to-day is a well-educated, honest, hard-working gentleman. Well leavened with university and public school men, our ranks are daily strengthened by the force of education and example. The modern Medical student ceases to be a type *sui generis*, beyond being the most hard-working, probably, of any class of students. His private life is much that of other young men; recruited from all ranks of society, sons of professional men, men of independent means or traders, his spare time is, in almost all instances, profitably or innocently employed, and his historical weakness for beer and tobacco is pretty much on a par with that of his fellows at the universities or in trade. Athletic sports nowadays form a considerable item in his list of amusements, and we can number in our ranks the most distinguished adepts either of the bat, the oar, or running-ground, to be found in England. To mention names would be out of place. All Hospitals have their cricket clubs, most of them their rowing clubs, and all amalgamate in a united athletic club. The supposed predilection of the Medical student for extravagant articles of dress is utterly a thing of the past, no difference being now discernible in this respect between him and any other class of young men. When some raw recruit, fresh from a country apothecary's surgery, arrives first in town, his dress is frequently of homely cut, but it is speedily replaced by some more fashionable garment.

The ordinary expenses of his education—that is to say, his Hospital and lecture fees—may be gathered from the prospectuses. They vary very little, some £20 or so being the difference between the highest and lowest. Students are a mixed class, as far as means are concerned. Whilst some have good allowances from home, or means of their own, others have the greatest difficulty in living, and frequently, during their student life, go out as assistants, thus obtaining their board or lodging in return for services in the surgery, attending lectures as they best can.

With regard to the cost of a student's life, exclusive of educational fees, the following appears to be about the average. It must be borne in mind that locality makes a great difference both with regard to food and lodging. Students usually reside in streets as near to their respective Hospitals as convenient, but frequently they choose some well-known street at a distance, which for years has been associated with them. Thus the small streets leading out of the Strand or Borough, the neighbourhood of Gray's Inn—especially the latter—are favourite resorts, healthy and moderate, and central for both study and recreation.

The part of the house occupied of course makes a considerable difference in rent, but where the student has no more than a single bedroom, which serves him for sitting-room as well, he may obtain accommodation at from 5s. to 10s. a week, a bedroom and sitting-room from 10s. to 15s. a week, or where two men share a sitting-room and have two bedrooms—a very good plan—they would pay from 15s. to £1 a week between them in most cases, sometimes as much as 30s. There is generally some favourite chop-house or eating-house near, and we recommend the best, as it is always the most reasonable. Plain food, well cooked, with good ale, should be enough for any one. The price of such dinners usually varies from 1s. 6d. to 2s. Dinner in company is in every way preferable. The Medical student, of all others, should eat a good breakfast, which should consist of meat or eggs, and tea or coffee, and the average cost of such a breakfast is about 6d. a day. Luncheon and tea come to about the same, supposing these meals are taken. Thus, then, his board and lodging would cost the student on an average about £1 15s. a week. Many of course "do it" on a great deal less; others living in better style may spend according to their means; but, from our own personal experience, the above may be considered a very fair average. Some of the Medical officers or teachers in the schools receive house pupils, who have board and lodging, and are generally looked after; such pupils are usually charged from 100 to 150 guineas a year.

Extra tuition—"coaching," as it is termed—often forms an additional item, and although many teachers are not particularly favourably disposed to the "grinders," as they call them, these gentlemen, from long experience in teaching, and by keeping well up to the times, have great success in assisting not only backward or idle students, but others who it might be thought could have no possible cause for other help than that obtainable from their Hospital staff.

We are glad to see that special practical instruction now forms a part of the curriculum at most Schools (at least in the prospectuses); but until these departments are really better worked the private teachers will still be in request.

We are sorry to find that the report, referred to in our last number, that Dr. Fleming has declined to deliver the Introductory Address at the opening of the Queen's College of Birmingham is correct. After the unanimous request of the

Council that Dr. Fleming should perform this duty, it is much to be regretted that any cause should have arisen to prevent the invitation being accepted. Dr. Fleming has been long so well known in London as one eminently fitted to speak with authority on subjects connected with Medical education, that we should have thought that his appointment would have met with the warmest support of all who feel an interest in the Queen's College; and if, as we fear, the cause of his refusal to give the address arises from the opposition of those who ought to have been the first to welcome his appointment, we must express our great surprise that such should be the case, and the only explanation we can offer is, that Dr. Fleming's status as a man of science cannot be so well understood in Birmingham as it is in London.

DAYS AND HOURS OF INTRODUCTORY LECTURES

TO BE DELIVERED AT THE DIFFERENT MEDICAL SCHOOLS.

IN THE METROPOLIS.

	Days and hours, p.m.	
St. Bartholomew's Hospital and Medical School	Oct. 1,	No Introductory Lecture announced.
Charing-cross Hospital and Medical Coll.	,, 4, 8	Dr. Alex. Silver.
St. George's Hospital Medical School	,, 1, 2	Dr. Wadham.
Guy's Hospital Medical School	,, 1, 2	Dr. C. Hilton Fagge.
King's College Medical Department	,, 1, 3	Prof. George Johnson, M.D.
London Hospital Medical College	,, 1, 4	Mr. C. Meymott Tidy, M.A., M.B.
St. Mary's Hospital Medical School	,, 1, 8	Dr. Cheadle.
Middlesex Hospital Medical School	,, 1, 3	Dr. Robt. Liveing, M.A.
St. Thomas's Hospital Medical College	,, 1, 3	Dr. Stone.
University College, Faculty of Medicine	,, 4, 4	Professor Sir Henry Thompson.
Westminster Hospital Medical School	,, 1, 8	Mr. Walker.

IN THE PROVINCES.

	Days and hours, p.m.	
Leeds School of Medicine	,, 4,	Mr. James Seaton.
Liverpool Royal Infirmary School of Medicine	,, 1, 3	Dr. Davidson.
Manchester Royal School of Medicine	,, 1, 12	Mr. S. M. Bradley.
Newcastle-upon-Tyne Coll. of Medicine	,, 4, 2	Dr. W. Murray.
Sheffield School of Medicine	,, 1, 4	Mr. A. Jackson.

The Winter Session of the Bristol Medical School and the Hull School of Medicine will commence on October 1, and the Queen's College Medical School, Birmingham, on October 4.

TABLE OF FEES CHARGED IN THE MEDICAL SCHOOLS OF ENGLAND

FOR ALL LECTURES AND HOSPITAL PRACTICE REQUIRED FOR THE LICENTIATE EXAMINATIONS OF THE ROYAL COLLEGE OF PHYSICIANS OF LONDON AND THE LONDON SOCIETY OF APOTHECARIES, AND FOR THE MEMBERSHIP EXAMINATION OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

London.	£	s.	d.
St. Bartholomew's (in three half-yearly instalments of £31 10s., £31 10s., and £36 15s.)	99	15	0
Charing-cross (in three yearly instalments of £36 15s., £31 10s., and £14 14s., in the case of Matriculated Students a deduction of 8 per cent.)	82	19	0
St. George's Hospital (in yearly instalments of £42, £42, and £10 10s.)	94	10	0
Guy's Hospital (in three yearly instalments of £40, £40, and £10)	90	0	0
King's College (in one sum)	100	0	0
,, (in instalments of £52 10s., £42, and £10 10s.)	105	0	0
London Hospital (in two instalments of £44 2s. each)	88	4	0
St. Mary's (in one sum)	84	4	0
,, (in instalments by arrangement with the Dean)	89	5	0
Middlesex, unlimited (or in yearly instalments of £35, £35, and £20, and £10 each succeeding year)	90	0	0
St. Thomas's (in yearly instalments of £40, £40, and £10)	90	0	0
University College (payable in yearly instalments of £54 6s., £33 12s., and £7 7s.)	95	5	0
Westminster (in one sum)	70	0	0
,, (in yearly instalments of £35, £30, and £10)	75	0	0
The Provinces.			
Birmingham—Queen's College and Hospital	78	15	0
Birmingham—Queen's College and General Hospital	91	7	0
Bristol Medical School and Bristol Royal Infirmary	103	15	0
Bristol Medical School and Bristol General Hospital	92	10	0
Hull Medical School and Hospital	63	0	0
Leeds Medical School and Infirmary (in two yearly instalments)	86	2	0
Liverpool Royal Infirmary and School	76	13	0
Liverpool Royal Infirmary School and Northern Hospital	76	13	0
Manchester Medical School and Infirmary	84	0	0
Newcastle School and Infirmary (in one payment)	64	1	0
,, (in three yearly payments of £26 5s., £25 4s., and £24 3s.)	75	12	0
Sheffield Medical School and Infirmary	76	15	0

TABLE OF FEES CHARGED IN THE MEDICAL SCHOOLS OF ENGLAND

FOR THE LECTURES AND SURGICAL PRACTICE REQUIRED BY CANDIDATES FOR THE DIPLOMA IN DENTAL SURGERY OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

	£	s.	d.
St. Bartholomew's (the "General Subjects required") (payable in two half-yearly instalments of £26 5s. each)	52	10	0
St. George's Hospital and School (not including Pract. Chem.)	45	0	0
King's College (in one sum)	67	0	0
,, (in two yearly instalments of £50 and £20 7s.)	70	7	0
St. Mary's	52	10	0
Middlesex (in two yearly instalments of £26 5s. and £15 15s.)	42	0	0
Westminster Hospital (in yearly instalments of £20 and £10)	30	0	0

EDUCATIONAL VACCINATING STATIONS.

In order to provide for the granting of those special certificates of proficiency in vaccination which, under the regulations of the Privy Council, are required to be part of the Medical qualification for entering into contracts for the performance of public vaccination, or for acting as deputy to a contractor, the following arrangements are made:—

1. The vaccinating stations enumerated in the subjoined list are open, under conditions appointed by the Privy Council, for the purposes of teaching and examination.

2. The public vaccinators officiating at the stations are authorised by the Privy Council to give the required certificates of proficiency in vaccination to persons whom they have sufficiently instructed therein; and

3. The public vaccinators, whose names in the subjoined list are printed in italic letters, are also authorised to give such certificates, after satisfactory examination, to persons whom they have not themselves instructed.

London.—Principal Station, Surrey Chapel, Blackfriars-road: *Mr. James Furness Marson*, who attends on Tuesday and Thursday at 1 p.m. North-west Station, 13, Lisson-grove: Mr. James George Gerrans, on Monday, at 10 a.m. West Station, 9, St. George's-road, Pimlico, S.W.: Dr. Edward Lowe Webb, on Monday, at 10 a.m. East Station, 1, Well-street, Well-close-square: Mr. William Jones Lewis, on Tuesday, at 10 a.m. North Station, Tottenham-court Chapel, Tottenham-court-road: Mr. William Edwin Grindley Pearse, on Monday and Wednesday, at 1 p.m. South-west Station, 2, Regent-place, Horseferry-road: Mr. William Edwin Grindley Pearse, on Tuesday, at 2 p.m. Strand Station, Charing-cross Hospital: Mr. Robert William Dunn, on Monday, at 10 a.m.

Birmingham.—The General Dispensary: *Dr. George Francis De la Cour*, on Monday, at 10 a.m.

Bristol.—The Public Vaccination Station, Peter-street: *Dr. Henry A. P. Robertson*, on Wednesday, at 11 a.m.

Exeter.—Odd Fellows' Hall, Bamfyld-street: *Mr. Charles H. Roper*, on Thursday, at 3 p.m.

Leeds.—23, Burmantofts-street: *Mr. Frederick Holmes*, on Tuesday, at 3 p.m.

Liverpool.—The Ladies' Charity, Parr-street: *Mr. Arthur Browne Steele*, *Mr. John Henry Wilson*, and *Mr. John Fenton*, acting conjointly, or at least two of them together, on Friday, at 2 p.m.

Manchester.—159, Rochdale-road: *Mr. Ellis Southern Guest*, on Monday, at 2 p.m.

Newcastle-on-Tyne.—11 Pilgrim-street: *Mr. George Cuthbert Gilchrist*, on Tuesday, at 2 p.m.

Edinburgh.—The Royal Dispensary: *Dr. William Husband*, on Wednesday and Saturday, at 12.

Glasgow.—The Hall of the Faculty of Physicians and Surgeons: *Dr. James Dunlop*, on Monday, at 12. The Royal Infirmary: Dr. Robert Dunlop Tannahill, on Monday and Thursday, at 12.

PRIVATE TEACHERS IN LONDON.

Da. Barron gives courses of Medical and Surgical tuition adapted to Students for Professional Examination at his Class-rooms, Millikin's Chambers, 12, Southwark-street, Borough.

Dr. Coales, M.A., 10, Trinity-square, S.E., prepares Candidates for the B.A., Prelim. Sc., and Matriculation Examinations of the University of London, and for the Examinations in Arts at the Royal College of Surgeons, Apothecaries' Hall, etc.

Mr. E. B. Goodwin, of Trinity College, Dublin, prepares gentlemen for the Preliminary Examinations at the College of Surgeons, Apothecaries' Hall, etc., at 8, Tyndale-terrace, Canonbury-square, N.

The Drs. Power continue daily their instructions for the various Competitive and Pass Examinations, at 8, Red Lion-square, Holborn, W.C.

Mr. J. Pincott, F.R.G.S., prepares Students for the Preliminary Examination of the Royal College of Surgeons and the Matriculation of the London University, at Tellham-house, Brixton-hill, S.

Dr. Steggall gives instructions to Medical men and Students in all the branches of their studies, at his residence, 2, Southampton-street, Bloomsbury-square.

City of London Hospital for Diseases of the Chest, Victoria-park.—Office, 24, Finsbury-circus, E.C.—Physicians—T. B. Peacock, M.D., J. R. Bennett, M.D., E. L. Birkett, M.D., S. H. Ward, M.D., J. Andrew, M.D. Consulting Surgeon—J. Hilton, F.R.S. Assistant-Physicians—J. C. Thorowgood, M.D., H. G. Sutton, M.B., S. Fenwick, M.D., A. B. Shepherd, M.B. Junior Assistant-Physicians—C. Bäumler, M.D., W. Rickards, M.D. Resident Medical Officer—Mr. W. H. Power. The Hospital affords accommodation for 120 in-patients. During the last year 639 cases were under treatment in the wards, and 14,928 were relieved as out-patients. In-patients admitted since the wards were opened in 1855, 6200; out-patients admitted since the establishment of the Institution in 1848, 163,700. Information respecting Medical instruction at the Hospital may be obtained on application to the Physicians.

TABLES

GIVING THE NAMES OF LECTURERS, HOURS OF LECTURE, DAYS OF ATTENDANCE, AND FEES IN THE METROPOLITAN MEDICAL SCHOOLS AND HOSPITALS.

LECTURES.	ST. BARTHOLOMEW'S.					CHARING CROSS.					ST. GEORGE'S.				
	Lecturers.	Days and Hours.	Fees. 1 Course	2 Courses	Perpetual.	Lecturers.	Days and Hours.	Fees. 1 Course	2 Courses	Perpetual.	Lecturers.	Days and Hours.	Fees. 1 Course	2 Courses	Perpetual.
WINTER SESSION.			£ s.	£ s.	£ s.			£ s.	£ s.	£ s.			£ s.	£ s.	£ s.
PRINCIPLES AND PRACTICE OF MEDICINE	Dr. Black Dr. Andrew	M Tu and Th 3 30	5 5	..	7 7	Dr. H. Salter	M W F 2.30	4 4	6 6	..	Dr. Barclay	M W F 9	6 6	..	7 7
SURGERY	Mr. H. Coote Mr. Savory	W F 3.30 S 9 a.m.	5 5	..	7 7	Mr. Canton	Tu Th S 9	3 3	5 5	..	Mr. Holmes	Tu Th S 9	6 6	..	7 7
DESCRIPTIVE & SURGICAL ANATOMY	Mr. Holden Mr. Callender	Tu W Th F 2.30	7 7	..	10 10	Mr. Barwell	M W F 9 Th 3.30	4 4	6 6	..	Mr. Rouse	M W F 3	6 6	..	7 7
ANATOMICAL DEMONSTRATIONS.	Mr. Langton Mr. Marsh	Daily 10.15 till 2	3 3	5 5	..	Mr. Bellamy	Daily, 10 to 1	3 3	5 5	..	Mr. Byam Mr. Baber	..	3 3	..	..
GENERAL ANATOMY AND PHYSIOLOGY	Mr. W. M. Baker	M Tu Th F 9	7 7	..	10 10	Dr. Silver	M Tu W F 3.30	4 4	6 6	..	Dr. W. Ogle Mr. Sims, *dem*	Tu Th S 11	6 6	..	7 7
CHEMISTRY	Dr. Odling Mr. Matthiessen	M W F 10	5 5	..	7 7	Mr. Heaton	M W F 10	5 5	..	..	Dr. Noad	Tu Th S 11.30	6 6	..	8 8
HOSPITAL PRACTICE—															
Physicians	Dr. Farre	Tu 12 Tu S 1.30	12 12 6 mths	18 18 2 yrs.	26 5	Dr. H. Salter Dr. Headland	M W F 1 Tu Th S 1	10 10 6 mths	15 15 12 mths	21 0	Dr. Fuller Dr. Barclay Dr. J. Ogle Dr. Wadham	Tu S 1 M F 1 M F 1 Tu S 1	8 8 6 mths	16 16 3 years	25 4
	Dr. Black Dr. Harris Dr. Andrew	M Tu Th 1 Tu Th S 1.30 M Tu Th F S 1.30													
Assistant-Physicians ..	Dr. Southey Dr. Church Dr. Gee Dr. Duckworth	W S 11 Tu F 11 M 11 Th 11	..	..	..	Dr. Pollock Dr. Silver Dr. Green	M Th Tu F W S	..	..	..	Dr. Dickinson Dr. W. Ogle	Tu S 12 M F 12	..	..	..
Surgeons	Mr. Paget	M Tu Th F S 1.30	15 15 6 mths	21 0 1 year	26 5	Mr. Hancock Mr. Canton	Tu Th S 1 M W F 1	10 10 6 mths	15 15 12 mths	21 0	Mr. P. Hewett Mr. Pollock Mr. H. Lee Mr. Holmes Mr. Brodhurst (Orthop.)	M F 1 Tu S 1 Tu S 1 M F 1	15 15 6 mths	21 0 3 years	42 0
	Mr. Coote Mr. Holden Mr. Savory	M W F S 1.30 Tu F S 1.30 M T Tu W Th F S 1.30													
Assistant-Surgeons	Mr. Callender Mr. T. Smith Mr. Willett Mr. Langton	W S 12 M Th 12 F 12 Tu 12	..	..	..	Mr. Hird Mr. Barwell	Tu Th S M W F	..	..	..	Mr. Rouse Mr. Pick	M F 12 Tu S 12	..	..	..
Physician-Accoucheur ..	Dr. Greenhalgh	Th 1 30 S 9	..	..	..	Dr. Parson	M W F	..	..	..	Dr. J. Clarke	Tu S 1 Th 12	..	..	..
CLINICAL MEDICINE ..	Dr. Farre Dr. Black Dr. Harris Dr. Andrew	.. Weekly	..	..	..	By the Physicians Dr. A. J. Pollock	.. ..	..	..	..	Dr. Fuller Dr. Wadham Dr. J. Ogle	M 2 M 2 M 2 sum.	..	..	..
CLINICAL SURGERY ..	Mr. Skey Mr. Paget Mr. Coote Mr. Holden Mr. Savory	.. Weekly	..	..	..	By the Surgeons	..	..	..	..	Mr. Hewett Mr. Pollock Mr. H. Lee	Tu 2 Tu 2 Tu 2 sum.	..	..	..
DISEASES OF WOMEN ..	Dr. Greenhalgh	..	..	..	..	..	..	..	..	..	Dr. Clarke	F 2	..	..	..
MORBID ANATOMY AND PATHOLOGY	Medical and Surgical Registrars	Daily 12 and 2	..	..	..	Dr. T. H. Green	W F 12 sum	2 2	..	..	Dr. J Ogle	Th 3 win. Tu Th 3 sum.	5 5	..	..
OPHTHALMIC SURGERY ..	Mr. Vernon	..	..	..	..	..	..	..	..	..	Mr. H. Power	W 10 win	..	..	..
SUMMER SESSION.															
MATERIA MEDICA	Dr. Farre	Tu Th S 10 W 11 30	5 5	..	6 6	Dr. Headland	Tu Th S 12	3 3	..	..	Dr. Dickinson	M W F 3	4 4	..	5 5
BOTANY	Rev. G. Henslow	M W F 10	3 3	..	4 4	..	M W F 10	2 2	..	..	Mr. Child	Tu Th S 3	3 3	..	4 4
FORENSIC MEDICINE ..	Dr. R. Southey	M Th S 9	3 3	..	4 4	Dr. A. Pollock	M W F 4	2 2	..	..	Dr. Wadham	Tu Th S 9	4 4	..	5 5
MIDWIFERY	Dr. Greenhalgh	Tu W F S 8 30 a.m.	5 5	..	6 6	..	M W Th 3	3 3	..	..	Dr. J. Clarke	M W F 9	5 5	..	6 6
PRACTICAL CHEMISTRY ..	Mr. Matthiessen	M Tu F 11 to 1.30	2 2	..	..	Mr. Heaton	M W F 11	2 2	..	..	Dr. Noad	M W Th F 10	4 4	..	..
MICROSCOPIC ANATOMY ..	Mr. M. Baker	..	1 1	..	..	Dr. Silver	..	..	..	..	..	..	..	..	..
DEMONSTRATIONS OF MICROSCOPIC ANATOMY ..	Mr. Vernon Dr Thorne	..	..	..	..	..	..	..	..	..	..	..	..	..	..
COMPARATIVE ANATOMY..	Dr. Church	Tu Th 11 Summer	2 2	..	3 3	Mr. J. C. Galton	..	3 3	..	4 4	Dr. Bright	M F 4.30	..	..	..
ORTHOPÆDIC SURGERY ..	Mr. Willett	..	..	..	..	..	..	..	..	..	Mr. Brodhurst	Tu 10	..	..	..
DRESSERSHIPS	..	..	12 12 3 mths	18 18 6 mths	26 5 1 year	..	..	..	..	..	..	..	..	..	..
DENTAL SURGERY	Mr. Coleman	S 10	2 2	..	3 3	Mr. Parkinson	..	..	..	..	Mr. Vasey	Tu 10	1 1	..	..
PSYCHOLOGICAL MEDICINE	..	..	..	..	..	Dr. Hunt	M 12	..	..	..	Dr. Blandford	W 3	..	..	..
OPERATIVE SURGERY ..	Mr. Langton Mr. Marsh	..	4 4	..	..	Mr. Barwell	..	..	..	..	Mr. Rouse	..	4 4	..	..
SKIN DISEASES	Dr. Gee	..	..	..	..	..	Tu 2.30	..	..	..	Dr. Barclay	Th 2.30	..	..	..
PRACTICAL PHARMACY ..	The Apothecary	..	..	..	..	..	..	..	..	..	..	..	..	..	..
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Unlimited to all Lectures ..	..	..	..	..	65 2	..	..	..	..	..	..	..	..	..	..

LECTURES.	GUY'S. Lecturers.	Days and Hours.	Fees. 1 Course £ s.	2 Courses £ s.	Perpetual. £ s.	KING'S COLLEGE AND HOSPITAL. Lecturers.	Days and Hours.	Fees. 1 Course £ s.	2 Courses £ s.	Perpetual. £ s.	LONDON. Lecturers.	Days and Hours.	Fees. 1 Course £ s.	2 Courses £ s.	Perpetual. £ s.
WINTER SESSION.															
PRINCIPLES AND PRACTICE OF MEDICINE	Dr. Owen Rees Dr. Wilks	M W F 3	5 5	..	..	Dr. G. Johnson	Tu 4 Th F 5	7 7	..	7 7	Dr. H. Davies Dr. A. Clark Dr. Ramskill	M W Th 9.15 till Xmas, after Th 9.15 M F 4	5 5	..	6 6
SURGERY	Mr. Birkett Mr. C. Forster	Tu Th 3.30 F 10.30	5 5	..	..	Sir W. Fergusson	M Tu W 5	6 6	..	7 7	Mr. Hutchinson	Tu F S 9	5 5	..	6 6
DESCRIPTIVE & SURGICAL ANATOMY	Mr. Durham	Tu W Th F 9	5 5	..	..	Mr. Partridge	Daily except M 9	7 7	..	10 10	Mr. Rivington	M Tu Th F 3	5 5	..	8 8
ANATOMICAL DEMONSTRATIONS	Dr. Pye Smith Mr. Howse, & Mr. Davies-Colley, *Assist-Dem.*	Daily 9 to 4	5 5	..	..	Mr. Wood *Ass.-Demonst.* Mr. Perrin Mr. Hayes Mr. H. J. Rope Mr. Skrimshire	..	..	..	..	Mr. J. Adams Mr. W. Tay	Daily 10 to 3 exc. W. & S after.	5 5	..	8 8
GENERAL ANATOMY AND PHYSIOLOGY	Dr. Pavy	M W F 4.15	5 5	..	..	Dr. Rutherford	M W Th F 4	7 7	..	10 10	Dr. H. Jackson Dr. Fenwick	M W Th 4	4 4	..	6 6
CHEMISTRY	Dr. Alf. Taylor	Tu Th S 11	5 5	..	..	Dr. Miller	M W Th S 10.15	8 8	..	10 10	Dr. Letheby Dr. C. M. Tidy	M W F 10.30	7 7	..	7 7
HOSPITAL PRACTICE—															
Physicians	Dr. Owen Rees Dr. Habershon Dr. Wilks Dr. B. Hicks, *obs.*	Tu Th S 1.30 Tu Th S 1.30 M Th 1.30 Tu S 1.30	10 10 3 mths	15 15 6 mths	26 5	*In-patients*— Dr. Johnson Dr. Beale Dr. Garrod *Out-patients*— Dr. Guy Dr. Priestley, *obs.*	M W F 1.30 Tu Th S 2 Tu Th S 1.30 Tu Th S 1.30	10 10 6 mths	15 15 18 mths	21 0	Dr. Davies Dr. A. Clark Dr. Ramskill Dr. Down Dr. Head, *obs.*	Tu F 8.30 M Th 1.30 W S 1 30 Tu F 1.30 Tu F 1.30	6 6 6 mths	12 12 Period req. by Apoth. Ll.	21 0
Assistant-Physicians ..	Dr. Pavy Dr. Moxon Dr. C. H Fagge Dr. J. J. Phillips, *obs.*	F 12 M 12 W 12 M F 1.30 Th S 12	..	..	..	Dr. A. Duffin Dr. Yeo Dr. Kelly Dr. Playfair *obs.*	M W F 1 Tu Th S 1 Tu Th S 1 Tu Th S 12.30	..	..	..	Dr. H. Jackson Dr. Mackenzie Dr. Sutton Dr. Fenwick Dr. Palfrey, *obs*	M 1.30 S 1.30 Th 1.30 W 1.30 W S 1.30			
Surgeons	Mr. Cock Mr. Hilton Mr. Birkett Mr. Poland Mr Poland *oph.* Mr. Hinton *aur*	M Th S 1.30 M Th 1.30 M Th 1.30 W S 1.30 M Th 1.30 Tu 12	10 10 3 mths	15 15 6 mths	26 5	Sir W. Fergusson Mr. Partridge Mr. Wells, *oph.*	Tu Th S 1.30 M W F 1.30 Tu Th S 1	15 15 6 mths	21 0 21 mths	26 5	Mr. Hutchinson Mr. Maunder Mr. Couper	M Th 1.30 W S 1.30 W S 1.30	8 8 6 mths	18 18 18 mths	26 5 3 years
Assistant-Surgeons	Mr. C. Forster Mr. Bryant Mr. A Durham Mr. Bader *oph.* Eye Wards	S 12 M Th 12 W 12 Tu F 12 W S 1.30	..	..	..	Mr. Wood Mr. H. Smith	Tu Th S 1 M W F 1	..	..	..	Mr. Rivington Mr. J. Adams Mr. W. Tay	Tu F 1.30 W 2 W 2	..	..	..
CLINICAL MEDICINE ..	*Winter*— Dr. O. Rees Dr. Habershou Dr. Wilks *Summer*— Dr. Pavy Dr. Moxon Dr. Fagge	S 1.30 W 1.30	..	..	..	Dr. Johnson Dr. Beale Dr. Garrod Dr. Priestley *obs.*	Every alt. M 3 p.m. Every alt. Tu & F 3 Every alt. Tu 3 p.m. Every alt. Th 3	..	..	..	Dr. A. Clark Dr. Ramskill Dr. Davies Dr. Down Dr. Jackson Dr. Mackenzie	M 2 win. W 3.30 win. Tu 9 win. Tu 2 sum. M 2 sum. W 2 sum.	..	..	..
CLINICAL SURGERY ..	*Winter*— Mr. Cock Mr. Hilton Mr. Birkett Mr. Poland *Summer*— Mr. C. Forster Mr. Bryant Mr. Durham	F 1.30 F 1.30	..	..	..	Sir W. Fergusson Mr. Partridge Mr. Wells, *oph.*	Every alt. Th 3 p.m. Every alt. F 3 p.m. Every alt. M 3	..	..	..	By the Surgeons	..	..	..	..
DISEASES OF WOMEN ..	Dr. Hicks	W 1.30	..	..	..	..	..	..	..	..	..	..	..	..	..
MORBID ANATOMY AND PATHOLOGY	Dr. Moxon	Daily 2 30 S 9 sum.	..	..	..	Dr. Beale,	Tu Th 4 sum	2 2	..	..	Dr. Sutton	Th 12.30	5 5	..	6 6
SUMMER SESSION.															
MATERIA MEDICA	Dr. Habershon	Tu Th F 3	4 4	..	..	Dr. A. B. Garrod	Tu W Th F 8 a m.	4 4	..	5 5	Dr. J. L. Down	Tu Th F 4	3 3	..	4 4
BOTANY	Mr. Johnson	Tu Th S 11.30	4 4	.. ..	..	Mr. Bentley	M Tu Th F 12.15	4 4	..	5 5	Mr. Baker	M W F 11	3 3	..	4 4
FORENSIC MEDICINE ..	Dr. A. Taylor	Tu Th S 10	4 4	..	..	Dr. Guy	M Tu W F 12.15	4 4	..	5 5	Mr. Rodgers Dr. P. James	Daily exc. Sat 10	3 3	..	4 4
MIDWIFERY	Dr. B. Hicks	Tu W Th F 8 45 a m.	5 5	..	..	Dr. W. O. Priestley	Tu W Th F 9	6 6	..	7 7	Dr. E. Head	M W Th F 3	4 4	..	6 6
PRACTICAL CHEMISTRY ..	Dr. Stevenson	M W F 10 to 1	4 4	..	..	MrC. L. Bloxam	M W F 10.15	5 5	..	8 8	Dr. Letheby	M Th S 9	2 2	..	..
COMPARATIVE ANATOMY..	Dr. Pye-Smith	Tu F 12.45	4 4	..	..	Mr. T. R. Jones	M W F 4	3 3	..	4 4	Dr. Woodman	M 4	3 3	..	4 4
PRACTICAL HISTOLOGY ..	..	..	..	..	..	..	..	..	..	..	Dr. H. Jackson	..	3 3	..	4 4
NATURAL PHILOSOPHY ..	Dr. Stevenson Mr. D Colley	W 12 win.	4 4	..	..	..	..	..	..	..	..	..	..	..	..
OPERATIVE SURGERY ..	Mr. Bryant	W 3	5 5	..	..	..	..	..	..	..	Mr. Maunder	..	..	..	..
DENTAL SURGERY	Mr. Salter	..	..	..	..	Mr. Cartwright	Tu F 9, alt. Th 10 clin.	6 6	..	8 8	Mr. Barrett	..	2 2	..	..
AURAL SURGERY	Mr. Hinton	..	..	..	..	..	..	..	..	..	Dr. Tidy and Mr. Rivington	..	..	..	..
CUTANEOUS DISEASES ..	Dr. H. Fagge	Tu 12 win.	..	..	..	..	..	..	..	..	..	..	..	..	..
OPHTHALMIC SURGERY ..	Mr. Poland Mr. Bader	M 8.45 a.m.	..	..	..	Mr. J. S. Wells	M Tu W Th 9	3 3	..	..	Mr. J. Hutchinson	Tu F S in June	2 2	..	3 3
DISEASES OF THE THROAT	..	..	..	..	..	..	..	..	..	..	Dr. Mackenzie	..	2 2	..	3 3
PRACTICAL BOTANY ..	Mr. Johnson	Th 12.30	..	..	..	..	..	..	..	..					
USE OF MICROSCOPE ..	Mr. Howse	Tu F 10 win M 3.30 sum	4 4	..	..	..	..	..	..	..					
TUTOR'S CLASS	..	..	..	..	..	Mr. J. B. Yeo	Day ex. S 9 Wm. M W F 5	3 3 3 3	..	..					

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WINTER SESSION.															
MEDICINE	Dr. Chambers Dr. Handfield Jones	M W Th 4	4 4	..	6 6	Dr. Murchison	Tu Th S 9	6 6	..	8 8	Dr. Barker Dr. Peacock	M Th 2 Tu 4	5 5	..	..
SURGERY	Mr. Spencer Smith & Mr. J. R. Lane	Tu F 4 W 3	4 4	..	6 6	Mr. De Morgan Mr. Moore	M W F 9	6 6	..	8 8	Mr. Solly Mr. Le Gros Clark	Tu F 3 W 12.45	5 5	..	..
DESCRIPTIVE & SURGICAL ANATOMY	Mr. Gascoyen Mr. Norton	M Tu Th F 2.45	6 6	..	8 8	Dr. R. Liveing	M W Th F 10	8 8	..	12 12	Mr. S. Jones	M F S 1 Th 3	5 5	..	..
ANATOMICAL DEMONSTRATIONS	Mr. Norton Mr. E. Owen Mr. G. Watson, *Assist. Dem*	Daily 9 to 5	3 3	..	..	Dr. R. Liveing	Daily 8—5	6 6	..	8 8	Mr. Rainey Mr. Croft Mr. W. Wagstaffe	Daily 9 to 3	5 5	..	..
PHYSIOLOGY	Dr. Broadbent Dr. Lawson	M Tu Th F 9 W S 12	6 6	..	8 8	Dr. Sanderson Mr. Hulke	M W F 4	6 6	..	8 8	Dr. Bristowe Mr. Ord	M W F 4	5 5	..	..
CHEMISTRY	Dr. W. J. Russell	M Tu Th F 10.15	5 5	..	7 7	Mr. T. Taylor Mr. Heisch	M W F S 11	6 6	..	8 8	Dr. Bernays	Tu Th S 11	5 5	..	..
HOSPITAL PRACTICE:															
Physicians	Dr. Sibson Dr. H. Jones Dr. Sieveking Dr T. Smith, *obs.*	M Th 1.15 W S 1.15 Tu F 1.15 Tu S 1.30	7 7 6 mths	12 12 1 year	21 0	Dr. Goodfellow Dr. Thompson Dr. Murchison Dr. J. Hall Davis, *obs.*	M W F 1.30 Tu Th S 1 M W F 1 Tu W F S 1.30	12 12 6 mths	21 0 18 mths	25 0	Dr. J. R. Bennett Dr. Goolden Dr. Peacock Dr. Bristowe Dr. Barnes, *obs.*	M Th 8.45 W S 9.30 Tu F 9 Tu F 9.30 W S 9.30 F 1	9 9 6 mths	15 15 15 mths	26 5
Assistant-Physicians	Dr. Broadbent Dr. Cheadle Dr. Lawson	M Th 1 Tu F 1 W S 1	..	..	..	Dr. Greenhow Dr. B. Sanderson Dr. Liveing	F 8.30 M 8 Tu 8.30	..	..	..	Dr. Clapton Dr. Gervis, *obs.*	M Tu Th S 12.30 W S 1	..	..	..
Surgeons	Mr. Lane Mr. Spencer Smith Mr. H. Walton Mr. J. Lane Mr. H. Walton *opht.*	Tu F 1.15 M Th 1.15 W S 1.15 Tu F 1 M Th 1.30	9 9 6 mths	21 0 1 year	31 0	Mr. De Morgan Mr. Moore Mr. Nunn Mr. Hulke, *opht*	M Th 1 M Th 1 Tu F 1 Th 1.30 Tu F 8.30	15 15 12 mths	21 0 3 years	25 0	Mr. Solly Mr. Le Gros Clark Mr. Simon	Tu F 9 M Th 9.30 W S 9.30	9 9 6 mths	15 15 15 mths	26 5
Assistant-Surgeons	Mr. Gascoyen Mr A. T. Norton	M Th 1 W S 1	..	..	..	Mr. Hulke Mr. Lawson	M F 1 Th S 1	..	..	..	Mr. S. Jones Mr. J. Croft	W S 9 Tu Th 12.30 M F 12.30 S 9	..	..	..
CLINICAL MEDICINE	Dr Sibson Dr. H. Jones Dr. Sieveking	M 2 Every alt. S 2 Every alt. F 2	..	..	..	The Physicians	F 3	..	..	..	Dr. Bennett Dr. Goolden Dr. Peacock Dr. Bristowe	*Winter*—After their visits *Summer*—After vis.	..	..	..
CLINICAL SURGERY	Mr. Lane Mr. Spencer Smith Mr. H. Walton	Every Tu 2 Every alt. Th 2 Every alt. S 2	..	..	..	The Surgeons Mr. Hulke, *opht.*	M 3 Tu 3	..	..	..	By the Surgeons	After their visits	..	..	..
CLINICAL MIDWIFERY	..	.	..	..	..	..	..	..	..	..	Dr. Barnes	M 3	..	..	..
DISEASES OF WOMEN	Dr. T. Smith	..	..	..	..	Dr. J. H. Davis	Tu 10	..	..	..	..	..	..	..	..
MORBID ANATOMY AND PATHOLOGY	Dr. F. J. Payne	Summer W S 11	..	..	..	Dr. Cayley Mr. H. Arnott	Tu Th 4	3 3	..	4 4	Dr. J. Lees	Daily 9.30	..	..	..
SUMMER SESSION.															
MATERIA MEDICA	Dr. Sieveking	Tu W Th F 8 a.m	4 4	..	6 6	..	M W F 10	4 4	..	5 5	Dr. Clapton	Tu Th F 2	3 3	..	..
BOTANY	Dr. Trimen	M W F 9	3 3	..	4 4	Dr. T. S. Cobbold	M W F 4	4 4	..	5 5	Dr. J. W. Hicks	M W Th 12	3 3	..	..
FORENSIC MEDICINE	Dr. Randall	M Tu Th 10	3 3	..	4 4	Dr. Greenhow	Tu Th S 9	4 4	..	5 5	Dr. Stone and Dr. Gervis	Tu F 12 S 8	3 3	..	..
MIDWIFERY	Dr. Tyler Smith	Daily ex. S 9	4 4	..	6 6	Dr. J. Hall Davis	M W F 9	4 4	..	5 5	Dr. R. Barnes	M Tu Th F 3	5 5	..	..
PRACTICAL CHEMISTRY	Dr. Russell	Tu Th 11.30 S 9	3 3	..	..	Mr. Taylor Mr. Heisch	M W F 11	3 3	..	..	Dr. Bernays	F 11 Tu Th 10—12 S 10—1	3 3	..	..
COMPARATIVE ANATOMY	Mr. S. G. Mivart	W F 10	2 2	..	3 3	Dr. T. S. Cobbold	Tu Th 4	3 3	..	..	Dr. Ord	Tu Th 1	3 3	..	..
OPHTHALMIC SURGERY	Mr. H. Walton	Tu 2.45	2 2	..	..	Mr. Hulke	Tu 3 wintr. & summer	..	..	..	Mr. S. Jones	M F 1	3 3	..	..
PRACTICAL HISTOLOGY	Dr. Lawson	W S 12 winter	..	..	..	Dr. Cayley	Tu Th 3	3 3	..	..	Mr. Rainey	Tu 12.30 winter	..	..	..
OPERATIVE SURGERY	Mr. Gascoyen Mr. Norton	Winter	..	..	..	Mr. Nunn	S Winter	5 5	..	..	..	..	..	..	..
DENTAL SURGERY	Mr. Sercombe Mr. Hayward	Tu Th S 9.30	2 2	..	..	Mr. Tomes	..	5 5	..	..	Mr. Elliott	Tu F 11	..	..	..
DISEASES OF SKIN	Dr. Cheadle	F 12	..	..	..	Dr. Liveing	..	..	..	..	..	..	..	..	..
GENERAL PATHOLOGY	..	..	..	..	..	..	..	..	..	..	Mr. Simon	..	..	..	..
PATHOLOGICAL CHEMISTRY	..	..	..	..	..	..	..	..	..	..	Dr. Thudichum	Th 4 win.	..	..	..
PRACTICAL PHARMACY	..	..	3 3 3 mths	6 6 6 mths	10 10 12 mths	..	..	5 5 6 mths	8 8 12 mths	..	..	..	..	..	..
Fees for the Lectures and Hospital Practice, for the Licences of the Royal College of Physicians, Society of Apothecaries, and the Royal College of Surgeons	£89 5s.,	or in	one	sum	84 0	.	..	..	..	90 0	..	..	..	..	..
To the Lectures alone	..	..	..	..	52 10	..	..	..	..	..	..	..	..	..	..
To the Hospital Practice alone	..	..	..	..	36 15	..	..	..	..	42 0	..	..	..	..	47 5
Unlimited	..	£105, or in	one	sum	99 15	..	..	..	..	..	..	..	..	..	90 0

LECTURES.	UNIVERSITY COLLEGE AND HOSPITAL.					WESTMINSTER.				
	Lecturers.	Days and Hours.	Fees. 1 Course	Fees. 2 Courses	Fees. Perpetual.	Lecturers.	Days and Hours.	Fees. 1 Course	Fees. 2 Courses	Fees. Perpetual.
WINTER SESSION.			£ s. d.	£ s.	£ s.			£ s.	£ s.	£ s.
MEDICINE	Dr. J. R. Reynolds	Day. ex. M 9	6 6 0	..	9 9	Dr. Basham	M Th F 4	5 0	..	7 0
SURGERY	Mr. Marshall	Tu W F 4	5 5 0	..	6 6	Mr. Holthouse	Tu W Th 3	5 0	..	7 0
DESCRIPTIVE ANATOMY	Mr. Ellis	Daily 12	7 7 0	..	10 10	Mr. Mason	Tu W Th F 9	5 0	..	7 0
DEMONSTRATIONS	Mr. Ellis Mr. F. T. Roberts Mr. T. R. Loy	Daily				Mr. Pearse	Daily 10—1	2 0	..	3 0
PHYSIOLOGY AND GENERAL ANATOMY	Dr. Sharpey	Daily ex. S 10	6 6 0	..	9 9	Dr. Maclure	M F 3 W 4	5 0	..	7 0
CHEMISTRY	Dr. Williamson	Daily ex. S 11	6 6 0	..	9 9	Dr. Dupré	Tu Th 3 F 3.30	5 0	..	7 0
HOSPITAL PRACTICE—										
Physicians	Sir W. Jenner, Bart., M D. Dr Reynolds Dr. G. Harley Dr. W. Fox Dr. S. Ringer	Daily 1 & 2	..	..	..	Dr. Basham Dr. Fincham Dr. Radcliffe Dr. F. Bird, *obs.*	M Th 1.30 W S 1 30 Tu F 1.30 Tu F 3	8 0 6 months	12 0 1 year	20 0
	Dr. Grailly Hewitt, *obs.*	Three times a week	For 6 months to the Physicians' and Surgeons' practice, £16 10s. To either separately, £11 15s.	For 1 year to the Physicians' and Surgeons' practice, £21 15s. To either separately, £16 10s.						
	Dr. T. Fox, Skin Infirmary	S 9								
Assistant-Physicians	Dr. Charlton Bastian	..			..	Dr. Anstie Dr. Gibb Dr. Sturges	M Th 1 Tu F 1 W S 1	8 0 6 months	12 0 1 year	20 0
Surgeons	Mr. Erichsen Mr. Marshall Sir H. Thompson	Daily 1 & 2			..	Mr. Holt Mr. Holthouse Mr. Hillman	M Th 1.30 W S 1.30 Tu F 1.30			
	Mr. W. Jones, *oph.*	M W F 1								
Assistant-Surgeons	Mr. Berkeley Hill Mr. C. Heath	..			27 0	Mr. Mason Mr. Pearse	M Th 1 W S 1	..	..	..
CLINICAL MEDICINE	Sir W. Jenner Dr. Reynolds Dr. W. Fox	M Tu Th F 1—3			..	By the Physicians	Weekly	..	..	..
	Dr. T. Fox	Once a fortnight								
CLINICAL SURGERY	Mr. Erichsen Mr. Marshall Sir H. Thompson	M W S 1—3			..	By the Surgeons	Weekly	..	..	..
	Mr. W. Jones, *oph.*	Once a fortnight								
CLINICAL MIDWIFERY	Dr. G. Hewitt	Fortnightly	..	..	..	..	..	..	..	..
MORBID ANATOMY	Dr. C. Bastian	Tu W F 4 sum.	4 4 0	..	6 6	Dr. Cavafy Mr. Davy	..	..	..	..
SUMMER SESSION.										
MATERIA MEDICA	Dr. Ringer	Daily exc. S 12	4 4 0	..	6 6	Dr. Anstie	M Th F 3	3 0	..	4 0
BOTANY	Mr. Oliver	Daily exc. S 8	3 3 0	..	4 4	Dr. Bennett	M W F 9.30	3 0	..	4 0
FORENSIC MEDICINE	..	Tu W Th F 10	3 3 0	..	4 4	Dr. Gibb Dr. Sturges	Tu W F 3	3 0	..	4 0
MIDWIFERY	Dr. Grailly Hewitt	Daily except. W and S 9	4 4 0	..	6 6	Dr. Bird	Tu Th F 4	4 0	..	5 0
PRACTICAL CHEMISTRY	Dr. Williamson	Tu W Th F 11	4 4 0	..	..	Dr. Dupré	Tu Th 10	2 0	..	..
COMPARATIVE ANATOMY	Dr. Grant, *with Zoology*	Daily except S 3, from Oct. to June	8 8 0	..	9 9	Mr. Carter Blake	W S 11	2 0	..	..
BANDAGING, &c.	Mr. B. Hill	Tu Th 3 mths. W	1 11 6	..	2 2	Mr. Mason	Tu Th 9	..	..	..
OPERATIVE SURGERY	Mr. C. Heath	Daily 3 in April	4 4 0	..	..	..	..	..	..	..
DENTAL SURGERY	Mr. Ibbetson	Tu Th 5 in Jan	1 1 0	..	..	Mr. Walker	W 9.30, Oct., Nov., Dec.	..	..	..
HYGIENE	Mr. Corfield	Tu Th 4	2 2 0	..	3 3	..	..	..	..	..
NATURAL PHILOSOPHY	Prof. Foster	M W F 4	3 5 0	..	..	Mr. Brooke	Tu 3 sum.	1 0	..	..
OPHTHALMIC SURGERY	Mr. W. Jones	Tu Th	2 2 0	..	..	..	..	..	..	..
PALÆO-ZOOLOGY	Dr. Grant	Daily except S 3 sum.	1 1 0	..	..	..	..	..	..	..
HISTOLOGY AND PRACTICAL PHYSIOLOGY	Dr. M. Foster Mr. Allchin	S 10-12 win.	sen. £4 4 jun. £2 2	..	5 5	..	..	..	..	..
MENTAL DISEASES	Dr. Sankey	Tu W Th 11	2 2 6	..	..	..	..	..	..	..
PRACTICAL PHARMACY	Mr. Martindale	..	3 3 0	..	5 5	..	..	..	..	..
			3 months		6 months					
Fees for the Lectures and Hospital Practice for the Licences of the Royal College of Physicians, Society of Apothecaries, and M.R.C.S.	..	..	..	..	95 5	..	..	..	..	70 0
For the Hospital Practice alone	..	..	..	..	27 0	..	..	..	..	26 0
Perpetual to Lectures and Hospital Practice	..	..	..	..	..	..	..	..	..	75 0

ADDITIONAL INFORMATION RESPECTING THE METROPOLITAN SCHOOLS, ETC.

ST. BARTHOLOMEW'S HOSPITAL AND COLLEGE.

This Hospital contains 650 beds.

Fees for Lectures and Hospital Practice are payable by instalments —£31 10s. at the beginning of the first Winter Session, £31 10s. at the beginning of the first Summer Session, £36 15s. at the beginning of the second Winter Session. Four House-Physicians and four House-Surgeons are appointed annually, on the payment of a nominal fee, and are provided with rooms, coals, and candles by the Hospital authorities. The Midwifery Assistant is appointed without fee for six months, and is provided with rooms, coals, and candles by the Hospital authorities.

All diligent Students may enter their names for the above appointments.

The Clinical Clerks to the Physicians and to the Physician-Accoucheur, and the Clerks to the Assistant-Physicians and Assistant-Surgeons are chosen from the diligent Students. Sixteen Dresserships are annually given to the Students who pass the best examinations in Surgery, or who may be otherwise specially recommended. Other Dresserships may be obtained by payment of the usual fees.

A course of Microscopic Demonstrations is given during the Summer Session. Arrangements have been made for conducting

the study of Diseases of the Skin (Dr. Gee, Friday at 1.30), Diseases of the Eye (Mr. Vernon, Wednesday and Saturday at 12.30), Diseases of the Ear (Mr. T. Smith, Monday at 1.30), and Orthopædic Surgery (Mr. Willett, Friday at 1.30), during the Sessions 1869-70. Instruction in Dentistry (Mr. Coleman, Friday at 9 a.m.).

The following Scholarships and Prizes are awarded :—Senior Scholarship of the value of £50, Medicine, Surgery, and Midwifery. Senior Scholarship of the value of £50, Anatomy Physiology, and Botany. Scholarships of the value of £25 each will be awarded to those Students who are placed second in the Examinations for the Senior Scholarships. Junior Scholarships of the value of £50, £30, and £20 are awarded after the General Examination at the end of the Summer and Winter Sessions. The Jeaffreson Exhibition, founded 1868, to the value of £20, and tenable for two years, is awarded to the Student who passes the best examination in the subjects of Preliminary Education at the commencement of each Winter Session. Wix Prize, founded 1842, is awarded for the best Essay on "The Connexion between Ancient and Modern Literature, and the Studies of Medical Science." Hichens Prize, founded 1851. Subject of Examination—Bishop Butler's Analogy. Bentley Prize, founded 1842. For the best Report of Surgical cases occurring in the Wards of the Hospital during the previous year. It is expected that the reports will comprise the Histories, Progress, Treatment, and Results of not less than Twelve Cases, with observations thereupon. Foster Prize. Subject of Examination—Practical Anatomy; Senior. Treasurer's Prize. Subject of Examination—Practical Anatomy; Junior. The Kirkes Medal. Subject of Examination —Clinical Medicine. Special classes are held for the Matriculation, for the Prel. Scientific, and for other Examinations at the London University. Students preparing for other Examining Boards are arranged in classes and examined by the Lecturers and Demonstrators.

A College, in which Students are lodged and boarded, exists in connexion with the Hospital. Resident Warden, Mr. Morrant Baker. Each Student pays an entrance fee of £2 2s.

Special Classes are held for preparing Students for the Matriculation, Preliminary Scientific, and First M.B. Examinations of the University of London. Fee for three months' instruction in Languages, Mathematics, and Chemistry, etc., for the Matriculation Examination, £10 10s.

Fee for general subjects for Students of Dental Surgery: First Winter, £26 5s.; First Summer, £26 5s.; or a single payment of £52 10s.

All communications must be addressed to Mr. Callender, Mr. Willett, or Mr. Morrant Baker, at the Hospital.

CHARING-CROSS HOSPITAL.

Gentlemen are received—1st. As Matriculated Students, or those who enter for their entire Medical Education at the Charing-cross Hospital Medical College. 2ndly. As occasional Students, or those who enter to one or more particular classes. Matriculated Students alone have the privilege of filling the offices of Registrar, Pathological Assistant, Assistant-Demonstrator, Clinical Clerks, Dressers, Dentist's Assistant, Resident Medical Officer, Resident Surgical Officer, and Physician Accoucheur's Assistant, and of becoming Candidates for the Scholarships, Medals, and various general class prizes.

The fee for the Courses of Lectures and Hospital Practice required by the University of London, the Royal College of Physicians, the Royal College of Surgeons, and the Society of Apothecaries, to Non-Matriculated Students, is £82 19s.; for the Hospital Practice alone, £31 10s. The Fee to Matriculated Students for the full period of the Lectures and Hospital Practice required by the Royal College of Physicians, the Royal College of Surgeons, and the Society of Apothecaries, is £76 6s. 5d.; for the Hospital practice alone, £28 19s. 8d. The Fee for Matriculation is £2 2s., to be paid on entering. Payment of Fees may be made either in one sum (£76 6s. 5d.) on Matriculation, or in three instalments.

The office of Registrar to the Hospital, and Pathological Registrar to the School, tenable for two or three years, for the efficient performance of the duties appertaining to which the Council award an annual stipend, is open to all Matriculated Students of the Hospital who have obtained their qualifications, as are also the offices of House-Physician, House-Surgeon, and Resident Physician-Accoucheur's Assistant.

Scholarships, Medals, and Prizes. — Scholarships: The Llewellyn Scholarship of £25 is open to all Matriculated Students who have just completed their second academical year. The Golding Scholarship of £15 a year, tenable for two years, is open to all Matriculated Students who have just completed their first academical year. The following medals are awarded annually :—The Gold Medal, for General Proficiency; the Governors' Clinical Silver Medal; Silver Class Medals, on all the subjects of the Lectures; Bronze Class Medals, on all the subjects of the Lectures.

Free Scholarships.—Candidates for Free Scholarships are required to be sons of Professional men of reduced circumstances and position, or of gentlemen in a corresponding station of society, and are to have had a classical education fitting them for the Medical Profession. They must have already commenced their Medical studies, and, from unforeseen circumstances, be unable to complete their Professional education without such assistance. They are to send in their applications and testimonials before September 1.

ST. GEORGE'S HOSPITAL.

Perpetual pupils pay at the time of entry a compounding fee of £105. They are admitted to the Practice of the Physicians and Surgeons, to all the Lectures (except Practical Chemistry), to compete for all prizes and exhibitions, to hold the appointments of House-Physician, House-Surgeon, Assistant House-Physician, and Assistant House-Surgeon.

Gentlemen are admitted to the Hospital Practice and Lectures required for the Licence of the College of Physicians, for the Diploma of Member of the College of Surgeons, and for the Licence of the Society of Apothecaries (with the exception of Practical Chemistry), on payment of the following fees—viz., £42 for the first year of study, £42 for the second year of study, and £10 10s. for each succeeding year.

The students are divided into classes during their Hospital attendance, and placed under the charge of the several Medical officers in rotation for periods of two months each.

Special Courses of Lectures are given on Pathology (including Morbid Anatomy), Comparative Anatomy, Psychology, Ophthalmic Surgery, Orthopædic Surgery, Operative Surgery, and Dental Surgery. Demonstrations of Diseases of the Skin and Lectures on Public Health are given by the Lecturer on Medicine. Demonstrations on the Laryngoscope are given by the Lecturer on Surgery, and Clinical Instruction on the Diseases of Women by the Lecturer on Midwifery. A Maternity department is attached to the Hospital.

Exhibitions and Prizes.—"The William Brown Exhibition," of £40 per annum, tenable for three years: This Exhibition is competed for by perpetual pupils who have commenced their third, but not completed their fourth Winter Session. It will be "bestowed on the candidate who shall show the best general fitness for the exercise of the Medical Profession, and whose moral conduct shall in all respects be satisfactory." Sir Charles Clarke's Prize for Good Conduct: The interest of £200 Consols to be awarded annually to the student of the Hospital "who, by reason of his general good conduct during the preceding year, should be considered the most deserving." The Thompson Medal: A Silver Medal to be awarded annually for the best Clinical Report of Medical and Surgical Cases observed in the Hospital during the preceding twelve months. Sir Benjamin Brodie's Clinical Prize in Surgery will be awarded to the perpetual pupil of the Hospital who shall have delivered to the Surgeons the best report of not more than twenty Surgical cases which have occurred in the Hospital during the preceding twelve months. Dr. Acland's Clinical Prize in Medicine will be awarded to the perpetual pupil of the Hospital who shall produce the best report of not more than twenty Medical cases which have occurred in the Hospital during the preceding twelve months. The Henry Charles Johnson Memorial Prize in Anatomy will be awarded to that pupil who shall, in the judgment of the Medical School Committee, exhibit the greatest proficiency in Practical Anatomy. General Proficiency Prizes: —To pupils in their first year, £10 10s.; to pupils in their second year, £10 10s.; to pupils in their third year, £10 10s.

The appointments of House-Physician, House-Surgeons, Curator, Registrars, Obstetric Assistant, and Demonstrator of Anatomy (the four latter with salaries attached), are open to senior pupils.

For further information apply to Dr. Barclay or Mr. Holmes.

GUY'S HOSPITAL.

This Hospital contains nearly 600 beds.

Voluntary Examinations are held at four periods of the Student's Course, as follows :—1st. At Entrance, commencing on October 5, in Elementary Classics, Ancient and Modern History, and Mathematics. The Candidate who most distinguishes himself receives £25; the Second Candidate, £20; the third, £15. 2nd. At the end of the first Sessional year,

in all the subjects of that year:—one sum of £30, another of £25, and a third of £10 10s. (presented by one of the Governors). 3rd. At the end of the second Sessional year, in the subjects which form the Course of Study up to that time:—£35 and £30. 4th. At the end of the third Sessional year, in all the subjects of the Curriculum:—£40 and £35. Honorary Certificates are also given to candidates who pass creditable examinations.

Special Examinations.—Two Gold Medals are given annually by the Treasurer to Students who have completed their third, and not exceeded their fourth year—the one for Clinical Medicine, the other for Clinical Surgery.

The Fees for Hospital Practice and Lectures are as follows: For the First Year, £40; for the Second Year, £40; and £10 for every succeeding year of attendance—the one payment of £100 entitles a Student to a perpetual ticket. Materials used in practical courses are charged extra.

Medical and Surgical Ward Clerks, Post-mortem Clerks, Clinical Clerks, Dressers, Resident Obstetric Clerks, and Dressers in the Eye Wards, are selected from the Students, according to merit. Each Dresser (except those in the Eye Wards) has the privilege of rooms and commons in the Hospital free of charge for one month of his Course. The Obstetric Clerks have the like privileges for two months each—one month as junior, another as senior. There are two House-Surgeons, each of whom holds office for four months—two as junior and two as senior. And two House-Physicians, each of whom holds office for six months, three as junior and three as senior.

The Registrars and the Demonstrators in Anatomy and Chemistry assist the pupils in their studies.

For further information apply to Mr. Stocker, Apothecary to the Hospital.

KING'S COLLEGE.

The fees, in three sums, may be paid either in one sum on Matriculation or at the commencement of each Winter Session. Students are, however, recommended to add £2 2s. for a second Course of Chemistry, as well as the fee for attendance on the Medical Tutor's class for one year—viz., £3 3s. All resident Students are required to attend the Tutor during their first year.

Resident Medical Officers, Clinical Clerks, and Dressers are chosen by examination from Matriculated Students who are Pupils of the Hospital.

Scholarships.—Warneford Scholarships: The sum of £200 is set apart annually for Scholarships in the Medical Department—viz., "For the encouragement of the previous education of Medical Students," two Scholarships of £25 per annum for three years; "For the encouragement of resident Medical Students," one Scholarship of £25 per annum for two years. College Scholarships: The following are given every year to Matriculated Students of this department:—1. One of £40 for two years, open to Students of the third and fourth year; 2. One of £30 for one year, open to Students of the second year; 3. One of £20 for one year, open to Students of the first year. Daniel Scholarship: £20, tenable for two years, is open to every Student of the College who has worked in the Laboratory for at least six months. Sambrooke Registrarships: Two of £30 every year.

Prizes.—Leathes Prizes: Bible and Prayer-book to two Matriculated Medical Students. Warneford Prizes: £40 is expended in the purchase of Medals and Books as Prizes to two Matriculated Medical Students. Class Prizes are awarded annually for proficiency; these consist of Books of the value of £3. Two Medical Clinical Prizes, one of £3 for the Winter Session and the other of £2 for the Summer Session; and two Surgical Clinical Prizes of the same value are given for attendance at the Hospital. Todd Medical Clinical Prize: This Prize was founded in memory of the late Dr. Todd. It consists of a Bronze Medal and Books to the value of £4 4s.

Residence of Students.—A limited number may reside within the College.

For further information apply to Professor Bentley, Dean of the Medical Department.

ST. MARY'S HOSPITAL.

The Hospital contains 170 beds—68 Medical, and 102 Surgical. There are Special Departments for the Diseases of Women and Children; and for Diseases of the Eye, the Ear, the Skin, and the Throat.

Resident Medical Officers, Clinical Clerks, and Dressers.—All these appointments are open to the Pupils without additional fee, and are held in succession, so as to secure a complete system of Clinical training. Five of these appointments exceed in value an equal number of Scholarships of £50 each. All General Students are required to perform the duties of Clinical Clerks and Dressers for a period of six months during the last two years of their curriculum. Students of the third year are appointed to assist the Physicians and Surgeons in charge of the out-patients, and the Curator in the performance of the post-mortem examinations. A Resident Registrarship within the Hospital has been created with a salary of £100 a year, tenable for one year, *and open to re-election*, preference being given to past House-Surgeons and Perpetual Pupils.

Prizes.—Examinations for Prizes are held at the termination of each Session, the Classes being grouped in accordance with the curriculum laid down for Students of the First, Second, and Third Year. The average value of each of these Prizes is £5 5s. A Scholarship in Anatomy, of the annual value of £25 (the holder of which will be styled Assistant-Demonstrator, and assist in the teaching of Practical Anatomy), will be awarded to the best qualified Student. A Prize of £20 for Students for the First Year is awarded at the end of the Winter Session. A Prize of the value of £4 4s. will be given to the Student who shall make the best Anatomical Preparation, such Preparation to become the property of the School. Two Prosectors are appointed annually, who each receive a Certificate and £5 for their services in the Dissecting-room.

The Entrance Fees for General Students may be paid in instalments by arrangement with the Dean of the School. A Fee of £1 1s. is required to be paid to the Library and Reading-room. Instruction in Vaccination can be obtained, Fee £1 1s.

Further information may be obtained from Dr. Cheadle, Dean of the School.

THE LONDON HOSPITAL.

The next Winter Sesssion will commence on Friday, October 1, 1869.

General Fee to Lectures and Hospital Practice, 84 Guineas, payable in two instalments of 42 Guineas each. Library fee, One Guinea. Special entries can be made to Lectures or Practice.

The Hospital contains 570 beds. There are Medical and Surgical Wards for Children, Wards for Syphilis, Special Departments for Diseases of Women, Diseases of the Eye, Diseases of the Ear, Diseases of the Skin, and special arrangements for Diseases of the Throat. A Maternity Department exists for the delivery of lying-in women at their own homes. 622 cases were attended last year by the Students of the Hospital.

For Instruction in Mental Diseases, Students can attend, without further fee, the practice of Dr. John Millar, Medical Superintendent of Bethnal House Asylum, a few minutes' walk from the Hospital. Clinical Lectures, both Medical and Surgical, will be given every week, and Practical Instruction imparted in all the departments.

The In-patients during 1868 were 4932, and the Out-patients 39,704 (equivalent to 120,000 attendances); total, 44,636.

At the Medical College Lectures will be given on all the subjects required by the Examining Boards.

The following Prizes and Appointments are open, without further payment, to Students paying the general fee of 84 Guineas:—Seven Scholarships to be offered for competition in the Winter Session—1. A Scholarship of £30 to the Student of less than three months' standing who passes in October the best examination in the subjects required at the Preliminary Examinations. 2. A Scholarship of £20 to the Student of less than three months' standing placed second in the above examination. 3. A Scholarship, value £20, in Human Osteology, for first-year Students, to be awarded at Christmas, 1869. 4. A Scholarship, value £25, in Anatomy, Physiology, and Chemistry, for first-year Students, to be awarded in April, 1870. 5. A Hospital Scholarship, value £20, for Clinical Medicine, to be awarded in April, 1870. 6. A Hospital Scholarship, value £20, for Clinical Surgery, to be awarded in April, 1870. 7. A Hospital Scholarship, value £20, for Clinical Obstetrics, to be awarded in April, 1870. The Duckworth Nelson Prize, value £10 10s., for Practical Medicine and Surgery (biennial). Money Prizes to the value of £60 given annually by the House Committee for zeal in dressing Out-patients and knowledge of Minor Surgery. Certificates of Honour in all the classes, according to the results of the general examination at the end of the Session, and Special Certificates to those who have fulfilled with credit the duties of the Hospital appointments. Three House-Surgeoncies, tenable for three or six months, and Dresserships to In-patients, open

to all. Dresserships to Out-patients, with the privilege of competing for the Prizes above mentioned. The office of Resident Medical Officer, tenable for two years, with a salary of £75 the first year, and £100 the second year. The office of Junior Resident Medical Officer, tenable for six months. Three Medical Assistantships, held for three months, with residence and board in the Hospital for one month. The office of Resident Accoucheur, tenable for six months. N.B.—The holders of all the resident offices are provided with rooms and board free of expense. Two offices of Clinical Assistant in the Medical Out-patient Department, each at a salary of £40. Two offices of Clinical Assistant in the Surgical Out-patient Department, each at a salary of £40. The office of Medical Registrar, salary 25 Guineas. The office of Surgical Registrar, salary 35 Guineas. Two Prosectors of Anatomy, Ward Clerks, and Post-mortem Clerks, according to merit.

Further information may also be obtained from Mr. J. Adams, Treasurer, 10, Finsbury-circus, E.C.; Mr. Rivington, Dean, 22, Finsbury-square, E.C.; or Mr. Waren Tay, Vice-Dean, 10, Finsbury-pavement, E.C.

MIDDLESEX HOSPITAL.

The Hospital contains upwards of 300 beds, of which 185 are for Surgical, and 120 for Medical cases. There is a special department for Cancer cases, affording accommodation for 33 in-patients, whose period of residence in the Hospital is unlimited. Wards are also appropriated for the reception of cases of Uterine Disease and of Syphilis, and beds are set apart for patients suffering from Diseases of the Eye.

Special attention is bestowed on the Clinical Instruction of the Students, both in the wards and out-patient-rooms. Three Clinical Prizes, including the Governors' Prize of twenty guineas, are annually awarded to those Students who pass the most satisfactory examination at the bedside and in the post-mortem room. Class Prizes are also given, and six resident clinical appointments are annually awarded, after competitive examination, to Students who have completed their education, and complied with the regulations of the School. The officers thus appointed reside and board in the Hospital free of expense.

The College Tutor assists all general Students free of charge, especially those who are preparing for examination, and his daily instruction is arranged with a view to avoid the necessity of Students obtaining any private teaching apart from that of the Medical School.

The fee for attendance on the Hospital Practice and Lectures required by the Colleges of Physicians and Surgeons and the Society of Apothecaries is £90, which may be paid by instalments.

The Introductory Address will be delivered by Dr. Liveing, on Friday, October 1, at 3 p.m.

ST. THOMAS'S HOSPITAL.

The admission fee to Hospital Practice and all the Lectures is £40 for the first year, and a similar sum for the second, and £10 for each succeeding year; or £90 at one payment for unlimited attendance. Special entries may be made to any course of lectures, or to the Hospital Practice.

All Students have the opportunity afforded them of being engaged in the performance of practical duties in connexion with the Medical, Surgical, Obstetric, Special, and Pathological departments of the Hospital.

There are special departments for Diseases of the Eye, Diseases of Women and Children, Vaccination, Diseases of the Skin, and Diseases of the Teeth.

Prizes and Appointments.—The William Tite Scholarship, awarded every third year: A Scholarship has been founded by Sir W. Tite, M.P., F.R.S., the proceeds of £1000 Consols, tenable for three years, on proof of continued residence and good conduct. Preference, in case of equality between students, to be given to the son of a Medical man, and more particularly of one who has been educated at St. Thomas's Hospital, or is in practice at Bath. To the three most distinguished pupils for general proficiency, the following Prizes are awarded at the end of the Session 1869-70:—First Year's Students—1st. The Wm. Tite Scholarship; 2nd. A College Prize of £20; 3rd. Ditto of £10. Second Year's Students—1st. A College Prize of £30; 2nd. Ditto of £20; 3rd. Ditto of £10. Clinical and Obstetrical Clerks and Dressers are selected according to merit from among Second Year's Students. The Dressers and Obstetrical Clerks are provided with rooms and commons during their period of attendance in the Hospital free of expense. Third Year's Students—1st. A College Prize of £30; 2nd. Ditto of £20; 3rd. Ditto of £10. The Cheselden Medal, founded by George Vaughan, Esq., is awarded in respect of a Special Examination in Surgery and Surgical Anatomy. The Treasurer's Gold Medal is given annually for general proficiency and good conduct. The Grainger Testimonial Prize, of the value of £20, will be awarded biennially to the Third or Fourth Year's Students for a Physiological Essay, to be illustrated by preparations.

The House-Surgeons and Resident Accoucheur are chosen from gentlemen who have obtained their Professional diplomas. All are provided with rooms and commons. The two offices of Medical Registrar and Surgical Registrar are from time to time filled from among gentlemen who have completed their studies in the School. Each Registrar, on completing his Annual Report to the satisfaction of the Physicians and Surgeons, receives a gratuity of £40. If the two offices are held by one person, he then receives, on completing his Reports as above, a gratuity of £80.

The Tutor in Arts is Mr. S. Hague, LL.B., B.A. Lond.

For further information, apply to Mr. Whitfield, Medical Secretary, the Manor House, St. Thomas's Hospital, Newington, London, S.E.

UNIVERSITY COLLEGE, LONDON.

The fee for Lectures and Hospital Practice required by the Colleges of Physicians and Surgeons and the Society of Apothecaries may be paid at once or distributed in payment over three years, as follows:—First Winter Session, £37 10s.; First Summer Session, £16 16s.; Second Winter Session, £26 5s.; Second Summer Session, £7 7s.; Third Summer Session, £7 7s.; total, £95 5s.

Entrance Exhibitions.—Three entrance Exhibitions, of the respective values of £30, £20, and £10 per annum, tenable for two years, are annually awarded, upon examination by written papers, to gentlemen who are about to commence their first winter's attendance in a Medical School. The subjects of the examinations are: Classics, Elementary Mathematics, Natural Philosophy, and either French or German at the option of the Candidate. The next examination will take place at the College on September 28 and 29. Notice of intention to compete, with a statement of the modern language in which the Candidate wishes to be examined, must be left addressed to the Secretary, not later than 2 p.m. on Saturday, September 25, at the office of the College, where the Regulations may be obtained.

Scholarships and Exhibitions.—The Atkinson Morley Surgical Scholarship, of £45, tenable for three years, is annually awarded to the Student who, upon examination, is found to possess the greatest proficiency in the Theory and Practice of Surgery. Filliter Exhibition: A Prize of £30 is awarded annually, in July, to the most proficient Student in the class of Pathological Anatomy.

Medals and Prizes.—Dr. Fellowes's Clinical Medals, one Gold and one Silver, awarded at the end of the Winter and of the Summer Session to Pupils who have most distinguished themselves by reports and observations on the Medical cases in the Hospital. The Liston Gold Medal is awarded at the end of the Summer Session to the Pupil who has most distinguished himself by reports and observations on the Surgical cases in the Hospital.

Class Medals and Prizes.—Besides the above, Gold and Silver Medals or other Prizes are awarded in each class.

The Appointments of Assistant Curator to the Museum of Anatomy and Pathology, of Demonstrators of Anatomy, and of Resident Medical Officer to the Hospital—all of which have emoluments attached to them—are almost invariably conferred upon Students of the College.

Offices in the Hospital tenable by Students.—Physicians' Assistants, House-Surgeons, Midwifery Assistants, Physicians' Clerks, Surgeons' Dressers, and Ophthalmic Surgeons' Assistants are selected from the Pupils, without additional fees. The Physicians' Assistants, Obstetric Assistant, and House-Surgeons reside in the Hospital, paying for their board.

Further information may be obtained at the office of University College, Gower-street, W.C.

WESTMINSTER HOSPITAL.

The Entry Fee to Lectures and Hospital Practice required by the Colleges of Physicians and Surgeons and the Society of Apothecaries may be paid in three instalments—£35 at the commencement of the first year, £30 at the commencement of the second, and £10 at the commencement of the third year.

Prize Appointments and Prizes.—The offices of House-Physician and House-Surgeon are open to competition amongst Gentlemen who have been educated at the Hospital, and who are

qualified to practise under the Medical Registration Act. The House-Physician and House-Surgeon are provided with board and lodging in the Hospital free of expense. Assistant-House-Surgeon: Is appointed from among the Senior Students by Examination. Clinical Clerks and Dressers: These appointments are conferred upon the most diligent students.

Prizes.—A Prize of Books or Instruments for each of the Winter and Summer Courses. A Clinical Medicine Prize of the value of 5 guineas. A Clinical Surgery Prize of similar value. Clabon Prize of the value of 5 guineas for General Proficiency to first-year students. A special Prize will be given for Clinical Midwifery by the Westminster Maternity Charity. Chadwick Prize for General Proficiency. A sum of 20 guineas will be awarded, in one or more Prizes, to the most meritorious Student or Students who are attending Lectures and Hospital Practice for the second or third year.

Further information may be obtained from the Dean, Mr. Holthouse.

ENGLISH PROVINCIAL SCHOOLS AND HOSPITALS.

QUEEN'S COLLEGE, BIRMINGHAM.

Professors of the Medical Faculty.—Winter Courses: Medicine, Dr. James Russell, Dr. Balthazar W. Foster; Surgery, Mr. Oliver Pemberton, Mr. Furneaux Jordan; Anatomy, Mr. Charles J. Bracey, M.B. Lond., and J. F. West, F.R.C.S.; Physiology, Dr. Richard Norris, Mr. T. H. Bartleet, M.B. Lond.; Chemistry, Dr. Alfred Hill, F.C.S.; Demonstrators of Anatomy, Mr. James Hinds, M.B. Lond., and Mr. William Thomas, M.B. Lond. Summer Courses: Midwifery, Mr. John Clay, Mr. John Bassett; Diseases of Women and Children, Mr. Samuel Berry and Dr. R. C. R. Jordan; Forensic Medicine and Toxicology, Mr. Thomas Swain and Dr. Alfred Hill; Practical Chemistry, Mr. Alfred Anderson, F.C.S.; Botany, Dr. William Hinds; Materia Medica and Therapeutics, Mr. J. St. S. Wilders and Mr. Edward Mackey, M.B. Lond.; Ophthalmic Surgery, Mr. J. Vose Solomon; Dental Surgery, Mr. Thos. Howkins; Comparative Anatomy, Dr. Thomas Savage; Medical Tutor and Registrar, Mr. James Hinds, M.B. Lond.

Hospital Practice may be attended at either the General Hospital or the Queen's Hospital, which are equidistant from the College.

Admission of Students.—Students may enter—1st, as Matriculated Students; 2nd, as Occasional Students, or those who enter for one or more courses of Lectures; 3rd, as Junior Students to prepare for the Matriculation Examination of the London University, or any of the Preliminary Examinations of the Licensing Boards.

Resident Students.—Students may reside within the College, where they will be provided with rooms and board, and will be under the supervision of the Warden and Resident Tutors. Resident Students are expected to attend the College Chapel, unless specially exempted by the Warden.

Resident Tutors.—Rev. W. H. Poulton, M.A., Rev. H. G. Cundy, M.A., and Dr. James Hinds.

Scholarships and Prizes.—Two Warneford Scholarships, the Sands Cox Prize (value of £20), the Warden's Prize (of the value of five guineas), the Percy Prize (books of the value of five guineas), and Class Prizes, Medals, and Certificates of Honour are awarded annually.

Fees.—Composition Fee for all the Lectures required by the University of London, the Royal College of Physicians, the Royal Colleges of Surgeons, and the Apothecaries' Society, fifty guineas, payable by two equal instalments: the first on entrance, and the second at the commencement of the second year. Fees for the Winter Courses are £5; for the Summer (with the exception of Midwifery, £5), £4 or £3 3s. Fees for Resident Students, for rooms and commons, £50 per annum.

The prospectus of the Medical Department, and further information, may be obtained by application to the Rev. the Warden, at the College; or to Professor Foster, M.D., 4, Old-square, Birmingham, Physician to the General Hospital; or to Professor Furneaux Jordan, Colmore-row, Birmingham, Surgeon to the Queen's Hospital.

QUEEN'S HOSPITAL, BIRMINGHAM.

Physicians, Dr. Fleming, Dr. Johnston, Dr. Heslop. Surgeons, Messrs. West, Gamgee, Furneaux Jordan, J. St. S. Wilders. Dental Surgeon, Mr. S. A. Parker. Resident Physician, Dr. Sawyer. Resident Surgeon, Dr. Jolly.

Fees.—Medical and Surgical Practice, four years. £26 5s.; one year, £11 11s.; six months, £7 7s.; Dental fee (optional), £2 2s.

The respective offices of Resident Pupils (with Board and Lodging), Physicians' Clerks and Surgeons' Dressers, are filled up by the Physicians and Surgeons from among the Students without extra fee. Clinical Lectures and Instruction are delivered daily at the Hospital by the Physicians and Surgeons.

GENERAL HOSPITAL, BIRMINGHAM.

Physicians, Dr. Bell Fletcher, Dr. Russell, Dr. Wade, Dr. Foster. Surgeons, Mr. Alfred Baker, Mr. Oliver Pemberton, Mr. T. H. Bartleet, Mr. W. P. Goodall. Resident Physician and Tutor, Dr. Welch. Resident Surgeon, Mr. Addenbrooke.

Fees.—Medical Practice, six months, £7 7s.; twelve months, £10 10s.; eighteen months, the term required for the Licence of the College of Physicians and the Society of Apothecaries, £12 12s. Surgical Practice, six months, £10 10s.; twelve months, £12 12s.; eighteen months, £17 17s.; three years, or the period required by the College of Surgeons, £26 5s. No Extra Fees for Clerkships and Dresserships.

Clinical Lectures are delivered by the Physicians and Surgeons every week during the Session.

BRISTOL MEDICAL SCHOOL, SESSION 1869-70.

The Winter Session will commence on Friday, October 1, 1869. Medicine, Dr. Martyn and Dr. Fox. Surgery, Mr. Coe and Mr. Leonard. General Anatomy and Physiology, Messrs. Atchley and Steele. Descriptive and Surgical Anatomy, Mr. Lansdown and Mr. Tibbits. Superintendence of Dissections, Messrs. Ludlow, Dowson, and Dobson. Chemistry, Mr. Coomber.

The Summer Session will commence on May 2, 1870. Midwifery and Diseases of Women, Dr. J. G. Swayne. Forensic Medicine, Dr. H. Marshall. Materia Medica and Therapeutics, Dr. G. F. Burder. Botany, Mr. A. Leipner. Practical Chemistry, Mr. Coomber.

Fee for perpetual attendance on all the above Courses, £52 10s.

Competitive Examinations are held amongst students of the first, second, and third years respectively; and prizes of money, instruments, and books, are annually awarded.

Medical and Surgical Hospital Practice and Clinical Lectures are attended at the Royal Infirmary or at the General Hospital.

Further information may be obtained on application to the Honorary Secretary, Dr. G. F. Burder.

BRISTOL ROYAL INFIRMARY.

The Infirmary contains 242 beds. Physicians, Dr. Brittan, Dr. Fairbrother, Dr. Fox, Dr. Beddoe. Surgeons, Mr. Prichard, Mr. Bernard, Mr. Leonard, Mr. Clark, and Mr. Tibbits.

Fees.—For one year, Surgeon's pupil, £12 12s.; Dresser (extra fee) £12 12s. For two years (at one payment), Surgeon's pupil, £21; Dresser (extra fee), £21. For three years (at one payment), Surgeon's pupil, £26 5s.; Dresser, (extra fee), £26 5s. Dressers reside in the House in weekly rotation. Physician's pupil, for six months, £8; one year, £15; eighteen months, £20; perpetual, £25. Clinical Clerks are appointed without extra fee. A Gold Medal and other Prizes are awarded annually. Patients admitted in 1868: In-patients, 2615; out-patients, 23,121; total, 25,736.

BRISTOL GENERAL HOSPITAL.

The Hospital contains 130 beds. Physicians, Dr. Martyn, Dr. Burder, Dr. Fripp. Surgeons, Mr. Coe, Mr. Lansdown, Dr. H. Marshall, Mr. G. F. Atchley. Physician-Accoucheur, Dr. Swayne. Two Scholarships of £15 each are awarded annually, and a Prize of Twenty Guineas is given to the Hospital Student who is successful in the third year's Competition at the School.

Fees.—Medical or Surgical Practice, for six months, £6: one year, £10; perpetual, 20. Extra fee for Clinical Clerk or Dresser, £5 5s. for six months. Library fee, £1 1s. per annum. Dressers reside in the Hospital by rotation and free of expense.

Resident Pupils (including Board, Lodging, and Washing), £100 for the first year, £60 for each subsequent year. Or for five years, with apprenticeship to the Hospital, £260.

Further information will be afforded by Mr. Atchley on application being made to him at the Hospital.

HULL AND EAST-RIDING SCHOOL OF MEDICINE AND ANATOMY, KINGSTON-SQUARE, SESSION 1869-70.

The Winter Session will commence on Friday, October 1, 1869. Anatomy, Physiology, and Pathology, by Mr. R. M. Craven and Mr. Rudd. Anatomy and Anatomical Demonstrations, by Mr. Nicholson. Principles and Practice of Medicine, by Dr. Elliott. Principles and Practice of Surgery, by Dr. King. Chemistry, by Mr. Walton.

The Summer Session commences May 1, 1870. Midwifery and Diseases of Women and Children, by Mr. Henry Gibson. Materia Medica and Therapeutics, by Mr. Holden and Mr. Henson. Forensic Medicine, by Mr. T. M. Evans. Botany, by Mr. Niven. Chemistry, by Mr. Walton. Pepetual fee to all the Lectures except Chemistry, £42.

The Hospital contains 152 beds and is recognised by all the Examining Boards. Clinical Lectures are given at the Hospital twice a week: On Medicine, by Sir H. Cooper, Dr. Daly, and Dr. Elliott; on Surgery, by Dr. Lunn, Mr. Craven, and Dr. King. Perpetual Fee for attendance on the Medical and Surgical Practice, £21. Clinical Lectures, £1 1s. Application for Tickets may be made to Mr. R. M. Craven.

LEEDS SCHOOL OF MEDICINE.

The Winter Session will commence on Monday, October 4, 1869. Anatomy, by James Seaton, M.R.C.S., Robert T. Land, M.D., M.R.C.S., and John A. Nunneley, M.B., M.R.C.S. Physiology, by William Hall, M.R.C.S., and Thomas R. Jessop, F.R.C.S. Principles and Practice of Medicine, by Charles Chadwick, M.D., F.R.C.P., John D. Heaton, M.D., F.R.C.P., and T. C. Allbutt, M.A., M.D., F.L.S. Principles and Practice of Surgery, by Samuel Hey, F.R.C.S., Claudius G. Wheelhouse, F.R.C.S., and T. Pridgin Teale, M.A., F.R.C.S. Chemistry, by J. Chapman Wilson, F.C.S. Materia Medica, by John Eddison, M.D. Midwifery, by W. Nicholson Price, M.R.C.S., and W. Hall, M.R.C.S. Forensic Medicine, by Thomas Scattergood, M.R.C.S. Botany, by Edward Atkinson. M.R.C.S., F.L.S. Comparative Anatomy, by C. G. Wheelhouse, F.R.C.S., and T. C. Allbutt, M.A., M.D., F.L.S. Assistant-Demonstrators of Anatomy, Robert Parr Oglesby, M.R.C.S., and Charles James Wright, M.R.C.S. Demonstrations in Operative Surgery, by Messrs. S. Hey, C. G. Wheelhouse, and T. Pridgin Teale. Demonstrations of Skin Diseases, by Dr. Allbutt, at the Infirmary. Ophthalmoscopic Demonstrations, by Mr. T. Pridgin Teale.—N.B. The Clinical Lectures are given in the General Infirmary, in conformity with the Regulations of the Royal College of Surgeons and the Apothecaries' Hall. Total fees, entitling to all the Lectures (except Practical Chemistry) and Hospital Practice required by the Licensing Boards, £84. These fees may be paid at once, or in two instalments at the commencement of the first and second years. Fee to Practical Chemistry, £2 2s. Entrance Fee to Library and Reading-room, £1 1s., to be paid by all students on admission. Instruction in Vaccination, as required by the College of Surgeons and the Poor-law Board, is given by Mr. Holmes, of Burmantofts, one of the Public Vaccinators. Fee, £1 1s. At the close of each Session, Examinations for Prizes are held, when Silver and Bronze Medals, Books, and Certificates of Honour are presented according to merit. Two Clinical Prizes of £10 each, a Forensic Medicine Prize of £10, and two Chemical Scholarships, are awarded to Students.

Clinical Clerkships and Dresserships.—In accordance with the recent requirements of the Examining Boards, it is now arranged that every Student in turn shall pass through the offices of Clinical Clerk and Dresser. No Certificate of Hospital Practice will be granted to Students who have not held these offices.

Resident Medical Officers.—Four House-Surgeons are elected for the service of the Infirmary, to work under the direction of the Resident Medical Officer. They are chosen from those senior Students who have shown industry and skill as Dressers and Clinical Clerks. They are provided with private apartments, board, gas, and coal in the Hospital, without charge.

For further information, apply to the Secretary, Mr. E. Atkinson, 2, Albion-place.

Honorary Medical Officers of the Hospital.—Consulting Surgeon: William Hey, F.R.C.S. Physicians: Charles Chadwick, M.D., F.R.C.P.; John Deakin Heaton, M.D., F.R.C.P.; and T. Clifford Allbutt, M.A., M.D., F.L.S. Surgeons: Samuel Hey, F.R.C.S.; Thomas Nunneley, F.R.C.S.; C. G. Wheelhouse, F.R.C.S.; T. Pridgin Teale, M.A., F.R.C.S.

Terms of Attendance upon the Hospital Practice.—The fees for attendance upon the Medical Practice alone, or upon the Surgical Practice alone, are as follows, being the same in each case. One Winter Session, £7 7s.; one Summer Session, £6 6s.; Twelve Months, £12 12s.; Eighteen Months, £15 15s. Three Years, £21; Perpetual, £26 5s. Applications for Medical Practice are to be made to Dr. Heaton, Claremont, between 9 and 10 a.m. Applications for Surgical Practice are to be made to Mr. T. Pridgin Teale, 20, Park-row, between 10 and 12 a.m.

LIVERPOOL ROYAL INFIRMARY SCHOOL OF MEDICINE.

The Introductory Address will be delivered on October 1, 1869, at 3 p.m., by Dr. Davidson.

Hospital Practice, Royal Infirmary.—Physicians, Dr. Vose, Dr. Turnbull, Dr. Inman. Surgeons, Mr. Stubbs, Mr. Bickersteth, Mr. Hakes. Assistant-Surgeon, Mr. Harrison. House-Surgeons, Mr. Pusey and Dr. Orton. Pathologist, Mr. Banks. Dental Surgeon, Mr. Snape.

Terms for Hospital Attendance and Clinical Lectures:—

	Medical Practice.	Surgical Practice.
For Six Months .	£5 5 0	£5 5 0
One year . .	6 6 0	6 6 0

Lectures, Winter Session.—Medicine, Dr. Cameron. Surgery, Mr. Bickersteth. Physiology, Dr. Waters, Anatomy, Mr. Harrison. Dissections, Dr. Glynn and Mr. Banks. Chemistry, Mr. Brown.

Lecturers, Summer Session.—Midwifery, Dr. Steele. Diseases of Children, Dr. Gee. Materia Medica, Dr. Nevins. Medical Jurisprudence, Dr. E. Whittle. Toxicology and Practical Chemistry, Mr. Brown. Botany, (Vacant). Ophthalmic Medicine and Surgery, Dr. Hibbert Taylor. Comparative Anatomy and Zoology, Dr. Davidson.

Exhibitions.—Royal Infirmary Medical Scholarship—value £42—consisting of Gold Medal, value £10 10s., and Six Months' Free Board and Residence, with Clerkship and Dressership, in the Royal Infirmary.—Four Exhibitions—value £31 10s. each—consisting of Six Months' Free Board and Residence in the Royal Infirmary.

The Fee for all the Lectures required by the Colleges of Surgeons and Physicians and the Apothecaries' Hall is £42, (exclusive of Practical Chemistry), payable in advance.

LIVERPOOL NORTHERN HOSPITAL.

The Winter Session will commence on Friday, October 1st. Physicians, Dr. Waters and Dr. Glynn. Surgeons, Mr. Manifold, Mr. Lowndes, and Mr. Branston Nash. Junior Surgeon, Mr. John Bradley. Dental Surgeon, Mr. J. Lloyd.

The Hospital contains 134 beds, which are mainly devoted for severe accidents and cases of acute disease. About 4500 cases are annually treated at this Hospital, of which upwards of 1500 are in-patients.

Fees for Attendance on Hospital Practice.—Perpetual, 30 guineas; one year, 12 guineas; six months, 9 guineas; three months, 6 guineas. Students can enter to the Medical or Surgical Practice separately on payment of half the above fees. Attendance on the Practice of this Hospital qualifies for all Examination Boards.

For further particulars apply to the House-Surgeon, Mr. Orfeur.

MANCHESTER ROYAL SCHOOL OF MEDICINE AND SURGERY, FAULKNER-STREET.

The Winter Session will commence October 1, with an Introductory Address by S. M. Bradley, Esq.

Winter Session, 1869-70.—Physiology, by Mr. Smith. Descriptive Anatomy, by Mr. Lund and Mr. Bradley. Practical Anatomy, by Mr. S. M. Bradley. Chemistry, by Mr. Stone. Principles and Practice of Medicine, by Dr. Roberts and Dr. Morgan. Principles, Practice, and Operations of Surgery, by Mr. Southam. Anatomy, Physiology, and Pathology of the Eye, by Mr. Hunt.

Summer Session.—Midwifery and Diseases of Women and Children, Dr. Thorburn. General Pathology and Morbid Anatomy, by Dr. Simpson. Materia Medica, Medical Botany, and Therapeutics, by Mr. Somers. Forensic Medicine, by Mr. Harrison. Botany, by Mr. Grindon. Practical Chemistry, by Mr. Stone. Comparative Anatomy, by Mr. Bradley.

Perpetual fee to the whole of the Lectures required to qualify for Examination at the London University, the Royal Colleges of Physicians and Surgeons, and the Apothecaries' Company, £42.

Hospital Practice at the Royal Infirmary, where Clinical Lectures are regularly delivered by the Physicians and Surgeons of the Institution.

Scholarships.—In addition to prizes, amounting to 36 guineas, for general proficiency, Three Scholarships for perpetual students will be offered for competition—one of £20 for third year's

students; one of £15 for second year's students; one of £10 for first year's students.

Further particulars may be obtained from Mr. Southam; or from the Vice-Registrar, Mr. Stone, at the School.

COLLEGE OF MEDICINE, NEWCASTLE-UPON-TYNE.

Winter Session, commencing October 4, 1869.—Anatomy and Physiology, Dr. Murray. Anatomy, Dr. Nesham, Mr. Armstrong, and Mr. Russell. Medicine, Dr. Charlton and Dr. Embleton. Surgery, Dr. Heath. Chemistry, Mr. Marreco.

Summer Session.—Midwifery, Dr. Gibson. Botany, Mr. Thornhill and Dr. Arnison. Medical Jurisprudence, Dr. Donkin. Materia Medica, Dr. Humble. Practical Chemistry, Mr. Marreco. Operative Surgery, Dr. Heath. Pathological Anatomy, Dr. Gibb and Dr. Philipson.

Fees for Lectures.—Perpetual Fee for all the Lectures qualifying for the Licence in Medicine, and the Mastership in Surgery, of the University of Durham, the Licence and Membership of the Royal College of Physicians, the Diploma of the College of Surgeons, and the Licence of the Apothecaries' Society, and payable on entering to the first Winter Session, £46 4s.

Hospital Practice.—This can be attended at the Newcastle Infirmary, which contains 230 beds. Midwifery at the Newcastle Lying-in Hospital.

Fees for Hospital Practice.—Twelve months, £7 7s.; Six Months, £5 5s.; Three Months, £4 4s.; Perpetual Fee, £17 17s.; or, if paid by instalments, first year £7 7s., second year £6 6s., third year £5 5s. These fees also are payable in advance.

Medical Scholarships in the University of Durham.—Four Scholarships, of £25 a year each, tenable each for four years. Two resident Clinical Clerkships, four Resident Dresserships, and four Non-Resident Dresserships are conferred for merit. Dickinson Memorial Scholarship, one, £15 for general proficiency.

College Medals.—At the end of each Session a Silver Medal and Certificates of Honour will be awarded in each of the required classes.

Further particulars may be obtained from Dr. Embleton, Registrar, or Dr. Philipson, Secretary.

SHEFFIELD SCHOOL OF MEDICINE.

The Winter Session will commence October 1, 1869. Lectures.—Anatomy, Descriptive and Surgical, Mr. Skinner and Mr. A. Jackson; Demonstrations on Anatomy, Mr. Woolhouse; Physiology, Mr. Leeds and Mr. S. Morton; Principles and Practice of Medicine, Dr. Frank-Smith; Principles and Practice of Surgery, Mr. W. F. Favell and Mr. Parker; Chemistry, Mr. Allen; Dental Mechanics, Mr. G. Mosely; Clinical Medicine, Dr. De Bartolomé, Dr. Law, and Dr. Frank-Smith; Clinical Surgery, Mr. Barber, Mr. W. F. Favell, and Mr. Parker. The Summer Session will commence May 1, 1870. Lectures.—Midwifery and Diseases of Women, Dr. Keeling and Dr. Hime; Materia Medica and Therapeutics, Dr. Young; Medical Jurisprudence and Toxicology, Mr. Harrison and Mr. Baker; Botany, Mr. Birks; Practical Chemistry, Mr. Allen; Dental Surgery, Mr. Merryweather; Demonstrations of Pathology and Microscopy, Mr. Hardy Smith (at the Infirmary); Demonstrations of Operative Surgery, Mr. Favell and Mr. Parker.

Fees.—Anatomy and Physiology, First Course, £6 6s.; Second Course, £4 4s. Practice of Medicine, Practice of Surgery, First Course, £4 4s.; Second Course, £2 2s. each. Chemistry, First Course, £4 4s. Midwifery and Diseases of Women, Materia Medica, Medical Jurisprudence, Botany, Practical Chemistry, First Course, £3 3s. each. Perpetual fee for attendance on all the Lectures required by the Royal College of Surgeons and Apothecaries' Hall, £40.

All further information may be obtained upon application to the Honorary Secretary, Dr. W. Frank-Smith.

Sheffield General Infirmary.—Physicians, Dr. De Bartolomé, Dr. Frank-Smith, Dr. Law. Surgeons, Mr. Barber, Mr. Favell, Mr. Parker. House-Surgeon, Mr. Batt.

The Infirmary contains 150 beds for in-patients.

The fees for perpetual attendance at the Infirmary are £15 15s. for Medical, £21 for Surgical Practice. For 12 months' Medical 10 guineas; 6 months 6 guineas. For 12 months' Surgical 10 guineas; 6 months 6 guineas.

MEDICAL SCHOOLS AND HOSPITALS IN SCOTLAND.

UNIVERSITY OF EDINBURGH.—1869-70.

Principal—Sir Alexander Grant, Bart, LL.D.

The Session will be publicly opened with an Introductory Address by the Principal, on Tuesday, November 2, 1869. The Classes for the different branches of study will be opened as follows:—

Faculty of Medicine.—Dietetics, Materia Medica, and Pharmacy, on Wednesday, November 3, at 9 o'clock, Professor Christison, M.D.; Chemistry, Wednesday, November 3, at 10 o'clock, Professor Crum-Brown, M.D.; Surgery, Wednesday, November 3, at 10 o'clock, Professor Spence; Institutes of Medicine or Physiology, Wednesday, November 3, at 11 o'clock, Professor Bennett, M.D.; Midwifery and Diseases of Women and Children, Wednesday, November 3, at 11 o'clock, Professor Sir J. Y. Simpson, Bart, M.D.; Clinical Surgery (Monday and Thursday), Monday, November 8, at 12 o'clock, Professor Lister; Clinical Medicine (Tuesday and Friday), Friday, November 5, from 12 to 2 o'clock, Professors Bennett, Laycock, and Maclagan; Anatomy, Wednesday, November 3, at 1 o'clock, Professor Turner, M.B.; Natural History, Professor Allman, M.D.; Practice of Physic, Wednesday, November 3, at 3 o'clock, Professor Laycock, M.D.; General Pathology, Wednesday, November 3, at 4 o'clock; Anatomical Demonstrations, Wednesday, November 3, at 4 o'clock, Professor Turner; Botany, Professor Balfour, M.A., M.D.; Medical Jurisprudence, Professor Maclagan, M.D.

The Lectures on Botany and Medical Jurisprudence are given in the Summer Session. Royal Infirmary, at noon, daily. Practical Anatomy, Monday, October 4, under the superintendence of Professor Turner. Practical Chemistry, under the superintendence of Professor Brown. Analytical Chemistry, under the superintendence of Professor Brown. Practical Physiology, under the superintendence of Professor Bennett. During the Summer Session, Lectures will be given on the following subjects:—Botany, by Professor Balfour. Practical Physiology, including Histology, by Professor Bennett. Medical Jurisprudence, for Medical and Law Students, by Professor Maclagan. Clinical Medicine. Clinical Surgery, by Professor Lister. Comparative Anatomy, by Professor Turner. Anatomical Demonstrations, by Professor Turner. Practical Chemistry and Pharmacy, under the direction of Professor Brown. Practical Anatomy, under the superintendence of Professor Turner. Natural History, by Professor Allman. Medical Psychology, with practical instruction at an Asylum, by Professor Laycock. Operative Surgery, by Professor Spence.

A Table of Fees may be seen in the Matriculation Office, and in the Reading-room of the Library.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS, EDINBURGH.

The Winter Session will commence on November 2, when an Introductory Lecture will be delivered by Dr. Argyll Robertson.

Winter Session, 1869-70:—The following Courses of Lectures on Medical and Surgical Science, and also those delivered in the University, qualify for examination for the Diplomas of the Royal Colleges of Physicians and Surgeons. Lectures commence on Wednesday, November 3. Surgery, Dr. P. H. Watson, Dr. Joseph Bell, and Mr. Annandale; Chemistry (Lectures, Practical Chemistry, Analytical Chemistry), Dr. Stevenson Macadam; Physiology, Dr. Sanders; Clinical Medicine (Royal Infirmary), Drs. Sanders, Haldane, and Balfour, Dr. Matthews Duncan (for Diseases of Women); Clinical Surgery (Royal Infirmary), Dr. Gillespie; Anatomy (Lectures, Anatomical Demonstrations, Practical Anatomy), Dr. P. D. Handyside; Medical Jurisprudence, Dr. Littlejohn; Practice of Physic, Dr. Rutherford Haldane; General Pathology, Dr. Grainger Stewart. The Practical Anatomy Rooms and Chemical Laboratories open on October 1.

Summer Session, 1870: Classes open on Monday, May 2. Materia Medica and Therapeutics, Dr. Angus Macdonald; Pathological Anatomy and Histology, Dr. Grainger Stewart; Midwifery and Diseases of Women and Children, Dr. Keiller and Dr. Matthews Duncan; Medical Jurisprudence, Dr. Littlejohn; Clinical Medicine (Royal Infirmary), Drs. Sanders, Haldane, and Balfour, Dr. Matthews Duncan (for Diseases of Women); Clinical Surgery (Royal Infirmary), Dr. Gillespie; Anatomy (Practical Anatomy, Anatomical Demonstrations), Dr. P. D. Handyside; Chemistry (Practical Chemistry, Analytical Chemistry), Dr. Stevenson Macadam.

The above Courses qualify for the Royal Colleges of Physicians and Surgeons of Edinburgh, London, and Dublin; the University of Edinburgh and other Universities; and the other Medical and public boards.

The minimum cost of the education in the above School for the double qualification of Physician and Surgeon from the Royal Colleges of Physicians and Surgeons, including the fees for the joint Examinations, is £90 4s., which is payable by yearly instalments during the period of study; whilst the minimum cost for the single qualification of either Physician or Surgeon, including the fee for Examination, is £80.

Extra Winter Classes: Vaccination (six weeks' Course), Dr. Husband. Clinical Diseases of Children, Drs. Keiller, Grainger Stewart, and Stephenson. Natural History, Dr. H. Alleyne Nicholson.

Extra Summer Classes: Vaccination (six weeks' Course), Dr. Husband. Clinical Diseases of Children, Drs. Keiller, Grainger Stewart, and Stephenson. Histology, Dr. Sanders. Operative Surgery and Surgical Appliances, Drs. Watson and Miller. Surgical Appliances and Operative Surgery, Dr. Joseph Bell. Surgical Pathology and Operative Surgery, Mr. Annandale. Diseases of the Eye, Dr. Argyll Robertson. Practical Pathological Histology, Dr. Grainger Stewart. Diseases of Children, Dr. Stephenson. Natural History, Dr. H. Alleyne Nicholson.

For further information apply to Dr. Stevenson Macadam, Secretary to the Medical and Surgical School.

ROYAL INFIRMARY, EDINBURGH.

We are informed by the Secretary of this Hospital that, as various changes are now going on in the Surgical Department of this Hospital, he is not enabled to furnish us with a correct account of the staff, etc. The following has hitherto been the scale of fees:—

Hospital Tickets: Perpetual, in one payment, £10; Annual, £5 5s.; Half-yearly, £3 3s.; Quarterly, £1 11s. 6d. Separate payments for two years entitle the Student to a perpetual ticket.

In this Hospital a portion of the beds is set apart for Clinical Instruction by the Professors of the University of Edinburgh. Courses of Clinical Medicine and Surgery are also given by the ordinary Physicians and Surgeons.

UNIVERSITY OF ABERDEEN.

Faculty of Medicine—Session 1869-70.

Winter Session, commencing on Wednesday, October 27.—Anatomy, Professor Struthers, M.D., £3 3s. Practical Anatomy and Demonstrations, Professor Struthers and the Demonstrator, £2 2s. Chemistry, Professor Brazier, £3 3s. Institutes of Medicine, Professor Ogilvie, £3 3s. Surgery, Professor Pirrie, £3 3s. Practice of Medicine, Professor Macrobin, M.D., £3 3s. Midwifery and Diseases of Women and Children, Professor Inglis, £3 3s. Zoology, with Comparative Anatomy, Professor Nicol, £3 3s. Medical Jurisprudence, Professor Ogston, £3 3s.

Summer Session, commencing on the first Monday in May.—Botany, Professor Dickie, £3 3s. Materia Medica (100 Lectures), Professor Harvey, £3 3s. Practical Anatomy and Demonstrations, Professor Struthers and the Demonstrator, £2 2s. Practical Chemistry, Professor Brazier, £3 3s. Zoology, with Comparative Anatomy, Professor Nicol, £3 3s.

Matriculation Fee for the Winter and Summer Sessions, £1. For the Summer Session alone, 10s.

Royal Infirmary.—Perpetual Fee to Hospital Practice, £6; or First Year, £3 10s.; Second Year, £3. Clinical Medicine, Drs. Harvey and Smith, £3 3s. Clinical Surgery, Drs. Keith and Pirrie, £3 3s.

General Dispensary, and Lying-in and Vaccine Institution: Daily. Royal Lunatic Asylum: Clinical Instruction is given for Three Months in the year.

Eye Institution: Daily. Clinical Instruction is given on the Diseases of the Eye and on the application of the Ophthalmoscope.

For further information, apply to Dr. Macrobin, Dean of the Faculty of Medicine.

UNIVERSITY OF GLASGOW.

Faculty of Medicine.—The Classes open for the Winter Session on Tuesday, October 26, 1869, when an Introductory Lecture will be given by Professor Anderson.

Chemistry, Practical Chemistry, and Chemical Laboratory, Dr. Anderson, £3 3s. Practice of Physic, Dr. Gairdner, £3 3s. Anatomy, Anatomical Demonstrations, and Practical Anatomy, Dr. Allen Thomson and Demonstrator, £8 8s. Materia Medica, Dr. Cowan, £3 3s. Forensic Medicine, Dr. Rainy, £3 3s. Surgery, £3 3s. Midwifery, Dr. Leishman, £6 3s. Institutes of Medicine, Dr. A. Buchanan, £3 3s. Clinical Medicine and Clinical Surgery, Physicians and Surgeons of Royal Infirmary.

Further information may be obtained from the Registrar of the University.

ANDERSON'S UNIVERSITY, GEORGE-STREET, GLASGOW.

Winter Session 1869 opens October 26.

Chemistry, Practical Chemistry, and Laboratory, Dr. Penny; Surgery, D. G. H. B. Macleod; Institutes of Medicine (Physiology), Dr. Watson; Anatomy, Anatomical Demonstrations, Practical Anatomy, or Dissection, Dr. G. Buchanan; Practice of Medicine, Dr. M'Call Anderson; Materia Medica, Dr. Morton; Hospital Practice in Royal Infirmary; Clinical Lectures in Royal Infirmary.

Summer Session.

Midwifery, Dr. J. G. Wilson; Medical Jurisprudence, Dr. P. A. Simpson; Surgical Anatomy, Practical Anatomy, Osteology for beginners, Dr. George Buchanan; Practical Chemistry, Dr. Penny; Operative Surgery, Dr. G. H. B. Macleod.

Class Fees: For each of the above Courses of Lectures, first Session, £2 2s.; second Session, £1 1s.; afterwards free.

Anatomy Class Fees: For both Courses (Lectures and Demonstrations), first Session, £4 4s.; second Session, £4 4s.; afterwards free.

Practical Anatomy: The Dissecting-room is free for two Sessions to those who attend both Courses of Anatomy. After the second year the fee for Practical Anatomy is £1 1s. per Session.

The Fees for all the Lectures and Hospital Practice required of Candidates for the Diplomas of Physician and Surgeon amount to £40.

GLASGOW ROYAL INFIRMARY.

The Winter Session commences on November 1, 1869. Physicians, Drs. W. J. Gairdner, Steven, Perry, and McCall Anderson. Surgeons, Drs. E. Watson, Dewar, Macleod, and G. Buchanan. Fever Physician, Dr. James Maclaren.

Number of beds, 583.

Besides the Clinical Instruction given at the bedside, Lectures on the Cases are given four times weekly, at 9 a.m., during the Winter and Summer Sessions. Clinical Medical Lectures on Mondays and Thursdays. Clinical Surgical Lectures on Tuesdays and Fridays. Regular Operating days—Wednesdays and Saturdays.

The valuable Pathological Museum is open to all Students who desire to examine the Preparations.

Four Physicians' Assistants and Four Surgeons' Assistants perform the duties of House-Physicians and House-Surgeons. This office, held for one year, is open to Students of the fourth year. They are lodged and boarded in the Hospital for £25 per annum. Dressers to the Surgical Wards and Clerks to the Dispensary are appointed without fee.

Dispensary.—Physicians, Drs. P. A. Simpson and Alex. Lindsay. Extra-Physicians, Drs. Charteris and McCall Anderson. Surgeons, Drs. Dunlop and Patterson. Extra Surgeons, Drs. Smart and R. Watson.

Fees admitting to the Medical and Surgical Practice and the Clinical Lectures:—For a Perpetual Ticket, £10 10s. Or, for the First Year, £5 5s.; Second Year, £5 5s.; Third and Perpetual, £1 1s. Practical Pharmacy, Six Months, £3 3s.

Medical Superintendent, Dr. M. Thomas. Secretary, Mr. H. Lamond, 64, West Regent-street.

SCHOOLS AND HOSPITALS IN IRELAND.

SCHOOL OF PHYSIC, UNIVERSITY OF DUBLIN.

The School was established by Act of the Irish Parliament 40th George III. cap. 84, and is under the joint government of the Board of Trinity College and the King and Queen's College of Physicians.

Institutes of Medicine, Professor Law. Materia Medica and Pharmacy, Professor A. Smith. Surgery, Professor R. Smith. Anatomy and Surgery, Professor M'Dowel. Practical Anatomy, Dr. Bennett. Chemistry, Professor Apjohn. Practice of Medicine, Professor Moore. Midwifery, Professor Sinclair. Botany, Dr. E. Perceval Wright. Medical Jurisprudence, Professor Travers. Hospital Practice and Clinical Lectures at Sir Patrick Dun's Hospital.

SIR PATRICK DUN'S HOSPITAL.

Consulting Physician, William Stokes, M.D., Regius Professor of Physic. Consulting Surgeon, Robert Adams, M.Ch.,

Regius Professor of Surgery. The Clinical Lectures in Medicine and Surgery are delivered by Physicians Robert Law, M.D., King's Professor of the Institutes of Medicine; William Moore, M.D., King's Professor of the Practice of Medicine; Aquilla Smith, M.D., King's Professor of Materia Medica and Pharmacy; Edward B. Sinclair, M.D., King's Professor of Midwifery. Surgeons, Benjamin G. M'Dowel, M.Ch., University Professor of Anatomy and Chirurgery; Robert W. Smith, M.Ch., Trinity College Professor of Surgery; Edward H. Bennett, M.Ch., University Anatomist; Richard G. Butcher, M.D., University Lecturer in Practical Surgery. The Physicians and Surgeons attend for Clinical Instruction on alternate days.

Hospital Fee for twelve months, including nine months' Clinical Lectures, nine guineas. Attendance on this Hospital is recognised by all Licensing Bodies.

THE QUEEN'S UNIVERSITY IN IRELAND—QUEEN'S COLLEGE, BELFAST, FACULTY OF MEDICINE.

The Lectures will commence on Tuesday, November 2. Anatomy and Physiology, Dr. P. Redfern. Chemistry, Dr. Thomas Andrews. Practice of Medicine, Dr. James Cuming. Practice of Surgery, Dr. A. Gordon. Materia Medica, Dr. J. S. Reid. Midwifery, Dr. R. F. Dill. Medical Jurisprudence, Dr. J. F. Hodges. Natural Philosophy, Dr. Everett. Zoology and Botany, Dr. Wyville Thomson. The Demonstrations in Anatomy are delivered by Dr. Charles. The Courses of Botany and Practical Chemistry, and a Second Course of Experimental Physics, will commence in May.

Fees.—Anatomy and Physiology—First Course, £3; each subsequent course, £2. Anatomical Demonstrations and Practical Anatomy—Each Course, £3. Practical Chemistry £3. Other Medical Lectures—First Course, £2; each subsequent Course, £1.

Two Medical Scholarships are awarded to the Students of each year of the Medical course. The Examinations commence on October 19.

Belfast General Hospital.—Fees for Clinical Instruction—First year, £4 4s.; second year, £3 3s.; third year, £2 2s.; for two years in advance, £6 6s. Hospital Fee, £1 1s. per annum. Three resident pupils are appointed by examination.

Belfast Lying-in Hospital.—Fee for the Session, £3 3s.

QUEEN'S COLLEGE, CORK.—FACULTY OF MEDICINE.—Session 1869-70.

Anatomy, Physiology, and Practical Anatomy, Dr. J. H. Corbett. Practice of Medicine, Dr. C. O'Connor. Practice of Surgery, Dr. W. Tanner. Materia Medica, Dr. P. O'Leary. Midwifery, Dr. J. R. Harvey. Natural Philosophy, Mr. John England. Chemistry and Practical Chemistry, Dr. J. Blyth. Zoology and Botany, Dr. J. R. Greene. Modern Languages, Mr. R. De Vericour. Clinical Medicine and Clinical Surgery, at the North and South Infirmaries, by the Physicians and Surgeons of these Institutions. Clinical Midwifery, at the Lying-in Hospital. The Medical Session will be opened on Tuesday, November 2, 1869, and the Lectures will commence on the same day.

Eight Scholarships, value £25 each, are awarded to Students of Medicine.

For further information apply to Mr. Robert John Kenny, Registrar.

QUEEN'S COLLEGE, GALWAY.—FACULTY OF MEDICINE.

Anatomy and Physiology, and Practical Anatomy, Dr. Cleland. Practice of Medicine, Dr. N. Colahan. Practice of Surgery, Dr. J. V. Brown. Demonstrator, Dr. Ward. Materia Medica and Medical Jurisprudence, Mr. S. M'Coy. Midwifery and Diseases of Women and Children, Dr. R. Doherty. Chemistry, Dr. T. H. Rowney. Natural Philosophy, Dr. A. H. Curtis. Botany and Zoology, Dr. A. G. Melville. Logic and Mental Philosophy, Dr. T. W. Moffett. The County Galway Infirmary, Town, and Union Hospitals are in the immediate vicinity of the Queen's College. They are visited every morning by Professors of the College, who deliver Clinical Lectures.

Eight Scholarships of the value of £25 each, and Exhibitions varying in value from £10 to £18, are appropriated to Students pursuing the Course for the Degree of M.D.

Fees.—Anatomy and Physiology, £3, First Session; afterwards, £2. Practical Anatomy, £3; Practical Chemistry, £3; Operative Surgery, £3; other Classes, £1 for each Course extending over one Term only—£2 for each Course extending over more than one Term—and £1 for each attendance on the same. The College Session is divided into three Terms. The first Term commences on October 20, 1869, and ends on December 23, 1869.

For further information, apply to the Registrar, W. Lupton, M.A.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—SCHOOL OF SURGERY.—Session 1869-70.

The public Lectures and the usual Winter Course will commence on Monday, November 1. Anatomy and Physiology, Dr. Mapother. Descriptive Anatomy, Dr. Bevan and Mr. Morgan. Surgery, Mr. Hargrave and Dr. J. S. Hughes. Practice of Medicine, Dr. Benson. Chemistry, Dr. Barker. Materia Medica, Dr. Macnamara. Midwifery, Dr. Sawyer. Medical Jurisprudence, Dr. Geoghegan. Practical Chemistry, Dr. Barker. Botany, Dr. Minchin. Hygiene, Dr. Cameron. Dissections under the direction of the Professors of Anatomy, and the Demonstrators, Drs. Croly, Stoney, Hewitt, S. Hewitt, Stoker, Kelly, and Ormsby, commence on Monday, October 4.

The Summer Session commences in April and terminates in July, including Materia Medica, Medical Jurisprudence, Botany, Practical Chemistry, Midwifery, and Hygiene.

The fee for each of the above Courses is £3 3s., except Comparative Anatomy, which is free. Practical Instruction in Operative Surgery is given by the Professors of Surgery, separate from the Surgical Lectures. Fee £5 5s.

For further information application to be made to the Registrar, John Brennen, Esq., at the College.

DR. STEEVENS' HOSPITAL, DUBLIN,

Contains 250 beds, with distinct Wards for Fever, Syphilis, Diseases of the Eye, and Diseases of Females. There is also in connexion with the Hospital a Maternity Department, and an extensive Dispensary for out-patients. Systematic Courses of Lectures are delivered during the Winter and Summer Sessions on all subjects required by the Colleges, Halls, and the Public Service. Students enjoy the advantages of a Reading-room, Museum, and Lending Library. There is accommodation in the Hospital for two Medical and six Surgical Resident Pupils as Dressers. Fee, £21, including Hospital Certificate. Special Private Classes are held for the preparation of Gentlemen for the Licensing Bodies and Competitive Examinations. Senior Middle and Junior Exhibitions will be awarded at the end of the Session to those whose answering exhibits general proficiency in every branch of their Professional studies. There will also be Prizes for the best reports of Cases which have occurred in the Hospital during the session. Two Midwifery Assistants are each year (month of November) selected by Competitive Examination, salary £30 per annum. The Dissecting Rooms will be opened on October 1 for Practical Anatomy. The Lecturers and Demonstrators attend throughout the day. The Sessional Courses of Lectures will commence on the 1st Monday in November. Fees—Hospital, £7 7s.; Lectures, £3 3s. each Course; Perpetual to all Educational Courses required by Colleges, Halls, and Public Service, 75 guineas, payable in two instalments.

Further particulars on application to Dr. Swan, Resident Surgeon, at the Hospital; or to E. Hamilton, M.D., Secretary, 120, Stephen's-green.

THE ADELAIDE HOSPITAL, PETER-STREET, DUBLIN.

This Hospital contains 100 beds. There are two Wards for Infants and Children, and a detached Fever Hospital. Clinical Instruction is given by the Surgeons punctually from 9 to 10, and by the Physicians from 10 to 11. A complete Course of Lectures on Diseases of the Eye and Ear is delivered.

Prizes.—Two Medical and Two Surgical Prizes will be given at the close of the Session.

Resident Pupils.—Two Resident Pupils are selected half-yearly from amongst the Students attending the Hospital. Certificates of Attendance upon this Hospital are fully recognised by all the Licensing Bodies of the United Kingdom. The central position of the Hospital, and its close proximity to the School of the Royal College of Surgeons and the Ledwich School, render it peculiarly convenient to Students attending those Institutions.

Fee for Nine Months' Hospital Attendance, £8 8s.; Six Months', £6 6s.; Summer Three Months', £3 3s.; Perpetual Pupil (paid at entrance), £21.

Physicians, Henry H. Head, M.D., M.R.I.A.; James Little, M.D. Surgeons, Albert J. Walsh, M.D.; John K. Barton, M.D.; Mr. Benjamin Wills Richardson. Ophthalmic and

Aural Surgeon, J. H. Loftie Stoney, M.D. Assistant-Physician, Walter G. Smith, L.K. and Q.C.P., L.R.C.S.I.

Further particulars can be obtained from Dr. Little, 24, Lower Baggot-street; or any of the other members of the Medical Staff.

CARMICHAEL (FORMERLY RICHMOND HOSPITAL) SCHOOL OF MEDICINE.

The Winter Courses of Lectures commence in November. The following are the courses of Lectures:—Theory and Practice of Surgery, and Operative Surgery, Mr. W. Stokes; Theory and Practice of Medicine, Dr. Cruise and Dr. Gordon; Anatomy and Physiology, Mr. Curran; Anatomy, Descriptive, Practical, and Surgical, Dr. Corley; Chemistry, Theoretical and Practical, Dr. Davy; Midwifery and Diseases of Women and Children, Dr. Jennings. Dissections are superintended by Messrs. Curran, Corley, Purser, Shaw, Madden, Mayne, and Clarke.

Carmichael Premiums.—Premiums to the value of £60, on the foundation of the late Richard Carmichael, Esq., and the "Mayne" Scholarship, value £15, are awarded at the termination of the Session.

Summer Session. — Lecturers: Botany, Dr. Campbell; Materia Medica and Pharmacy, Dr. Frazer; Medical Jurisprudence, Dr. O'Reilly; Practical Chemistry, Dr. Davy.

Fees.—The Fee for each Course of Lectures delivered at this School is £3 3s.

LEDWICH SCHOOL OF ANATOMY, MEDICINE, AND SURGERY, PETER-STREET, DUBLIN.

Founded 1810.

Anatomy, Physiology, and Pathology, etc., Mr. E. Ledwich and Mr. T. P. Mason. Theory and Practice of Surgery, Messrs. Wharton and Barton. Surgical and Descriptive Anatomy, Demonstrations and Dissections, Messrs. Bright, Glanville, and O'Leary. Theory and Practice of Medicine, Drs. Little and Eames. Midwifery and Diseases of Women and Children, Dr. J. Ringland. Materia Medica and Therapeutics, Dr. M'Dowell. Forensic Medicine and Hygiene, Dr. R. Travers. Theory of Chemistry, Practical Chemistry, and Natural Philosophy, Dr. Cameron. Botany, Dr. Maunsell.

A Conrse of Operations to be performed by the Student, under the superintendence of the Lecturers (subjects, etc., included), £5 5s.

Certificates of attendanee on these Lectures are received by Trinity College, Dublin, and all the Examining Boards.

The Fee for each of the above Courses will be £3 3s.

Further information may be obtained from any of the Lecturers, or from Edward Ledwich, Secretary, 7, Harcourt-street, Dublin.

CITY OF DUBLIN HOSPITAL.

This Hospital is situated in Upper Baggot-street, about ten minutes' walk from the Royal College of Surgeons and the Medical School of Trinity College, and twelve from the Ledwich Schools and the School of the Catholic University. Physicians, Surgeons, and Assistant-Physicians are, with three exceptions, either Professors or Demonstrators in the School of the Royal College of Surgeons in Ireland. The Hospital contains 104 beds, and accommodates about 800 intern patients annually. There are special wards for Ophthalmic Diseases, on which subject a special course of Lectures is delivered by Dr. Jacob, and for Diseases of Children. A new wing has been lately opened for the reception of Fever and other Infectious Diseases. The "Purser" Studentship of £20 per annum (with apartments) is obtainable by competitive examination by all students, and a special certificate is granted, and medals in Medicine, Surgery, and Ophthalmology are awarded by competitive examination in the Junior and Senior Classes. The fees for Hospital attendance are—Nine months, £8 8s.; six months, £6 6s. Summer three months, £3 3s. Perpetual, £21.

HOSPITALS, ETC., FOR SPECIAL INSTRUCTION.

At Downing College, Cambridge, every alternate year an election to a Fellowship takes place, the holder of which must be engaged in the active pursuit of the studies of Law or Medicine. These Fellowships are of the annual value of £200, and are tenable for twelve years. They are not vacated by marriage, and the Fellows are not required to reside. The next election will take place in October next. A Foundation Scholarship of £50 per annum (in some cases with rooms and commons) is awarded annually for distinction in natural science, tenable until the B.A. degree, and in case of special merit for three years longer. Minor Scholarships of £40 per annum, tenable for two years, are offered each year for competition before entrance, and in awarding one of these considerable weight is given to proficiency in natural science.

Pharmaceutical Society of Great Britain, Bloomsbury-square, London.—School of Pharmacy.—Session 1869-70.—The Session will commence on Friday, October 1, and extend to the end of July. Lectures on Chemistry and Pharmacy will be delivered by Professor Redwood on Monday, Tuesday, and Wednesday mornings at nine o'clock, commencing on Monday, October 4. Also Lectures on Botany and Materia Medica by Professor Bentley. The first and second parts of this course, extending over the winter months, will be delivered at 17, Bloomsbury-square, on Friday and Saturday mornings, at nine o'clock, commencing Friday, October 1. The third part of the course, on Systematic Botany, will be delivered at the Royal Botanic Gardens, Regent's-park. Fees: For Registered Apprentices and Associates of the Society, for either of the above courses, One Guinea; for either part separately, Half-a-Guinea. For those not connected with the Society, Two Guineas for either of the above courses; One Guinea for either part separately. Laboratory: The suite of Laboratories for Practical Instruction in General and Pharmaceutical Chemistry will be opened on Friday, October 1, under the direction of Professor Attfield. Fee for the entire Session of ten months, Twenty-five Guineas. The Laboratories are open from half-past nine a.m. till five p.m. Students can enter at any period during the Session. Two Scholarships (the Jacob Bell Memorial Scholarships), of £30 a year each, are open to competition annually in July. The Board of Examiners meet monthly to grant certificates of competency. For further information, apply to Mr. Brenridge, Secretary and Registrar.

Great Northern Hospital, Caledonian-road, N.—Consulting Physician—Dr. Copland, F.R.S. Consulting Surgeon—Mr. Skey, F.R.S. Physicians—Dr. Leared, Dr. Hardinge, Dr. Cholmeley, Dr. F. C. Webb, Dr. Jephson, Dr. Cruckuell. Surgeons—Mr. Gay, Mr. W. Adams, Mr. T. Carr Jackson, Mr. E. C. Hulme, Mr. W. Alliogham, Mr. B. Shillitoe. Obstetric Physician—Dr. G. C. P. Murray. Diseases of the Eye—Dr. Lawrence. Aural Surgeon—Mr. Harvey. Dentists—Mr. Statham, Mr. C. J. Fox. House-Surgeon—Mr. P. Hopgood. Operations on Wednesdays at two o'clock. Medical Practitioners admitted to see the practice of the Hospital on presenting their cards. Cards of admission to the practice of the Hospital will be granted to certified Medical Students on application to the Secretary at the Hospital.

Royal Orthopedic Hospital, 315, Oxford-street.—Operations, Thursdays, 2 p.m. Lectures are regularly given to Medical Practitioners and Students.

National Hospital for the Paralysed and Epileptic, 23 and 24, Queen-square, Bloomsbury.—The Hospital contains 60 beds. The Physicians attend every Monday, Tuesday, Wednesday, and Friday. Physicians—Drs. Ramskill, Radcliffe, Hughbings-Jackson, and Buzzard. Assistant-Physician—Dr. Charlton Bastian. Medical Superintendent—J. N. Radcliffe, Esq. Medical Practitioners and Students will be admitted on showing their cards.

Norfolk and Norwich Hospital.—150 beds. One year's attendance recognised by Examining Boards. Fees: For the Physicians' Practice, £10 10s.; for the Surgeons' Practice—one year, £20; two years, £30; perpetual, £40. Pupils, resident and non-resident. Physicians—Dr. Copeman, Dr. Eade, Dr. Bateman. Surgeons—Mr. Nichols, Mr. Firth, Mr. Cadge. Assistant-Surgeon—Mr. Crosse. Resident Medical Officer—Dr. Beverley.

Queen Charlotte's Lying-in Hospital, Marylebone-road.—Instituted 1752. Rebuilt 1856. Consulting Physician—Dr. Roget. Consulting Surgeon—Henry Lee, Esq. Medical Officers for the In-patients—Dr. Blakely Brown, Dr. Hope. Medical Officers for Out-patients—J. Cholmondeley, Esq., Dr. Parson. Secretary—Mr. A. S. Boodle, who attends at the Hospital on Monday from ten to two. Pupils are admitted to reside and board in the Hospital (after having been examined by the Physicians) for periods of not less than six weeks. Terms on application at the Hospital.

The Hospital for Sick Children, 48 and 49, Great Ormond-street, W.C., and Cranwell House, Highgate.—Physicians—Dr. West and Dr. Dickinson. Assistant-Physicians—Dr. Samuel Gee, Dr. W. B. Cheadle, Dr. J. J. Phillips, and Dr. J. F. Payne. Surgeon—Mr. Thomas Smith. Assistant-Surgeon—Mr. F. Howard Marsh. Surgeon-Dentist—Mr. Thos. Edgelow. 75 beds. In-patients—1868, 718; Out-patients—attending, 15,143. The practice of the Hospital, in both In- and Out-patient Departments, is open at 9 every morning. Fee for Six Months' attendance, £3 3s.; perpetual, £5 5s. Samuel Whitford, Secretary.

St. Luke's Hospital for Lunatics, Old-street, E.C.—Physicians—Dr. Henry Monro and Dr. William Wood. Surgeon—Mr. C. H. Moore. Resident Medical Superintendent—J. Thompson Dickson, M.B. and M.A. The Visiting Physicians are allowed by the Committee to take pupils. For information address the Secretary.

Hospital Ship "Dreadnought," off Greenwich.—Office, 86, King William-street, E.C.—This institution contains 200 beds, and is established for the relief of seamen of all nations. Casualties from the shore are also received. Residence is provided on board for Students and others who may be desirous of studying diseases incidental to tropical climates before entering the service or going abroad. Constant opportunities also occur for the performance of Surgical operations.

London School of Dental Surgery and Dental Hospital of London, 32, Sono-square, W.—The Winter Session will commence on Friday, October 1. Mechanical Dentistry, Mr. R. Hepburn; Metallurgy, Mr. G. H. Makins; Dental Surgery and Pathology, Mr. Cartwright; Dental Anatomy and Physiology, Mr. Ibbetson. Surgeons to the Hospital—Messrs. Fox, Underwood, Gregson, Coleman, Rogers, and Hepburn. Assistant-Surgeons—Messrs. Moon, Medwin, Harding, Lane, Bartlett, and Hill. Dental House-Surgeon—Mr. Milward Harding. Treasurer—Mr. Cartwright.

Queen's College, Liverpool.—The Session will commence on Monday, October 4. The College is in connexion with the University of London, and its classes comprise the subjects required for the Matriculation, B.A., B.Sc., and Preliminary Scientific M.B. examinations of that University. Instruction in Practical Chemistry is given in the College Laboratory by Professor Hamilton. Provincial Examinations of the London University are held at Queen's College. Fees: Separate classes, £2 2s. to £4 4s. per Session; Practical Chemistry, £5 5s.; course students, £20 per Session.

CLINICAL SURGERY.—No. IV.

ON HIP DISEASE.

By THOMAS BRYANT, F.R.C.S.,
Assistant-Surgeon to Guy's Hospital.

ON DISEASES OF THE HIP-JOINT ATTENDED WITH SUPPURATION.

PART III.

In the two preceding parts in which disease of the hip-joint has been illustrated, the disease was arrested and a recovery secured—in the first part with the happy ending of complete restoration of the joint's action, in the second with the less satisfactory yet still good result of a more or less complete anchylosis.

In none of the cases quoted did suppuration or the formation of an external abscess take place.

In the present paper I propose to take into consideration the subject of suppuration of the hip-joint, to give cases illustrating this condition in all its phases, with the effects of treatment, and their natural cure, reserving for a future occasion what observations I may feel disposed to make upon such operations as may be called for in the treatment of a disorganised hip-joint.

It will be observed that it is in this series of cases that the most severe examples of hip disease are to be found, for it is always certain, when suppuration of a joint has taken place, that the more or less complete disorganisation of that joint has likewise ensued. It is true that when an abscess has been the result of chronic changes in a pulpy synovial membrane, the complete disorganisation of the joint need not as a necessary consequence be looked for, although where it has followed upon disease in the articular extremities of the bones —articular ostitis—it is more than probable that the articular cartilages will have been completely destroyed with the ligaments and synovial capsule. There is, however, this difference between the two classes of cases. When the suppuration has taken place as a consequence of synovial disease, recovery may take place with soft or fibrous anchylosis, or even with some degree of movement, and when recovery follows upon disorganisation, the result of articular ostitis, fibrous anchylosis may take place, but osseous anchylosis can only occur when the cartilages, with the articular lamella of bone, have entirely gone, and there is no necrosed bone left to keep up the disease; for when this complication exists a natural recovery cannot take place till the source of irritation has been discharged by natural processes or removed by art.

We must not, however, regard all cases of suppuration about a joint, even when associated with disease of a joint, to be the direct result of disorganisation of the articulation, for it is quite certain that inflammatory mischief may exist in the joint and subside and yet give rise to suppuration in the cellular tissue about the part; and in this opinion pathology confirms clinical observation. There may be difficulty in making out these cases during life, but I think there can be no doubt of their occasional existence. In the hip-joint I believe them to be by no means uncommon.

When suppuration, therefore, takes place in a hip-joint as a consequence of disease, although recovery with partial movement may follow, there is but one result that a Surgeon can reasonably look for and strive to secure, and that is anchylosis. Should he be able, by the clinical history of the case and the existing symptoms, to make out that the disease began in the synovial membrane, and that the suppuration was the result of pathological changes following upon such an affection, the hope of securing a good result is very great; for the disease in the joint, however complete it may be, is probably only superficial, and does not involve the bones to any extent, and consequently a good recovery with a stiff joint may fairly be anticipated.

Should, however, the clinical history of the case and existing symptoms indicate disease of the bones, the probabilities of the same result taking place will rest entirely upon the amount of disease in the bone, and not upon the extent of disease in the joint.

If the disease in the bone be superficial, a natural cure by anchylosis may be looked for; for even dead bone, if not too large, may be discharged externally, and a good recovery follow. Should, however, the disease in the bone be extensive, or a sequestrum be so placed in the centre of a bone as to keep up irritation and prevent reparation from going on, the Surgeon's active interference will be imperatively demanded, and it may be added that under no circumstances is it practised with better results.

The first case I propose to quote is one of suppuration, the disorganisation of the joint, as far as it went, having apparently been the result of the breaking down of the pulpy disease of the synovial membrane. In this case a good and unexpected recovery followed—that is, a recovery with movement. It is the only instance I have before me in which such a result took place, and it is recorded here as an exceptional one.

I have, however, a case in which a considerable amount of movement existed when the patient left the Hospital, and which I should have here recorded; but I have recently learnt that, as years went on, the joint gradually stiffened, and complete anchylosis subsequently took place. The case will be found in another section (Case 32). It is sufficient here to recognise the fact that a movable joint may possibly follow upon suppuration in the articulation, although, as a result to be expected, it is highly improbable.

In the succeeding cases the more usual results of suppuration of the hip-joint will be illustrated.

Case 27.—*Hip Disease—Suppuration—Free Incision into Abscess —Recovery with Partial Movement.*

Laura H., aged 6, came under my care at Guy's Hospital on July 11, 1864. She had been observed to limp with her right leg for one month, and had complained of pain in the hip-joint and knee. When seen the foot was everted and the child complained of pain in the outer side of the thigh. There was pain in the hip in walking, but none in gentle rotation of the femur on the pelvis. Moving the limb caused, however, some spasm of the muscles. There was considerable thickening about the joint behind the trochanter and in the groin. The parents were directed to secure rest to the limb and foment the hip. Tonics were also given. In three weeks the spasm of the muscles had nearly gone, and by August 29 it had disappeared. On Oct. 17 there was some slight return of the symptoms, as the child had been allowed to walk, but by Nov. 28 they had again subsided. On Jan. 9, 1865, a second relapse took place, and an abscess subsequently made its appearance over the joint on its outer side. This was opened freely and discharged for three months, when it closed. A splint was applied and the limb kept absolutely at rest. In six months the joint had recovered with some amount of movement, in another six the movements were more perfect, and by the end of the year they were nearly complete.

I shall now proceed to illustrate the subject of suppuration of the hip-joint with its complications, and, in doing so, I shall divide the cases into three classes, these divisions being arbitrary and resting on clinical rather than pathological distinctions. The division is made, moreover, more from reasons of convenience than from anything else, and with the view of rendering the subject more intelligible.

The first series will include cases of suppuration of the hip-joint unattended with malposition, dislocation, or anchylosis.

The second will include examples of disorganised hip-joint in which malposition and anchylosis existed.

The third will include cases of dislocation of the hip-joint from disease, with its treatment.

SERIES I.

CASES OF SUPPURATION OF THE HIP-JOINT IN WHICH NO SUCH COMPLICATION EXISTED AS MALPOSITION OF THE LIMB OR DISLOCATION.

Case 28.—*Disease of the Hip-joint—Suppuration and Anchylosis treated by Free Incision.*

Dennis M., aged 4, was brought to me at Guy's Hospital on March 19, 1866, for limping with his right leg. It had been observed for three weeks, and had come on without any history of a fall or injury. The child had complained also of pain in the part. On examination, the pelvis was tilted to the left side, giving the appearance of elongation to the affected limb of about an inch. There was no enlargement or thickening about the joint; no increase of heat or pain in gentle manipulation. The glands in the groin were healthy. Firm pressure, however, upon the trochanter gave pain, and any attempt to move the limb excited spasm of the muscles. The parents were directed to keep the child off its legs, to bathe the part with warm water, and to give tonics. By April 9 the symptoms had improved. There was less pain and less spasm of the muscles. By the 16th they were still better. The child then disappeared from view, the parents thinking he would soon be well. Before long he began to use the limb. On October 15 he reappeared, with evident thickening about the joint, particularly about the neck of the bone. It was more painful on pressure.

The symptoms had been worse for three weeks. On December 3 a large abscess showed itself behind the trochanter, which was freely opened, the finger passing through the abscess down to the joint. A splint was applied. On January 6 the sinus was discharging, but the child seemed well in his general health. By May 3 the sinus had closed, and the joint was clearly becoming anchylosed. By October 20 it was firmly fixed. On December 10 my report states that the joint was quite stiff and immovable, free from all pain. The child subsequently went about freely with a stiff joint.

Case 29.—*Suppuration of the Hip-joint—Recovery with Anchylosis.*

Harriet T., aged 11, came under my care at Guy's Hospital in 1865 for disease of her right hip. It had been of two years' standing, and had come on after fever. Pain and swelling were early symptoms, and in about three months an abscess opened behind the trochanter, and from that time it had been discharging.

When I saw the girl the sinus was still open, and discharged a thin purulent fluid; no diseased bone could be felt with a probe. The limb was straight and slightly everted. The slightest movement caused pain. The patient's general health was good. A splint was ordered and rest enforced, tonics being given. In one year all suppuration ceased, and the joint became partially fixed. The girl then disappeared from view. She reappeared in May, 1868, for some affection of her leg. The hip was then found to be firmly anchylosed in its natural position, and the limb was straight; it was half an inch shorter than the other. The pelvis was straight. No signs of disease existed beyond the cicatrix of the old abscess. A high-heeled boot was ordered.

Case 30.—*Disorganisation of the Hip-joint—Recovery with Anchylosis.*

James B., aged 3, came under my care at Guy's in 1857 for disease of the hip-joint of four months' standing, but the early history of this case has been mislaid. In about one year suppuration set in, and continued for two years from sinuses around the trochanter. In 1860 suppuration ceased, and the sinuses closed, the joint having been fixed with a splint in a right line. Anchylosis speedily followed, and in my last note, made on June 24, 1862, good firm anchylosis was reported to exist. There was no shortening or malposition of the limb, and the boy could walk well.

This boy's brother subsequently came under my care with the same disease, and recovered (*vide* Case 19).

Case 31.—*Disease of Hip-joint—Suppuration—Recovery with Anchylosis.*

Walter W., aged 2, came under my care at Guy's Hospital in 1860, for disease of the hip-joint. It was very insidious in its progress, and suppurated after two years. The thigh also became flexed upon the pelvis. It was treated by extension and a long splint, and in one year suppuration ceased, the child in 1863 being quite well, with a firmly anchylosed hip-joint and useful limb. The boy's general health was good. In 1865 the child was still well.

Remarks.—The cases which have just been briefly related are good types of disease of the hip-joint in its stage of suppuration, and fairly illustrate the right treatment that should be adopted under the circumstances. In none did the disorganisation of the joint appear to be so severe as to preclude the hope of a cure by anchylosis being entertained; for, although enough suppuration took place in all to indicate the severity of the local disease, it was neither so severe nor so lasting as to indicate the existence of necrosed bone or the presence of any active mischief which might prevent repair. The satisfactory results of the cases also proved the partial nature of the disease, or, rather, demonstrated the fact that the disease of the joint, although complete as to its destruction, was unattended with any such extensive disease of the bone as is too often found in neglected cases, and is so well illustrated in our pathological museums. With respect to treatment, there is now no question amongst Surgeons that to help the arrest of disease in a suppurating joint, and to assist the natural recovery by anchylosis, there is nothing of any value to be compared to the maintenance of complete immobility of the limb. The affected joint must, in some way or other, be fixed, and rendered immovable. The femur and pelvis must, by some mechanical contrivance, be made one, and the action of the muscles that move these bones normally upon one another must be neutralised. Any apparatus that secures these principles of treatment being carried out efficiently is to be looked upon with favour, and the ingenuity of the Surgeon may work out these ends in many ways. In some cases the long splint answers every object when well fixed to the pelvis, thigh, and leg of the patient. In others the weight and pulley are far more effectual or more comfortable. In a third set of cases, leather, felt, gutta percha, or wire casing, including pelvis, thigh, and knee of the patient, is the most comfortable and the most efficient; and, if I have a preference for any one form of treatment, it is probably this. It will not do, however, well where much suppuration exists and where there are many sinuses, although, when this stage of the disease has passed, there is nothing like it. During this time, also, constitutional treatment is not to be neglected. Tonics are almost always needed in Hospital practice, and good living is a necessity, but local treatment is of pre-eminent importance, and to it the general treatment must always be of secondary value—that is, general treatment alone is sure to fail, although in many cases local treatment may be of use without the general. Both, however, should be employed.

Series II.

Cases of Disorganisation of the Hip-joint in which Malposition with Anchylosis existed.

Case 32.—*Disease of Hip-joint—Suppuration—Partial Anchylosis with Limb completely flexed—Extension under Chloroform, and Recovery with some Movement—Subsequent Anchylosis.*

Charles P., aged 8, came under my care at Guy's Hospital, in September, 1859. He had had disease in his right hip-joint for two years. It came on after a fall, pain in the part and limping being the first symptoms; an abscess formed after nine months, which discharged itself behind the trochanter, and healed in another nine months. The joint then began to contract. When admitted the thigh was flexed upon the pelvis so completely that the knee touched the integument of the abdomen, the joint was also partially fixed, the thigh was adducted, and along the flexure of the thigh the skin was much ulcerated. Chloroform was given and gradual extension made, the limb being brought down to a right line. The yielding of the fibrous connexion with the joint was very perceptible. A long splint was applied. This was kept on for one month, when it was removed and some movement was allowed, sandbags and weights being applied.

On November 14, the movement had much improved. The boy could stand and walk upon the limb without pain. There was no shortening of the limb, although apparent shortening existed from obliquity of the pelvis. The boy then left Guy's and escaped my observation, but he reappeared in January, 1869, for some other affection, when his right hip was found to be firmly anchylosed, and the limb to be a very useful one. It had gradually become fixed after his leaving in 1859.

Case 33.—*Suppuration of Hip-joint—Anchylosis at a Right Angle—Extension and Recovery.*

John R., aged 9, came under my care at Guy's Hospital on September 23, 1863, with a disease of the right hip, the thigh being fixed to the pelvis at a right angle. There had been disease of the joint for seven years and suppuration for four, but the abscess had been healed three years, and the leg fixed in its present position for about the same time. No signs of active disease now existed.

Chloroform was given, and forcible extension made, the limb being brought down to a straight line with a perceptible giving way of the anchylosed joint, and a horrible crackling being felt. A splint was applied to the limb and ice to the joint, all untoward symptoms rapidly disappearing. In two months the child left the Hospital with a good limb, wearing a splint, or rather a leather casing. He was told, however, not to walk upon the part for some months.

A year later this boy was seen walking well with a stiff joint.

Remarks.—The two cases that have just been quoted illustrate many points. They show first of all the effects of bad surgery; for there is no room for doubt that, by well-applied Surgical appliances in the early stage of the disease, the limbs of both the patients in the cases described might have been placed and maintained in a right line, and that natural processes would then have perfected the cure, precisely in the same way as we have already illustrated in the former series of cases to which attention has been drawn. They illustrate likewise the effects of what Surgery can do in restoring the malplaced limbs to their natural position, and point out the means by which this end is to be secured in similar cases. Gradual extension of the affected limb, the patient being under the influence of chloroform, is a measure of immense value in these cases, and is rarely followed by any evil consequence. The fixing of the limb by a splint or casing subsequently allows natural processes to go on without interruption, and, unless extensive l one disease exists, a good recovery may generally be promised. In

the first of the two cases recorded, the amount of flexion of the joint was extreme to a degree—more extreme, indeed, than in any other case I have ever seen—for the knee of the patient touched the abdomen, and ulceration of the skin along the line of flexion resulted from the collected secretions of the integument; nevertheless the results of treatment proved satisfactory, and a good recovery ensued.

Series III.

Cases of Disorganisation of the Hip-joint, complicated with Dislocation of the Head of the Femur.

Case 34.—*Acute Destruction of the Hip-joint—Suppuration and Dislocation—Reduction under Chloroform, and Recovery with Anchylosis.*

Richard T., aged 11, was admitted into Guy's Hospital on August 15, 1868, for acute disorganisation of his left hip. It had appeared eleven weeks previously without any assignable cause, and two weeks after the first symptom of pain and swelling an abscess formed behind the trochanter. This was opened, and a long splint was applied. The boy came under my hands for treatment on September 10, and I then found that the femur was clearly dislocated, its head resting on the dorsum ilii. The left thigh was nearly two inches shorter than the right. The foot was inverted (*vide* Fig. 1). Under chloroform steady extension was applied,

Fig. 1.

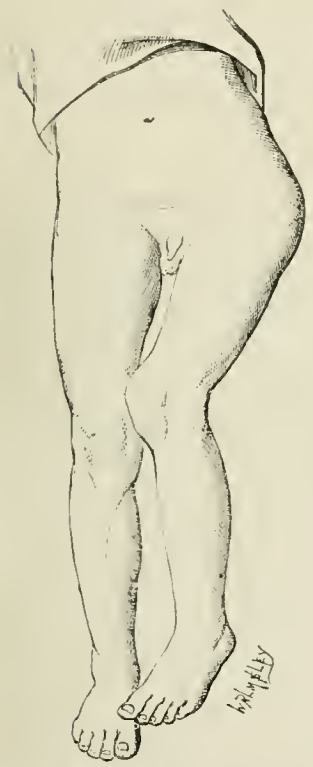

Fig. 1.—Illustrating the dislocation of the head of the femur on to the dorsum.

Fig. 2.

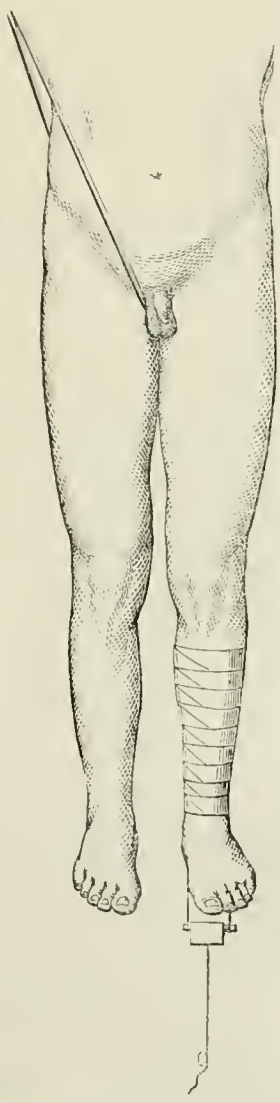

Fig. 2.—Illustrating the position of the limb after its reduction, and the means by which the head of the thigh was kept in position.

and the dislocation reduced. A weight of about six or seven pounds was then fixed to the foot, and slung over a pulley at the foot of his bed. The pelvis was fixed by a perineal belt, passed upon its right side to the head of the bed (Fig. 2). By this means the limb was kept in a good position. Some amount of freedom was given to the patient, and cold applications were applied to the hip. No bad symptom followed this operation. In two months the weights were removed, and a leather casing was applied, the joint becoming gradually fixed. The boy then returned home. When I heard of him in January he was doing well, and in March he was still progressing satisfactorily, and wanted to be allowed to remove the casing and to walk. In July last he was walking about without artificial support with a perfectly anchylosed joint.

Case 35.—*Disease of Hip-joint—Recovery by Anchylosis, with Dislocation after Suppuration.*

Alec C., aged 16, a young gentleman, residing at New-cross, came under my care on May 23, 1861, with some disease of his right hip-joint. He had had it for eighteen months, and there had been suppuration behind the trochanter for six months. The head of the femur was also clearly dislocated on to the dorsum, this deformity having taken place suddenly three months previously. When I saw him anchylosis was progressing. Tonics were given, and water dressing applied. Crutches were also ordered, for it was a necessity for this youth to follow his occupation. Within three months all signs of suppuration had disappeared, and the sinuses had healed, and in six months he was declared convalescent. The joint was perfectly fixed, and he could walk well with a boot some four inches higher than the other.

Case 36.—*Dislocation of Hip-joint from Disease—Anchylosis.*

Alfred W., aged 39, came under my care at Guy's Hospital on May 12, 1868, for some affection of his left hip and lameness. On examination it was found that the left lower extremity was shorter than the right by two inches and a half. This shortening was also in the thigh. On examining the hip-joint it was found to be perfectly stiff, and the trochanter was at least two inches higher up than natural. The head of the bone, or what represented it, was resting on the dorsum ilii. There was much thickening about this part. The history of the case was that this patient, when nine years of age, had hip-joint disease attended with suppuration, abscesses having formed in front and behind the part. The displacement took place during the treatment. The man had walked on the leg for about twenty-five years, and had at times had pain in it when hard worked. He came to me with these symptoms from the same cause. A little rest and tonics made him well.

Case 37.—*Dislocation of the Head of the Femur on to the Dorsum Ilii, with Arrest of Growth in the Limb, following Disease of the Hip-joint Seventeen Years previously.*

Thomas P., aged 22, came under my care at Guy's Hospital on July 25, 1867, for great shortening of his right lower extremity. From the history of the case it was evident that he had been the subject of hip-joint disease seventeen years previously, and that, as a result of that affection, his right femur had been dislocated on to the dorsum ilii. All signs of disease had been absent for at least fifteen years, but the shortening had gradually become worse. When I saw the man there were all the symptoms of dislocation of the femur on to the dorsum. The trochanter was clearly elevated and more prominent, and with the head of the femur could be felt out of its position. The thigh was partially flexed, and the foot inverted, but the muscles of the leg and of the knee-joint were well developed in all respects. The femur, on careful measurement from the upper part of the trochanter to the knee, measured just five inches less than its fellow.

Remarks.—I have given four examples of genuine dislocation of the head of the femur as a result of disease of the hip-joint. They are unquestionably of comparatively rare occurrence. They have been formerly described as a somewhat common result of disease, but Surgeons now know that the cases simulating dislocation are examples of extreme flexion and adduction associated with marked tilting of the pelvis, the shortening of the limb in these cases being only apparent and not real, the trochanter always maintaining its natural position relative to the anterior superior spinous process of the ilium, and the line drawn from it to the tuberosity of the ischium (Nélaton's) being in these cases of apparent dislocation always below the line, in the real cases always above it. In Case 34 (Richard T.), the rapid disorganisation of the joint with the dislocation was most remarkable. The whole process took only four months to show itself, and the symptoms indicating the dislocation were very marked. The reduction of the dislocation by steady extension, with the patient under the influence of chloroform, was very satisfactory and complete; and the means adopted to keep the limb *in situ* is worthy of attention—the weight and pulley to the affected limb, and the counter-extension to the opposite side of the pelvis by means of a strap. This plan was very effectual and very comfortable to

the patient. It allowed, moreover, of the application of ice, etc., to the affected joint, and its ready examination. I have adapted this plan on three occasions to hip-joint disease with the same good result. In the three other cases the dislocation, although well marked, was in each of too long a standing to allow of treatment such as the former case suggested. The results of treatment and of the natural processes in the cure of disease were, however, satisfactory. The arrest of growth in the femur as a consequence of disease is a point worthy of note. The same result has been already illustrated in Case 14, as quoted in Part I. of this paper.

ORIGINAL COMMUNICATIONS.

ON HYDRATE OF CHLORAL AND ITS USE IN PRACTICE.

By T. SPENCER WELLS, F.R.C.S.,
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THROUGH the kindness of Professor Bardeleben, of Berlin, I received last July about two ounces of hydrate of chloral, a substance which had been brought before the Medical Society of Berlin as a new hypnotic and anæsthetic on the 2nd of June, by Dr. Otto Liebreich, Chemical Assistant in the Pathological Institut of that city.

Chloral and chloro-acetic acid were discovered thirty years ago by Liebig. When anhydrous alcohol is acted on by perfectly dry chlorine-gas, a remarkable result takes place. Five-sixths of the hydrogen of the alcohol are removed and are replaced by three of chlorine, and after separation of a large quantity of muriatic acid, a dense oily liquid, Chloral, $C_4HCl_3O_2$, is obtained. The process takes place in the following way:—At first the chlorine removes two equivalents of hydrogen, and thus reduces the alcohol to aldehyd; then it acts on the hydrogen of the radical acetyl and replaces it, forming a new compound radical, i. e. acechloryl C_4Cl_3. This combines with the oxygen and the water in chloral, as acetyl is in aldehyd. The rational formula of chloral is therefore C_4Cl_3O + aq.

$$\underbrace{C_4H_6O_2}_{\text{Alcohol.}} - H_2 = \underbrace{C_4H_4O_2}_{\text{Aldehyd.}} = \underbrace{C_4H_3O}_{\text{Acetyl.}} + \text{aq.}$$

$$\underbrace{C_4H_6O_2}_{\text{Alcohol.}} - H_3 = C_4O_3HO;$$

$$C_4O_3HO + Cl_3 = \underbrace{C_4Cl_3O}_{\text{Acechloryl.}} + HO = C_4HCl_3O_2.$$

This new substance behaves like all aldehyds. An aldehyd is a very unstable compound, and soon changes its physical properties. It will become polymeric; and so will chloral. The anhydrous chloral is a very pungent oily fluid, which, after standing some time, is converted into a solid substance. It combines with water, forming a crystalline hydrate of chloral, and by degrees is converted into an isomeric substance like porcelain. The crystals of hydrate of chloral are very soluble in water. Concentrated sulphuric acid will not affect them; they are resistent against acids, but alkalies decompose the chloral. This reaction is very remarkable. Adding a small quantity of hydrate of sodium to a solution of chloral in water, chloroform will be formed in the shape of oily drops. Thus chloroform may be obtained of greater purity than by any other known method. The aqueous solution will also contain formiate of soda—

$$\underbrace{C_4HCl_3O_2 + HO}_{\text{Chloral-hydrate.}} + \underbrace{NaO,HO}_{\substack{\text{Hydrate of}\\\text{sodium.}}} = \underbrace{C_2HCl_3}_{\substack{\text{Chloroform}\\\text{or}\\\text{Perchloride}\\\text{of formyl.}\\ Fo,Cl_3}} + \underbrace{NaO.C_2HO_3}_{\substack{\text{or}\\ NaO.FoO_3\\\text{Formiate of sodium.}}} + 2\,\text{aq.}$$

This change helps us to solve the problem how far substances introduced into the body, and decomposing there, become active through their components, and to which of its components a drug owes its remedial properties. Chloral readily dissolves in water, and the solution is easily absorbed. The alkaline liquids of the body would therefore set chloroform free in the tissues. The other component, the formic acid, from its comparatively small proportion, can have but very slight effect.

A minute dose of chloral was sufficient to produce the symptoms of narcosis from chloroform in a young rabbit; the animal fell gradually asleep, but without the stage of excitement. Regular pulse and respiration were the only evidences of life.

In a middle-sized rabbit complete hypnosis was produced during nine hours by an injection of seven grains of choral, which correspond to about three grains of chloroform. Experiments on frogs are still more conclusive. The first effect of chloral on frogs is a cataleptic stage, during which the animal may be placed and kept in any position, but reflex motion may be produced by irritation. In the next stage, however, no reflex motion can be effected. If the dose is not too large and fatal, the animal returns to its former condition. If, however, the dose is too large and the animal dies, the ventricles and the auricles will be found distended by blood. Death takes place from paralysis of the heart. The same effect has been observed in other animals. Liebreich concludes from these and other experiments that chloral at first paralyses the ganglionic cells of the brain and then those of the spine, and, if fatal, finally the ganglionic cells of the heart. The effects of chloral on animals are identical with those of chloroform. The absence of the stage of excitement may be explained by the more gradual formation of chloroform within the animal body—actually in the tissues of the body, even in the brain itself. Liebreich tried also the effect of chloral on man, in the Charité, at Berlin. The first experiment was made on an insane person, by subcutaneous injection, at first of very small doses. No local irritation took place. One dose of about twenty grains of hydrate of choral produced five hours' sleep.

In another case of a patient suffering from stupor and melancholia fifty grains of chloral in a wineglassful of water produced sleep during sixteen hours. In a very painful inflammation of the wrist-joint in a woman, forty grains of chloral produced sufficient anæsthesia to admit of the painless application of an apparatus. In every case the sleep was normal, and followed in about five minutes after the administration of chloral.

Having read the paper of Liebreich from which the above statements have been kindly abstracted for me by my colleague, Dr. Junker, I dissolved 15 grains of the *chloral* (using this word for convenience instead of the more correct "hydrate of chloral") in an ounce of water, and drank the solution. The draught was rather pungent, and was followed by a sensation of heat in the throat and stomach, but not to an unpleasant extent. I continued my ordinary occupation during the day, and found very little effect of any kind from the dose. I felt, therefore, quite safe in giving 30 grains to a young married lady whom I saw in consultation with my friend, Dr. Frank, of Cannes, suffering for the fourth time from a severe and very intractable attack of sciatica, and Mr. Squire undertook to make up prescriptions and procure a further supply of the chloral. From one to two grains of morphia by subcutaneous injection had been required to give relief to our patient, $\frac{1}{60}$ of a grain of atropia being added to prevent the sickness which, without this corrective, was invariably severe and protracted. Even this large dose of morphia, always successful in calming pain for the greater part of the night, procured, as a rule, but little sleep, and that was disturbed by delirium and distressing startings of the affected limb. Atropia alone, gradually increased to $\frac{1}{24}$ gr. (by subcutaneous injection), did no appreciable good, not soothing the neuralgia, although the toxic effects of the drug were disagreeably evident. The morphia and atropia injection was suspended during a lull in the severity of the neuralgic paroxysms, and during a period of three days extreme and distressing restlessness with absolute sleeplessness prevailed. I had twice introduced six acupuncture needles with only temporary relief. The neuralgia, favoured by the exhaustion consequent on want of sleep, threatened a relapse with all its former vehemence, and a return to opiates would have been inevitable if the timely arrival of the chloral had not offered a new resource. Thirty grains of chloral given at this juncture procured for the patient the best night she had enjoyed since the commencement of her illness—a night of perfectly tranquil sleep, from which she awoke fresh and well as from natural slumber. The dose was repeated the following evening with the same effect; but the patient had rather a troublesome headache in the morning. Subsequently the dose had to be increased to 45 grains to insure a perfect result, which was always obtained except on one occasion, when, on account of a rather severe relapse of the neuralgia, $\frac{1}{2}$ gr. of morphia and $\frac{1}{60}$ gr. of atropia had been injected two hours before the chloral was administered. Morning headache, not yielding to coffee, was constantly complained of, and in that respect the result differed from those reported in the German journals, where the absence of distressing after-

effects is described with especial emphasis. The patient complained a little of the burning taste of the drug, but her appetite, never good, was even better than usual, and the digestive functions were not at all interfered with. She had but little sleep when the remedy was suspended, but none of the distressing restlessness following the interruption of the morphia injection. The sciatica having since all but yielded to the application of the actual cautery to the back near the roots of the left sciatic nerve, the patient has been able to give up the chloral after a course of three weeks, abandoning its use with much reluctance.

The next trial was made in the case of a lady, another patient of Dr. Frank's, the subject of occipital neuralgia. During a long period of suffering all ordinary sedatives had proved themselves conspicuously unavailing, in whatever way or combination administered. Three applications of the continuous current had been productive of very marked relief, but after a fourth *séance* the neuralgia became intensified, and symptoms of diffuse cerebral irritation were evident. Thirty grains of chloral produced no hypnotic effect under these circumstances, and the patient suffered so much from burning pain in the throat and stomach that she declined further experiment.

(*To be continued.*)

OBSERVATIONS ON THE

DIFFICULTY OF DIAGNOSING

IN SOME CASES

PYÆMIA FROM RHEUMATIC FEVER.

By HENRY G. SUTTON, M.B.,

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USUALLY it is not difficult to diagnose rheumatic fever; occasionally, however, it is very difficult, and it may be impossible, to say whether a patient is suffering from acute rheumatism, acute gout, or acute rheumatic gout. After scarlet fever, it is very difficult to say whether the inflammation of the joints and pyrexia are rheumatismal or the expression of some septicæmia, a result of the scarlet fever.

It is not difficult, in many cases, to diagnose pyæmia; there is bone disease or some other affection which is known to give rise to pyæmia. The patient has rigors, followed by a hot and often yellow skin; dry, parched, brown tongue; quick pulse, tremor of the limbs, and great prostration. When, however, there is nothing to excite a suspicion of pyæmia, when there is no bone disease, and no evidence to show that suppuration is going on in any part of the body, our attention is not drawn to pyæmia, and if the inflammation of the joints is erratic, we are led to think of rheumatic fever.

Dr. Bristowe remarks(a) that acute rheumatism has many symptoms in common with pyæmia, and the particulars of the following case will show the truth of his observation:—

J. F., aged 16, servant, admitted into the London Hospital February 12, 1868. She stated on admission that she had never been laid up before. Her present illness commenced, seven days before she entered the Hospital, with pain in her left knee. She perspired very much, and was very thirsty. On admission, she complained very much of pain in her back and in her arms. Her skin was moist. Her tongue was dry and furred in the centre. Her bowels were confined. The heart was normal.

February 13.—In the morning, the temperature was 100°; pulse 116; respiration 26. In the evening, the temperature was 101°; pulse 140; respiration 32. She complained of pain in her chest, also of pain in her wrists, in her shoulders and neck. The wrists were a little swollen. Herpes on her lower lips. Heart was normal, excepting that the first sound was a little prolonged.

14th.—She complained of pain in the wrists, shoulders, and neck. The right wrist was red and swollen. Lips dry; tongue furred and rather dry. She was very thirsty, and sweated a great deal. The temperature in the morning was 99·8°; pulse 112; respiration 28. Evening: Temperature 101·2°; pulse 120; respiration 32.

15th.—Morning: Temperature 100°; pulse 120; respiration 24. Evening: Temperature 100·8°; pulse 132; respiration 28.

16th.—Morning: Temperature 98·8°; pulse 130; respiration 28.

17th.—Morning: Temperature 99·8°; pulse 128; respiration 24. Evening: Temperature 101°; pulse 120; respiration 32. Slept much better, complained of pain in arms and legs; face was flushed and sweating; lips were dry; tongue was coated with yellow fur; bowels confined; heart was normal.

18th.—She complained of pain in all her joints on moving; tongue coated and a little dry; not so thirsty. Temperature in the morning 100·5°; pulse 120; respiration 24. Evening: Temperature 101·2°; pulse 120; respiration 28.

19th.—Morning: Temperature 99·5°; pulse 112; respiration 24. Evening: Temperature 100·5°; pulse 132; respiration 32.

20th.—Morning: Temperature 99·5°; pulse 112; respiration 28. Evening: Temperature 101°; pulse 120; respiration 28. She complained of pain in her back and chest; skin perspiring; face was flushed; tongue was furred and moist; she was thirsty; both hands were painful.

21st.—Face was flushed and perspiring; tongue was moist, coated with yellow fur; she was thirsty; bowels open; she complained of pain in the right arm; heart was normal. Morning: Temperature 100·2°; pulse 136; respiration 28. Evening: Temperature 101·2°; pulse 140; respiration 16.

22nd.—Morning: Temperature 99·2°; pulse 124; respiration 24. Evening: Temperature 101°; pulse 140; respiration 28. Complained of pain in the back.

23rd.—Morning: Temperature 99·5°; pulse 136; respiration 28. Evening: Temperature 101·4°; pulse 132; respiration 24.

24th.—Morning: Temperature 99°; pulse 124; respiration 24. Evening: Temperature 99·2°; pulse 124; respiration 28.

25th.—Morning: Temperature 99·4°; pulse 130; respiration 28. Evening: Temperature 100·4°; pulse 124; respiration 28.

26th.—Morning: Temperature 98·6°; pulse 120; respiration 26. Evening: Temperature 100·5°; pulse 120; respiration 24.

27th.—Morning: Temperature 98·6°; pulse 120; respiration 24. Evening: Temperature 98·4°; pulse 120; respiration 28. She slept badly last night on account of the pain in her back and right wrist. Her tongue was moist and clean, and she did not feel so thirsty. Face was flushed. Bowels were open. The heart was normal, excepting that the first sound was somewhat prolonged over the base. This was not well marked.

28th.—Morning: Temperature 99·5°; pulse 124; respiration 24. Evening: Temperature 100°; pulse 136; respiration 24.

29th.—Morning: Temperature 99·4°; pulse 124; respiration 20. Evening: Temperature 101°; pulse 140; respiration 20.

March 1.—Her face was flushed. Lips and tongue were dry. She was thirsty, and she had vomited a little. She complained of pain across the epigastrium. The abdomen was tympanitic. Bowels were confined. Heart was normal. Morning: Temperature 100·5°; pulse 140; respiration 24. Evening: Temperature 100·4°; pulse 140; respiration 28.

2nd.—Morning: Temperature 99·8°; pulse 136; respiration 20. Evening: Temperature 101°; pulse 160; respiration 28. She had been sick nearly the whole night. Face was pale; lips red; tongue dry and coated with yellow; thirsty. Bowels relieved by enema. Evacuations were light-coloured and watery. The vomited matter was dark-coloured. Abdomen was tender on pressure.

3rd.—Had not vomited so much during the night. Her tongue was cleaner. Abdomen was tympanitic and very painful on pressure. She complained that she felt very low. Bowels were relaxed during the night; the evacuations were dark brown and liquid. Morning: Temperature 100·2°; pulse 136; respiration 28. Evening: Temperature 101·2°; pulse 140; respiration 24.

4th.—Morning: Temperature 103°; pulse 160; respiration 28. Evening: Temperature 104°; pulse 152; respiration 32. Slept pretty well last night. Bowels not relaxed, but she had vomited. Her tongue was very dry. Abdomen was tympanitic and swelled; no severe pain on pressure. Face dusky; skin hot. She said that she felt a great deal better.

On the 5th, at 1.20 a.m., she died.

The urine on the 13th—*i. e.*, the second day of admission—was very acid, deposited lithates; specific gravity was 1030, and contained no albumen.

On the 15th the urine was acid, specific gravity 1030, and contained no albumen.

On the 22nd the urine was very high-coloured, acid, specific gravity 1033, and contained no albumen.

On the 24th urine was high-coloured, contained albumen. On adding nitric acid and boiling the urine, about one-fourth of it was converted into albumen.

Autopsy, conducted by Dr. H. G. Sutton, March 5, 1868, at 3.30 p.m.—The body was fairly nourished, and weighed 92 lbs. There were several white markings above the

(a) *Vide* article "Pyæmia," Reynolds's "System of Medicine."

knees, apparently the results of linear atrophy of the skin. She was a well-made woman, with regular features. Scalp was healthy, skull healthy. The temporal bones appeared to be healthy; they were not removed. Brain and membranes were healthy. Spinal cord was not examined. Pleuræ adherent in parts over the right lung. Some sanguineous spots were seen over the lower lobe of this lung. These were scattered almost all over this lobe, but much more in some spots than in others. Left pleura was healthy. Lungs were congested, and softer than normal. In the substance of the right lung near the apex was a cavity about the size of a horse-bean. It contained a yellow puriform-looking fluid, and had no distinct wall. In the middle and lower lobes there were other cavities; one about the size of a small walnut was filled with pus, and there were two small abscesses about the size of a pea, which contained pus. None of these cavities had any distinct wall. The left lung did not contain any abscesses or lobular pneumonia. Bronchial tubes: The mucous membrane was of a deep red colour, apparently blood-stained; this was uniformly so throughout both lungs. The tubes were otherwise healthy. Bronchial glands: Just below the bifurcation of the trachea on the right side there was a bronchial gland much enlarged; it was in size equal to a walnut. On cutting into it a quantity of healthy-looking pus escaped. This gland cut firmly, and felt firm and tough, so much so that it was with difficulty broken down, and of a greyish colour. The firm tough tissue appeared to indicate that disease had existed in this gland some time. This gland contained minute cavities which were filled with pus, and surrounding these cavities was this tough, firm, apparently fibrous tissue. The gland was situated close to the bronchial tube, and there was an opening into the right bronchus, which had apparently been made by the knife. A little below this gland was another equally as large, and on cutting into it a quantity of creamy pus escaped. This gland was not indurated like the previous one. The pulmonary arteries were not plugged. Heart: Pericardium was healthy. The left ventricle formed the apex of the heart. The muscle of the left ventricle was not contracted, nor was it very flaccid. The endocardium on both sides of the heart was deeply blood-stained. The valves and muscular tissue were healthy; the right side of the heart was healthy; the right auricle contained a large black clot, the ventricle a moderate-sized partially discoloured clot. Liver was large, pale, and soft, apparently fatty. Spleen healthy, but soft. Kidneys weighed 16½ ozs.; capsules separated readily; surfaces were smooth; cortical portions were swollen, but not particularly soft; no sanguineous spots in the cortical portions, and these parts were not particularly congested. The medullary portions were of a deep-red colour. There was a small abscess in one kidney. The uterus, Fallopian tubes, ovaries, and bladder were healthy; mesenteric glands were healthy; no evidence of disease of the bones of the spine; no psoas or iliac abscess. Peritoneal cavity contained a quantity of opaque dirty-red fluid. The serous membrane over the ileum was in parts dull, opaque, and coated with yellow lymph. On tracing the small intestine upwards, as the jejunum was approached, the coils of the intestine were united together by recent lymph, so that they were all glued together. There were several dark spots, which appeared to be due to blood extravasated beneath the serous membrane all along the jejunum. As stated above, the coils of the intestine were adherent together by recent lymph. On separating them, the wall of the intestine and the mesentery adjoining were seen to be of a deep yellow colour, looking as if there was pus beneath the peritoneum. On further examination, pus was observed beneath the peritoneum all over the upper portion of the jejunum, and on cutting through the wall of the intestine, pus was observed on the divided surface in the muscular coat of the intestine. On opening the intestine, the veins running across the ileum were of a dark red colour, and about the diameter of an ordinary sewing needle; others were as large as a small knitting needle. On cutting across these veins they were all seen to be plugged in the greater part of their course around the intestine. The mucous membrane of the ileum was pale, otherwise healthy. The mucous membrane in the lower fourth of the jejunum was healthy; in the upper portion it was completely destroyed. The valvulæ conniventes were absent; apparently they had sloughed or ulcerated away. This was especially well marked in two places over a space extending from two to three inches. In another portion of the jejunum the mucous surface was irregular, having a worm-eaten appearance of a greyish colour, and all trace of mucous membrane had disappeared, and the muscular coat of the intestine was exposed. In another part the mucous membrane had been apparently in the process of sloughing, for on this part there were patches about the size of an inch of a dirty yellowish colour, soft, and the edges of the sloughing patch were loose, looking as if they could be easily peeled off. They did not, however, separate readily. One patch was of a dirty blackish-red colour. Duodenum was healthy. The stomach was healthy. The right wrist-joint was partially opened; there was no pus in the synovial sac.

On referring to the various particulars given of this case, it will probably be considered that the symptoms, especially during the early period of the disease, very much resembled those of rheumatic fever. The history given on the day of admission was such as is very frequently heard from patients suffering with rheumatic fever. The patient said that her illness commenced seven days before admission with pain in her left knee; that she perspired very much, and was very thirsty. The day she entered the Hospital her temperature was 100°, her pulse 116, and the respirations 26 a minute. Her heart was normal. She had pain in her wrists, which were a little swollen, also pain in her shoulder. The urine resembled that seen in rheumatic fever, for it was very acid, deposited lithates, of a high specific gravity—1030—and contained no albumen. On the third day of admission she had pain in her wrist, shoulders, and neck. The right wrist was swollen and red; her tongue was furred and rather dry; she perspired a great deal; the urine was acid, sp. gr. 1030, and contained no albumen. On the fifth day of admission, the symptoms had a still greater resemblance to those of rheumatic fever, for the patient had pain in her arms and legs, and she complained of pain in all her joints when she moved. Her face was flushed; her tongue was coated with yellow fur. On the eighth day of admission the symptoms still resembled those of rheumatic fever. The face was flushed and perspiring; her tongue was moist and coated with yellow fur; she had pain in her right arm; her pulse had risen from 112 to 136 in the morning, and from 120 to 140 in the evening. During the next six days she continued much the same; the temperature never exceeded 101·4°. On the 26th, or fourteenth day of admission, and twenty-one days from the commencement of her illness, the temperature was 98·6° and 98·4°, pulse 120, respiration 24 and 28. She had pain in her back and right wrist. Face was flushed. On the 29th the pulse reached as high as 140, respiration only 20, and temperature 99·4° in the morning and 101 in the evening. March 1, her tongue was dry, and face was flushed. She had vomited; abdomen tympanitic all over. The tympanitis and vomiting indicated something more than ordinary rheumatic fever. The evidence of peritonitis became still more marked, for on March 2 she had vomited a great deal, and the abdomen was tender on pressure. On the 3rd she vomited a good deal, and the abdomen was tympanitic. The temperature was 100·2° and 101·2°; pulse 136 and 140. On the 4th the temperature was 104°; pulse 152 and 162; respiration only 28 and 32. Her tongue was very dry; abdomen distended and tympanitic; face dusky; and next day she died. While she was in the Hospital the urine was acid, of high specific gravity, varying from 1033 to 1025. On the 22nd (that is, the tenth day of admission) the urine contained no albumen; on the 24th (that is, the twelfth day of admission) it contained a quantity of albumen.

During the first week that this patient was in the Hospital she was considered to be suffering from rheumatic fever; and, as far as I can judge, there were no symptoms to point to any other conclusion. She had pain and swelling of the joints, she perspired a great deal; tongue was furred, occasionally dry, and at other times moist and coated with yellow fur. The urine was acid, of high specific gravity, high-coloured, and deposited lithates. All these symptoms clearly pointed to rheumatic fever. But it will probably be allowed that in diagnosing disease we not unfrequently fall into error because we do not question the truth of our conclusions; and in this case, if we had doubted for a moment that the patient was suffering from rheumatic fever, we should have noticed that the quickness of the pulse was out of all proportion to the pyrexia. The pulse on the 14th in the evening was 120, and the temperature was 101·2°; on the 15th the pulse was 132, and the temperature only 100·8°. On the 16th the pulse was 130, and the temperature only 98·8°. The pulse also continued quick day after day. It was 112 on the day of admission, and it never fell below 120 except on the 19th and 20th. At the same time there was no evidence of heart or lung disease to account for this quick pulse; there was no evidence of any disease in the abdomen to account for it during the first eight or ten days the patient was in the Hospital; and the joint affection was scarcely if

at all sufficient to account for the pulse remaining so persistently high as 120, and not sufficient to account for the pulse gradually increasing in frequency until it reached 136 and 140 a minute. The temperature all this time never exceeded 100° and 101·2°.

The increase of temperature indicated that some acute disease was going on in the body, and the rapid pulse indicated that there was a great amount of constitutional disturbance; yet there was not sufficient manifest local disease to account for such constitutional disturbance.

If we refer to the joint affection, it may be noticed that the pain and swelling were chiefly in the wrists, but there was pain in both shoulders and in the neck during the first two days the patient was in the Hospital. On the third day the right wrist was red and swollen. On the fifth day the pain had extended to the legs, and she had pain in all her joints when she moved. On the fifth day, therefore, the joint affection very closely resembled that of rheumatic fever. There was no great effusion, fluctuation, redness, or œdema about the joints to indicate pyæmia. There was no evidence to show that suppuration was going on in any part of the body to point to pyæmia; and no evidence of disease of the bone or of any acute or chronic internal disease to suggest pyæmia. There were no rigors, no typhoid symptoms, such as are frequently seen in pyæmia. The supervention of symptoms indicating peritonitis certainly showed that there was something more than ordinary rheumatic fever; but the peritonitis in no way demonstrated that the patient was suffering from pyæmia and not from rheumatic fever. For the peritonitis might have been thought to be rheumatic inflammation of the peritoneum. Such a disease is, however, very rare, and in all the cases that I know of it has occurred with pericarditis, and in this case there was no evidence of pericarditis. It may perhaps be considered that it was impossible to diagnose pyæmia from rheumatic fever in this case during the first week that the patient was in Hospital. This case would, however, teach us to suspect pyæmia in a patient who, having pain, swelling, redness of one or more joints, perspiration, coated tongue, and increased temperature, at the same time has a rapid pulse, and especially a pulse daily increasing in frequency without there being any discoverable internal disease to account for such increase.

Respecting the morbid appearances in this case, the evidences of pyæmia were the small abscesses in the right lung, the abscess in the kidney, and the pus in the wall of the jejunum. Pyæmic deposits are usually found in both lungs, but not always, and in this case they were confined to one lung. Appearances such as were seen in the intestine in this patient seem to have been noticed in other cases. Dr. Bristowe (*vide* article "Pyæmia" in Reynolds's "System of Medicine," vol. i. p. 195) says that occasionally, too, the intestinal submucous tissue becomes the seat of well-marked pyæmic deposits, which may tend to the destruction of the mucous surface over them and the production of a sloughy ulcer not unlike the ulcer of typhoid fever or that which follows the opening of a boil. It is also instructive to notice that although the pain, redness, and swelling were most severe in the right wrist, yet on opening this joint there was no pus in it. This case, therefore, confirms what has been observed in other cases of pyæmia—that joints often inflame in pyæmia without suppurating. The cause of the pyæmia was apparently an old abscess in one bronchial gland.

I may briefly mention the following particulars of another case:—

I was asked to see a female aged about 34. I found her in bed complaining of pain in her left shoulder, and also in other joints; she was perspiring freely; her tongue was coated and moist; her pulse was quick, but not very remarkably so. I counted her pulse at the time, but I did not note down the number of beats per minute. She was cheerful, she did not complain of great prostration, nor did she appear very weak. Her countenance was natural. I carefully examined the heart, and there was no evidence of pericarditis nor of endocarditis. I inquired into her history, and she stated that she had not been very well for some time, but she had been able to do her work. She thought she had suffered from some uterine affection. It appeared to me at the time of my visit that she was suffering from acute rheumatism, and I told her friends so, and that I thought she would do well, as there was no heart complication. Two days after this I was asked to see the patient again, as she was supposed to be dying. I was very much astonished, and inclined to think this was an exaggerated statement on the part of her friends. When I saw the patient, however, it was clear she was dying; she was almost insensible, breathing very heavily, with gurgling in her throat; and a few hours after my visit she died. I made a post-mortem examination, and having opened the bag of the pericardium I noticed some minute sanguineous spots on the anterior surface of the heart, also over the lungs. At once it occurred to me that I had made a mistake, and instead of rheumatic fever the patient had had pyæmia. I then carefully examined the lungs, and on examining the bases I found some dark-looking patches about the size of a marble, and on cutting into them they were seen to be pieces of lobular pneumonia passing into the stage of red and grey hepatisation. There were no collections of pus in the liver, spleen, or kidneys.

On opening the left shoulder-joint, a quantity of pus escaped. The uterus itself was healthy; but on opening the left Fallopian tube, it was noticed to be unusually dilated, for it allowed the point of a pair of scissors to pass up with very great ease, and on squeezing it, pus escaped.

It may happen that a patient has symptoms resembling those seen in rheumatic fever—for instance, redness, pain, and some swelling of the joints, sweating, pyrexia, and pericarditis. And there may be evidence of suppuration in some part of the body which may lead us to suspect that the disease may be not rheumatic fever, but pyæmia. The patient may die, and the post-mortem examination may fail to clear up the difficulty which existed during life, and, after considering the post-mortem appearances, it may be impossible to determine whether the patient has died of pyæmia or of rheumatic fever.

A patient was in Guy's Hospital, under the care of Dr. Barlow. There was pyrexia and joint affection, such as is usually witnessed in acute rheumatism; there was evidence of suppuration going on in the body, which led Dr. Barlow to suspect that the disease might be pyæmia and not rheumatic fever. The patient died, and the post-mortem examination failed to clear up the difficulty. There was acute recent pericarditis, and a communication existed betwixt the bag of the pericardium and the left ventricle.

Dr. Wilks remarked that it was impossible to say whether this communication was caused by rheumatic ulcerative endocarditis, making its way through the wall of the left ventricle, or whether there had been a pyæmic abscess in the wall of the left ventricle which, having made its way towards the pericardium and endocardium, had burst into the sac of the pericardium and into the left ventricle.

From the evidence that I have brought forward, it appears to me that, in some cases, it is exceedingly difficult, if not impossible, to diagnose pyæmia from rheumatic fever.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

THE MOORFIELDS OPHTHALMIC HOSPITAL.

CURIOUS INSTANCE OF OCCASIONAL SUDDEN FAILURE OF SIGHT.

(Under the care of Mr. HUTCHINSON.)

A YOUNG woman applied at Moorfields complaining of occasional sudden failure of sight. In an ordinary way her sight was, she said, excellent, but very frequently it would become so misty that she could not see small objects. These attacks were especially liable to occur in the evening, but sometimes in the daylight any slight mental shock would cause them. She was accustomed to work at a sewing machine, and often for half an hour together she would be obliged to give it up from inability to see. She particularly mentioned that any slight mental shock would cause it, such, for instance, as the accident of breaking her needle at work, or suddenly meeting any one in the street. She had never been left in darkness, but during the attacks all objects became hazy and indistinct. On testing her vision she read brilliant easily, and read 20 at 20′.

Mr. Hutchinson remarked that two theories might be suggested to explain this curious symptom. It might be one of the cases of so-called "epilepsy of the retina," in which the blood-vessels suddenly become emptied; or it might be an instance of latent hypermetropia, with sudden failure of the over-worked ciliary muscle. The latter proved to be the correct one. After atropine had been put into one eye she could not, even with a diaphragm, see more than 50 at 20′, and required +10 to enable her to see 20. Thus there could be no doubt

that she was constantly exerting her accommodation to the utmost, and that its sudden failure was the cause of her loss of sight. We may remark that sudden seizures, such as she complains of, are not a common symptom in hypermetropia. It is far more frequent to have prolonged symptoms of over-fatigue and its resulting asthenopia than to have periods of perfect sight alternating with those of complete suspension of the accommodation function. The case is, perhaps, allied to the group sketched out by Mr. Paget under the ingenious title of "stammering by other organs than those of speech;" at least, in so far as mental emotion appears to be the exciting cause.

BIRMINGHAM GENERAL HOSPITAL.

A CASE IN WHICH LEFT HEMIPLEGIA WAS FOLLOWED BY HEMIPLEGIA ON THE RIGHT SIDE BEFORE COMPLETE RECOVERY—PECULIAR DISTRIBUTION OF THE PARALYSIS—CONTRASTED AFFECTION OF SPEECH.

(Under the care of Dr. JAMES RUSSELL.)

THE patient, a man aged 26, had contracted a chancre five or six years ago, for which he was salivated. His throat still exhibits the consequence of extensive ulceration. He was admitted with hemiplegia of the left side on April 19, the paralysis being considerable. He was discharged improved, and returned to work on June 12. He was again admitted on July 12 with hemiplegia of the right side, from which he is now slowly recovering.

1. The case thus presents an instance in which the two sides of the body were paralysed in succession, the paralysis of one side occurring whilst a considerable amount of paralysis remained on the opposite side.

The paralysis in the first attack—on the left side—was of the ordinary type, such as occurs when the corpus striatum is the seat of disease; and there is every reason for believing that in the second attack the disease affected the corresponding part of the brain on the other side. But on the second occasion an interesting departure from the ordinary type of hemiplegia was observable, which we are able to refer to the circumstance of paralysis seizing one side before the opposite side had fully regained power; or, to speak more precisely, the peculiarity was due to disease in a particular part of one hemisphere occurring whilst the corresponding part of the opposite hemisphere was still in a crippled condition.

It is hardly necessary to refer to the explanation offered by Dr. Broadbent of the partial distribution of the paralysis in the common form of hemiplegia—viz., that the muscles are affected by the paralysis in proportion as they are independent, in their usual action, of those of the opposite side—in other words, in proportion as they are accustomed to act unilaterally; whilst they escape paralysis in proportion to their union with the opposite muscles in the bilateral actions of the body—in other words, as they are incapable of acting independently. Such union in bilateral acts being most probably due to the existence of commissural fibres between the opposite nuclei of corresponding nerves, the motor impulse from the healthy side passes, in hemiplegia, across the communicating fibres to the nuclei of the nerves on the paralysed side, and thus preserves their motor power.

In the present case, both sides of the brain being implicated in disease, the arrangement in favour of the bilateral muscles lost its efficacy, and accordingly the second attack of paralysis involved the bilaterally acting muscles, in addition to those which are ordinarily involved, as will be apparent from the following description of the patient's condition. It should be premised that we are indebted to the House-Physician, Dr. Welch, for the particulars of the patient's symptoms during the first month of the second attack of hemiplegia, as Dr. Russell was then absent from town; it is of this attack alone that we now write:—

The paralysis of the arm and leg on each occasion was such as is ordinarily met with in hemiplegia; at the present time, when recovery has considerably advanced, he still shows manifest signs of weakness on both sides of his body.

Deglutition, which did not suffer in the first attack, was so completely paralysed on the second occasion that the man had to be supported entirely by enemata for the first fortnight; when I saw him at the end of a month he swallowed with difficulty, and he has not yet fully recovered this function. The maimed condition of the throat precludes any observation upon the action of the muscles of the palate. He could not protrude his tongue at all; he does so now easily, and it deviates slightly to the right.

In the first attack the only imperfection in the action of the trunk muscles was that the chest on the left (the paralysed) side contracted less readily than on the right; on readmission with right hemiplegia, the respiratory acts were greatly impaired. Dr. Welch reports that the right side did not expand at all, and that the ribs seemed only to be dragged up by the movement of the left side. At the present time expansion is so imperfect as not to separate to the extent of half an inch the ends of a tape encircling the chest. The right ribs hardly move at all; those on the other side are elevated by a short sudden jerk, in which the shoulder is raised by participation of its muscles in the effort which is required.

As regards the other muscles of the trunk it has been a constant complaint on the part of the nurse, even after the expiration of the first month, that the patient could not maintain himself in a sitting posture for a minute, but fell back directly; now, however, he can walk with tolerable ease.

Dr. Welch also states that he could hardly open his mouth; he was quite unable to use the muscles of mastication for a fortnight after the seizure; the patient affirms that even now he cannot chew well on the right side, though the only fault I can discover is in want of power in the right temporal. The right angle of the mouth is now more feeble than the left; the eyes close symmetrically, but the contraction of the orbiculares wants its customary firmness. It is probable that the globes of the eyes have been moved freely throughout both attacks; they certainly are so now; sensation of the trunk, limbs, and face is quite active, and smell and taste are not impaired; he reads No. 1 Jäger easily. When he first entered the Hospital Dr. Welch found the fundus oculi healthy.

He has suffered from general muscular wasting.

2. Articulation was slightly impaired with the left hemiplegia, probably in part from the condition of his throat. On the occasion of his re-entering with right hemiplegia, articulation was quite extinguished. He is now slowly recovering the power of speaking, but articulation is still incomplete, especially as regards the linguals.

3. With regard to the mental functions, they were quite unimpaired in the first attack. When the right hemiplegia took place, although speaking was impracticable, the testimony of the nurse is positive that, from the first, he made signs accurately and readily, and used to point out in a book the words he would have pronounced if he could. He constantly amused himself with reading. At the present time his apprehension is quick, his memory ready and active. He has never misplaced a word since he began to speak again, nor has he been at a loss for a single moment. He is, however, somewhat childish in laughing without reason, and in being amused with trifles.

It is most probable that, on both occasions, the lesion which occasioned the paralysis was in the region supplied by the middle cerebral artery. Although it is not without precedent to find so extreme an interference with articulation with so little suffering of the mental element in speech, it is worthy of remark that we notice in this case an instance in which the motor functions of the body are impaired to an extreme degree on both sides of the body, and, to a certain extent, coincidently, whilst the more important functions of the mind are unimpaired. This circumstance seems to have a bearing upon important suggestions on this subject which have emanated from time to time from Dr. Hughlings-Jackson.

MORTALITY OF SCOTLAND.—The deaths of 2244 persons were recorded in the eight towns during August, of whom 1118 were males and 1126 females. This number, after allowing for increase of population, is 189 above the average of the month for the last ten years. Of the 2244 deaths registered, 1005, or 45 per cent., were of children under 5 years of age. In Aberdeen, 33 per cent. of the persons who died were under 5 years of age; in Perth, 37 per cent; in Edinburgh, 42 per cent; in Dundee, 43 per cent.; in Paisley and in Glasgow, 46 per cent.; in Greenock, 50 per cent.; and in Leith, 56 per cent.

DEATH FROM CHLOROFORM.—The *Australian Medical Gazette* relates the case of a man who died at Ovens Hospital from chloroform. He was 25 years of age, and took the chloroform previous to undergoing amputation of the finger. Only a small quantity of the agent was used. On examination after death, the heart was found to be in a state of fatty degeneration, and the spleen was ruptured. A considerable quantity of blood was found in the peritoneum. The *Gazette* remarks that several cases of death from chloroform have recently occurred, in all of which fatty degeneration of the heart was found, though it was not discoverable before death.

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Medical Times and Gazette.

SATURDAY, SEPTEMBER 18, 1869.

THE VACANT CHAIRS IN EDINBURGH AND GLASGOW.

To a Londoner the excitement caused by a Scottish University election, in Edinburgh especially, is hardly credible. Immediately on a vacancy being declared, or even before that date, the whole of the Medical men constitute themselves supporters or opponents of one or other of the rival candidates. It does not follow that the men so separated become the less good friends on that account, but there is for the time being a tendency to form cliques constituted by the supporters of the different champions. There are various modes of election common in Scotland, which renders these committees of value; for some of the chairs are in the gift of the Crown, and then all kinds of political influence are in request; others of the chairs are in the gift of the Curators or some such local body, and then all kinds of personal influence are in request.

In the two chairs now vacant in Scotland—that of Surgery in Glasgow, vacant by the transfer of Professor Lister to Edinburgh, and that of General Pathology in the University of Edinburgh, which has been given up by Professor Henderson on account of ill-health—the respective advantages and disadvantages of the two modes of election come to light. When the appointment is in the hands of Government, politics are too apt to be all in all. Not that we can speak against the Government appointments as having been bad; quite the contrary, they have been generally superior to those made by the local bodies, and have been the great means of liberalising the minds of these bodies. Still, it is rather hard that a man's political opinions should stand in his way for a post for which he has in every way evinced the highest qualifications, the post being one which *per se* has absolutely nothing to do with politics. Such in Glasgow has been Dr. G. Macleod's position—a skilled and popular teacher of Surgery, in every way fitted for the position of Professor of Surgery in the University, but, unfortunately for his immediate success, a Conservative. Had he been a Liberal, no doubt he would have been already appointed.

Now let us see how matters go in Edinburgh, where the appointment is in the hands of a body of laymen. In dealing with this topic we are met with extreme difficulty, for as in all such cases we desire to be absolutely fair and to dispense justice with an equal hand; but in a case where we should like two men to have one chair, what are we to do? The candidates for the chair of General Pathology are three in number—Dr. Sanders, Dr. Grainger Stewart, and Dr. Smart; but the career of the two former, as men already skilled in *teaching*, to say nothing of their contributions to pathology, may be considered to give them a claim before their fellow-competitor. Now, in the case before us, both Dr. Sanders and Dr. Grainger Stewart are men of undoubted ability, both representative men in their way, and the task which lies before the Curators is no easy one. Whichever they elect, they know that he is a first-rate man, but to have the better they must decide in their own minds what they intend the duties of the chair to be. The following has been over and over again expressed to us as the opinion of those who know both men well:—"That if the Curators desire to see the chair made one of General Medicine or Pathology, to use the word in one sense, Dr. Sanders is the candidate best suited for the post; if it is their desire to see the chair filled by one who would rather teach Pathology and Morbid Anatomy, Dr. Grainger Stewart is one who will do this to perfection." And we think the thesis a fair one. Dr. Sanders we esteem and admire as a skilful Physician and a painstaking co-worker with us in Medical journalism. His contributions to Medicine are too numerous to be recounted by any one of inferior genius to that of Homer, for the catalogue of the ships is not very entertaining reading, and the list of Dr. Sanders's published contributions to Medical science is about equally lengthy, and would, even in our hands, be hardly interesting. Dr. Sanders is further well known as a skilful and successful teacher of physiology in the Edinburgh Extramural School. All this serves to confirm our previous statement that if the chair is to be one of General Medicine no one could more worthily fill it than Dr. Sanders. Of Dr. Grainger Stewart, again, we can say that his work from beginning to end has been essentially pathological. He has been for a good many years Pathologist to the Royal Infirmary, Edinburgh—a position which has given him ample opportunities of studying morbid anatomy—opportunities which his published works and the weight which in Medical circles attaches to his testimony show he has not neglected to utilise to the utmost. A younger man than Dr. Sanders, Dr. G. Stewart's published works are not of course so numerous as those of his rival; but their quality is good, his latest work especially—that on Bright's disease—being worthy of all commendation. There is no man in Edinburgh better fitted to teach pathology by the way of morbid anatomy than is Dr. Stewart.

Such are the conflicting claims on which the Curators have to decide. Both gentlemen have issued large volumes of testimonials (a system against which we would enter an earnest protest, as if the question was to be decided by the size of the volumes only, for if so, why not at once make avoirdupois weight the standard?) too large to be read with profit, and therefore of doubtful advantage to either candidate. If we look at the lists of the givers of these testimonials, we notice that there are more British names among the supporters of Dr. Sanders, more foreigners among those who speak in favour of Dr. Stewart. It may be well for the Curators to recollect that they ought not to be carried away in favour of Dr. Sanders merely by the fact that they happen to know the names of his supporters and can judge of the value of their opinions, whilst of those who rank among the supporters of Dr. Stewart many are foreigners, the value of whose opinion is to them an unknown quantity. The truth is that the testimonials which have come to Dr. Grainger Stewart from abroad are all from men eminent in their calling, and whose testimony is worthy of all respect. This, in all fairness, we are bound to say. But we must end as we began. Would there were two chairs—one for either, for either is worthy!

THE SUPPLY OF SUBJECTS.

Our readers are well aware that the matter of the supply of dead bodies for dissection has been again and again brought up, but that, notwithstanding, no improvement whatever has as yet taken place. It is every day becoming a more and more serious question, and one which demands a searching

inquiry. The number of subjects has been decreasing every year, and the dearth of material for dissection has given cause for great anxiety to those engaged in the teaching of anatomy. In no session has the want been so severely felt as in that which has just passed away. We are glad to be able to rank Mr. Charles Hawkins among the foremost of the reformers in, the reforming Medical Teachers' Association, and in the Council of the College of Surgeons. May we be allowed to point out to him that in no direction could his energy be more usefully employed than in that which peculiarly appertains to him under the Anatomy Act? An adequate number of subjects is of vital importance to all Medical schools; and if Mr. Hawkins could only manage to insure an ample supply, he would earn the gratitude of both teachers and taught.

Perhaps we may be able to point out some of the causes which bring about this dearth of subjects, and, the cause being known, the remedy in this case becomes plain.

It will be seen from an article which elsewhere appears in our columns that, during the past year in the ten Hospitals from which we have received information, 656 students had 211 bodies. This number includes those used for the operations of Surgery, and also imperfect postmortemised subjects—"broken parts," as they are called. The usual distribution of a subject is into eight parts, so that, at a rough calculation, this would give rather more than two parts each to the pupils. Some, of course, have had more, but many less, and those who are at all acquainted with the practical working of a dissecting-room know how difficult a matter it is justly to apportion them.

A chief cause of this small supply is as follows:—The masters of the workhouses, with some few exceptions, seem to have set their faces against the bodies going to the Schools; for as soon as it gets known where they are going to, public indignation is roused against them, and they refuse to undertake any risk or annoyance, especially as they get nothing for their trouble. Formerly a douceur was allowed the undertakers for moving a subject, and a portion of this was given to the masters for their pains, but since this has been done away with the supply has steadily diminished.

We have known instances in which the masters of workhouses have prevented unclaimed bodies going to the Schools by offering some small bribe to any one willing to make themselves out to be friends or relatives of the deceased. We doubt, however, if this would have been the case if he himself had some remuneration for seeing the body safely and carefully delivered into the undertaker's hands. It is, after all, the old story—men will not work without remuneration. Those engaged in the teaching of anatomy must have noticed an almost immediate decrease in the supply after the publication of an article, entitled "Paupers' Bones," in one of the Sunday newspapers some months ago, scurrilous enough, and taking an utterly wrong view of the matter; but it certainly appears to have had due effect upon those who have the disposal of the bodies, at least at the workhouses. This really seems a very feasible explanation of our difficulty, for obviously those persons in whose hands the sending away of unclaimed paupers lies have everything to lose and nothing to gain. We cannot help thinking that if some slight extra payment upon every subject received were offered, and that if this were generally known amongst those who are supposed to supply our Schools, we should soon have the material we require. A slight subscription amongst the students of the metropolis would easily meet this expense.

A contributor elsewhere very sensibly calls attention to the fact that "an ample supply of unclaimed bodies might be had for dissection if it were not for the railways and the public." Cannot this matter be urgently laid before the Home Secretary?—we allude to the fact of the railways making such exorbitant charges for the removal of corpses. Surely the days have come when such a fanatical idea as its being "a trafficking in human flesh" were exploded.

When we take one only out of the many sources from which we might, by proper legislation, obtain material—the pauper lunatic asylums, where there must be hundreds of unclaimed bodies—we can form some estimation of the amount of supply lost; and we can only think that better management in railway arrangements would tend largely to obviate this difficulty. If they may operate upon them and postmortemise them in the several establishments, surely they might be better turned to general use in our schools. We shall be thankful for any further suggestions from our correspondents, but it is evident that the time has come when some stir must be made about the matter.

ANNUAL REPORT OF THE POOR-LAW BOARD.

The Poor-law Board, in their Twenty-first Annual Report, bring the history of their work down to the end of July last, except as regards certain statistics of relief and expenditure, which are tabulated to Lady-day and Michaelmas, 1868, respectively, the numbers of paupers of all classes being calculated to January 1, 1869. The report shows that, during the parochial year 1867-68, a sum of £7,498,061 was expended for the relief of the poor, as against £6,959,841 in 1866-67 and £6,439,515 in 1865-66. The rate per head on the population in 1867-68 was 6s. 11½d., being an increase of 5¼d. over 1866-67, and of 10¼d. over 1865-66. Taking past decennial periods, the rate per head for 1868 does not appear excessive when compared with 6s. 0½d. in 1858, 7s. 1¾d. in 1848, and 5s. 5¼d. in 1838. It appears from the report that the total number of persons in receipt of relief on January 1, 1869, was 1,046,569, as against 1,040,103 on January 1, 1868, being an increase of 6466. The numbers of able-bodied adults relieved, however, show an improvement, being 2468 less in January, 1869, than in January, 1868, or a decrease of 1·3 *per centum*.

The report gives numerous and exhaustive comparative tables which space will not allow us to examine in detail. Suffice it to say that they show broadly the following results:—

That the expenditure for all purposes in the year ending Lady-day, 1868, was greater by £538,220 than in the preceding year, an increase of 7·7 *per centum*.

That the charge distributed over the estimated population amounted to 6s. 11½d. per head in 1867-8, against 6s. 6¼d. in 1866-7, an increase of 6·7 *per centum*.

That the charge distributed over the rateable value of England and Wales amounted to 1s. 6d. in the pound in 1867-8, against 1s. 5¼d. in 1866-7, an increase of 4·3 *per centum*.

That the mean number of paupers of all classes in 1867-8 was 992,640, against 931,546 in 1866-7, showing an increase of 6·6 *per centum*.

In the above statement the word "increase" occurs with ominous and unpalatable frequency, and this the Board appear to recognise, as they admit "that the cost of maintaining the poor has risen in a somewhat greater ratio than the number of persons relieved." But they evidently consider that comfort should be derived from the reflection that, "owing to the constantly augmenting proportion of 'rateable value,' the increase in the 'rate in the pound' is less than the increase in numbers or expenditure;" or, in other words, the country is so rich that it can well afford to pay at an ever-growing rate *per head* for a constantly increasing number of paupers. The report, however, reminds us that one way to check the rates is to avoid any tendency to pet our paupers. The hint is conveyed in the most unmistakable manner, thus:—"It is a significant circumstance, which deserves attention, that in the year ending Lady-day, 1868, an increase of expenditure of greater or less amount has taken place in every county in England and Wales." The Board could not speak more clearly, or, as it seems to us, with more truth, if they said, "In obedience to the popular will we nrged the guardians throughout the country to provide for their poor increased comforts and better accommodation and appliances; the guardians generally, though in some cases reluctantly, set about complying, and now the

bill has come in," or perhaps it would be more correct to say, "the bills have begun to come in."

The report details the grounds upon which certain of the proposals as regards the formation of sick-asylum districts, in pursuance of the Metropolitan Poor Act of 1867, have been abandoned, without sacrificing the advantages which that Act was intended to secure. It was found that the cost of each of the proposed asylums would not be less than from £45,000 to £50,000, and the report states that—

"Under these circumstances, and taking into account the large and increasing burdens on the ratepayers of the metropolis, we deemed it necessary to review the proposed arrangements, for the purpose of ascertaining whether the requisite separate accommodation for the sick poor might not be provided in some other manner equally efficient, but not involving so serious an outlay.

"After a full inquiry into the available space in the existing workhouses it became evident to us that if each workhouse in the unions forming the sick-asylum districts were appropriated to a separate class, not only would the requisite classification be secured, but great economy in space would be effected, and that the further accommodation thus obtained would, if certain additions of a comparatively inexpensive character were made to some of the workhouses, so far meet the wants of most of the six districts as to obviate the necessity of erecting costly new buildings for the separate treatment of the sick."

These considerations were acted upon, and most of the unions in the metropolis have been so altered or combined as to render them co-extensive with the contemplated sick-asylum districts. The remainder, it appears, will probably soon be similarly dealt with, excepting a few which have not been included in an asylum district. In these latter cases suitable accommodation will be provided by building, but much room for the sick will be set free by the removal of the imbeciles to the asylums in course of erection at Caterham and Leavesden. The small-pox and fever Hospitals at Homerton and Stockwell are to be proceeded with, but that proposed at Hampstead has been abandoned.

The only other portion of the report to which we can now direct attention is that which treats of the steps taken in regard to dispensaries. The Commissioners say:—

"In our last report we inserted a circular letter, which we had addressed to the guardians in the metropolis, drawing their attention to those sections of the Metropolitan Poor Act, 1867, which related to dispensaries, and pointing out the advantages which would arise from their establishment; but we regret that, owing to unforeseen obstacles in some cases, and legal impediments in others, but little progress has been made in giving full effect to these provisions of the Act.

"In some unions dispensaries have been established, where all medicines required for the out-door poor are dispensed by duly qualified dispensers upon the prescriptions of the district Medical officers, and although in these cases a dispensary committee has not been appointed pursuant to the Act, the dispensary arrangements have been superintended by a committee appointed by the guardians. This system has been attended with very satisfactory results.

"We are still strongly of opinion that the requisite medicines should be provided by the guardians at their own cost instead of by the Medical officers, and that the Medical officers should see and prescribe for the sick poor not confined to their houses at the dispensaries rather than at their own surgeries; but we do not consider it essential that a dispensary committee should be appointed in those cases where the guardians object to such an arrangement, and are willing to comply with the other requirements of the Act.

"The measure now(a) before Parliament for amending the Metropolitan Poor Act will relieve the guardians from the obligation of appointing a dispensary committee in certain cases, and offer other inducements for the general establishment of dispensaries throughout the metropolis."

The Bill referred to in the report has now become law, and we trust that before long we may be enabled to record a very general willingness on the part of metropolitan guardians to accept the offered inducements for the establishment of dispensaries.

(a) July 30, 1869.

ENDOWED HOSPITALS.

The spectacle of a mathematician and strict reasoner like Mr. Whitworth devoting part of his property to endowing scholarships in the present age of this country is, in every point of view, a remarkable one. The founder, desiring to do the State some service, must first have settled for himself in the affirmative the vexed question whether endowments, even if strictly administered, are productive of good to the community; and he must then have satisfied himself that the dangers of misapplication which have beset all endowments, whatever their purpose, whether for the spread of knowledge or the defence of a dogma, for a domestic crotchet or a social reform, for "a college or a cat," will be harmless to his own favourite project. Yet the experience of other founders, if we could call them from their graves to give it, would hardly be encouraging. Many would doubtless tell us that they would rather have thrown their money into the sea than have done so much harm with it. Others would say that the good which has resulted from their schemes has been effected under totally opposite conditions to those which they had themselves contemplated. All would probably think more than twice before trying the experiment again. Mr. Gladstone's attention has of late been forcibly directed to the subject of endowment, and also, unfortunately, to that of illness; perhaps the association of ideas may induce him to permit his thoughts to be turned to the compound subject of the endowments which are devoted to the relief of illness. It is probable that there are few institutions which could suffer less, and might profit more, from a thorough examination in the interests of the State. The first question to be determined would of course be whether it is to the public advantage that these endowments should exist at all; and, this being answered in the affirmative, it must be asked in what way they can be made most serviceable to the community—whether, for example, by the reception of sick and destitute individuals who would otherwise be chargeable to their several parishes, and thereby relieving the rates of particular districts, or by providing collections of patients suitable for clinical instruction, and so insuring a supply of well-taught Medical Practitioners for the whole country. There are other modes that might readily be suggested for utilising these endowments; but, as between the two above mentioned, the balance of educated opinion would perhaps be in favour of the latter. The further question would arise whether, in addition to the reception of patients within the walls, it is desirable to give away advice and medicines indiscriminately to all comers, after the fashion of the doles of mediæval monasteries, or whether such a practice is not now as demoralising to the recipients of such doles as it was found to be in the middle ages. There is no doubt that there are managers of such endowments whose vanity is flattered by large figures. Here is a cheap and easy way of indulging in that weakness. Let them buy cheap drugs, overwork their dispensers, and get the patients attended for nothing, and it matters little to the funds of the Hospital how many thousands come.

The endowed general Hospitals of London are three in number—St. Bartholomew's, St. Thomas's, and Guy's. The first two were refounded by that amiable and enlightened monarch, Henry VIII., or his son, out of the proceeds of suppressed monasteries, apparently as a sop to the citizens of London, to whom the grant of the property was made. Probably it was found that the sight of Hospitals being swallowed up at their very doors by greedy court favourites was a little more than the sturdy commonalty would stand. How the present very anomalous mode of government, by which the citizens are practically excluded from the control of the endowments, and a self-elected body of governors is substituted for them, we do not profess to explain. This, as well as the more important question—Is the present mode capable of improvement?—are fit subjects for public inquiry. The

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history of Guy's, as is well known, is much shorter than that of the two others. It was founded in 1721.

It is manifestly impossible in a single article to go fully into the history of these endowments; we will therefore pass over Guy's, in which many and extensive improvements both in the buildings and in the system have been made of late years, and St. Thomas's, which is now in a chrysalis state, and intends to burst forth in new splendour when its home is ready for it, and turn our attention for a moment to the internal condition of St. Bartholomew's. During the past year repeated mutterings of a storm have found vent in our columns and those of our Medical contemporaries, and, from what we can gather, the storm appears to be now at its height. Dissatisfaction with the present administration of the Hospital pervades the whole working body: and the managers have just taken the best mode of bringing this dissatisfaction to a head by removing from office one of the House-Physicians, Dr. Mayo, for "insubordination." We are aware that Dr. Mayo has been active in endeavouring to force on the notice of the managers of the Hospital the flagrant abuses of the out-patient department; but into the further details of his quarrel we are scarcely competent to enter, especially as it is of course possible that he may wish to test the legality of his removal in a court of law.

If we might venture, however, to give a word of counsel to Dr. Mayo and those who think with him, it would be that they should rather choose to abide by the verdict of public opinion, which will assuredly be on their side, than resort hastily to the use of that double-edged weapon, the British jury. Our old and eminently successful friend, Jack the Giantkiller, often found it advisable, for strategical reasons, to avoid direct encounter with opponents who presented a too solid front for immediate attack, and the results perfectly justified his tactics. Above all, we would remind the St. Bartholomew's reformers that the most effective engine for the removal of abuses has always been organisation and sustained concerted action. Let them not forget the lesson of the bundle of sticks.

And what will be the effect on the school of all this ferment? We observe that there is to be no introductory lecture this year? Is this because the managers of the Hospital are unwilling to meet the students? Again, the managers have given the use of the Hospital hall, on which a large sum of money has lately been spent in gilding and decoration, for the dinner of old Bartholomew's students on October 1. Is this to prevent that free expression of opinion which was likely to take place outside? If we are told that we must not look a gift horse in the mouth, we fall back on Charles Lamb's refutation of that popular fallacy, and say with him, "Something is always expected in return." Those old Bartholomew's men who go to this meeting will doubtless have the satisfaction of being told that everything that is is right, while they see the quinine and sarsaparilla that ought to have been prescribed by the dressers spread over the walls of their dining-room. For ourselves we fear that the old ship is in danger of disasters from inefficient pilotage, and we would call to her mind—

> "Nil pictis timidus navita puppibus
> Fidit. Tu, nisi ventis
> Debes ludibrium, cave."

Lastly, there is one question that occurs to us—What has become of the staff of St. Bartholomew's?

THE SOUTHWARK WATER COMPANIES.

Every day's experience proves the importance of water as a means of propagating or producing disease, and every day's experience consequently shows the value of a pure supply for domestic consumption. The water companies on the south side of the Thames have long been notorious for their shortcomings in this respect. Week after week, and month after month, their water has been reported turbid and unfit for use; yet nothing has been done. It was high time that some searching inquiry was made into the causes of this continued evasion—or rather, we should say, infringement—of the laws, and no better man could have been selected for this purpose than Mr. John Netten Radcliffe, he who so industriously and ably traced out the cause of the fatality of the cholera in East London during the last epidemic. His report is now before us, and we regret we cannot enter into its details as fully as it deserves, but we shall try to make the main points clear.

The gist of the whole matter lies in this. Every company is required by law to *effectually filter* all water supplied by it within the metropolis for domestic use; but no officer is appointed to see that this is done, and the companies, with—shall we say commendable?—prudence, have carefully abstained from any supervision of their own delinquencies. The most notorious offender is the Southwark Water Company, in whose mains, indeed, clear water would seem to be the exception. By way of apology, for they are forced to admit the fact, they say that the demands on them have so rapidly increased, chiefly owing to the enormous consumption of the railways, that they have hitherto been unable to meet the increased demand, but that now, when new works are approaching completion, they hope to manage better. We shall try to explain in a few words the causes of this unsatisfactory state of matters. The purifying of water depends essentially on two processes, subsidence and filtration. The subsidence beds of the Southwark Company are far too small, and their filtering beds are also too small; the consequence is that the water has no time to be purified after it has been taken from the Thames until it is distributed in the mains. Then, again, the demand for water is not uniform during the twenty-four hours; it is much greater in the morning than in the afternoon, and consequently well-regulated companies have room for storing large quantities of filtered water. The Southwark Company have no such storage; the pump wells communicate directly with the filter beds, so that when the demand for water increases, to increase their supply they throw more pressure on the filter beds, remove any obstacles to the transmission of the water through these beds, so that the process of filtration becomes not only a sham, but, as suggested, an actual means of impurity, for the rush of the water through the filter would seem to be powerful enough to carry off the detritus thrown down by previously filtered water. Nor is this all. There exists a still more direct communication between the filter-beds and the pump wells in the shape of large pipes, which it is shrewdly suggested the company use to supplement their supply when the stores of so-called filtered water in the mains are low. One would fancy that such sources of impurity were enough, but there are others. Formerly the company used to take their supply of water from the tidal stream at Battersea, and their filtering-beds are close to the river. The old conduit still exists, and it is possible to use it for supplementing the supply acquired higher up the river. It is not absolutely asserted that this has been done, but Dr. Frankland's analyses show plainly enough that at certain periods tidal water was making its way into the reservoirs some way or another—a condition of matters which it is not pleasant to contemplate, when viewed by our experience of past epidemics. Now all this could be easily avoided, as is well shown by the experience of the West Middlesex Company, which draws its supply of water from the Thames at the same point as does the Southwark Company, yet very, very rarely, and then only in most unusual states of the river, has its water been turbid.

The Lambeth and Chelsea Companies would also seem to be offenders, but in a minor degree; they are unfortunate in their intake, which should be moved higher up the river, and their filtering beds ought to be extended, but both companies keep a store of more than one day's supply of filtered water, so that their pumps go steadily during the twenty-four hours, no in-

crease in the supply from the filtering beds being necessary during the hours of excessive demand.

Not the least instructive portion of the report is that contributed by Dr. Burdon Sanderson as to the microscopical characters of certain specimens of water. It would seem that fishes, eels, and frogs, live and enjoy themselves in the mains of the Southwark Company. This they could not do if the water was pure, and consequently we are prepared for the statement that diatoms, desmids, amœboid protozoa, and other lowly organisms abound. But nowadays, although these are very ugly when viewed through a microscope, especially when existing in the water we are accustomed to drink, yet we know what they mean. As Dr. Burdon Sanderson says, "when they are found in such waters the fact simply implies that the mechanical means (*i.e.*, the filters) employed to keep them out of the service reservoirs are insufficient." Not so with certain other still more lowly forms—those elementary bodies whose only proof of vitality consists in motion; their natural history is not yet known, but enough has been discovered to make us suspicious of them as the agents of disease and death. Such bodies were plentifully formed in the water of the Southwark Company after it had stood for a time. Their presence is at all events a guarantee that matter is there in an organisable state, and that transformation was going on in this material—a fact which is the reverse of agreeable to those who have to drink it.

Divines are in the habit of appending a practical moral to their longish discourses; ours is that the inquiry shows it is high time that some more responsible authority were placed over our water supply. A joint-stock company cannot be expected to look after more than the securing of good dividends. It would be somewhat awkward to apply to water companies the rough means whereby railway companies are coerced. We fear that the battles of the experts would be quite interminable in a keenly contested claim for damages. But if this cannot be so, the proposal to render our water supply, as it is elsewhere, a municipal institution, is surely not impracticable, and, in the face of the dangers to which we are exposed under existing circumstances, one which ought to be urged on. In our position of Medical Mentor, we cannot refrain from insisting on our present danger, and on the duty of providing a remedial measure—if it be satisfactory we do not care what it is—and finally from thanking Mr. Radcliffe for a report which cannot fail to aid the good cause of domestic sanitation.

THE WEEK.

TOPICS OF THE DAY.

EVERY ONE is out of town. A lull has followed the gale which the meeting of the Medical Council raised over the narrow field of Medical politics, and until the Schools meet in October nothing can be expected to disturb the well-earned repose of the Medical world of London. The next meeting of the Council of the Royal College of Surgeons will take place on October 7, and we believe that the important communication on Medical education and examination addressed by the Medical Council to the Examining Boards will again be under discussion. The Council of the College have, we are told, formed a committee for the purpose of reporting on the questions raised by the recommendation of the Education Committee of the General Council in reference to a joint board for the examination of students. The same question is also, we have reason to know, being discussed by the authorities of other examining bodies. One thing seems clear—that if the result desired is to be brought about it cannot be done without a fair and just consideration of existing claims. Neither will Medical education be forwarded, nor will justice be done, by transferring the examination of the general Practitioner from those bodies to whom substantially the Profession have owed all the improvements in Medical education and in the status of the Medical man which have been made in the last fifty years, either to a board of Government nominees, or to any other Medical corporations or institutions. All the joint board is expected to perform is to give a minimum examination, and we may reasonably doubt whether the standard of a minimum examination will in reality be higher than that at present enforced by the principal examining bodies. The real argument for the joint board is the convenience of the student and the consolidation of the Profession. But whether these advantages may not be purchased at too high a rate by the destruction of existing machinery is a question which ought to be carefully weighed.

There has occurred a case of supposed poisoning by strychnia in Gloucestershire, the facts of which are remarkable enough to warrant attention. A lady, the wife of a clergyman, who had previously been insane and exhibited suicidal tendencies, but who, in November last, had been discharged from an asylum, and had since exhibited no sign of insanity, died suddenly. The report we have seen states that—

"On the night of the 1st inst. Mrs. Salter wished her friends good night, and went to bed between 10 and 11 o'clock. Her husband joined her in an hour, and she then appeared still happy, contented, and cheerful, as she had been during her stay at Cinderford. Early in the morning Mr. Salter was awakened by his wife's hard breathing, and he asked her what was the matter. She asked for water, complained of cramp, and rapidly fell into violent convulsions. Mrs. Whatmough was first called, and then Dr. Whatmough. Mrs. Salter was then in a state of tetanus, and exhibited all the usual symptoms of poisoning by strychnia. The Doctor went to his surgery, which is on the premises, and before he could return she was dead. A post-mortem examination was of course made, and the contents of the stomach were analysed by Mr. Horsley, of Cheltenham, the county analyst. The poison had evidently been absorbed into the system, and although no traces of it could be found, three Medical men gave it as their opinion that Mrs. Salter had died from tetanus caused by strychnia. No bottle or box was found in the bedroom, and Dr. Whatmough stated that neither of the bottles in the surgery containing preparations of strychnia was missing. The jury, therefore, returned a verdict stating that deceased died from tetanus caused by strychnia, but that under what circumstances the poison was taken, or whether taken by the act of deceased or administered by some other person, there was no evidence to show."

Now we think that a verdict of this kind establishes a dangerous precedent. It could not be shown that the deceased lady had strychnia in her possession, and none of the poison was found in her body, but on the report of the symptoms alone the jury attribute the death to poisoning by strychnia. It must be remembered that the fact of Mrs. Salter having suffered from insanity proves that her nervous system was not in a condition of health above suspicion. It may be that the verdict of the jury was right, but, in the absence of all traces of poison, we do not think it was warranted. The relations of the deceased and the fortunes of survivors might be seriously compromised by a decision which, with the evidence before us, we cannot but think a doubtful one.

The Compulsory Vaccination Act is working amid difficulties. The other day a woman brought her child to Bow-street to exhibit it to the magistrate, in the words of the *Times* reporter, "literally covered with sores," which she attributed to vaccination, performed by the assistant of Mr. Bennett, of St. Giles's. Dr. Seaton has since investigated the case, and he calls the eruption eczema, although, on the first examination, Mr. Bennett was reported to have thought it chicken-pox. Dr. Seaton, in his report, acknowledges the possibility that the vaccination had some part in evolving the eruption, which he considers to have been a latent affection. He states that the child was flabby and ill-nourished, and that the operation ought to have been postponed. We fully concur in Dr. Seaton's account of the matter, but it cannot be denied that such occurrences afford evidence which the enemies of vaccination will not

fail to make the most of against the policy of compulsory vaccination at the age of three months. Vaccination is a great boon to mankind, but it is nevertheless the origination in a child's system of a new train of morbid action. Enormous benefit as it is, then, it cannot be expected to be an unmixed one. There is no doubt that eczema does occasionally follow eruptive fevers of the varioloid group. We have lately had an opportunity of seeing at one of the metropolitan Hospitals a case of unmanageable chronic eczema of several years' duration, which followed confluent small-pox. It is only by impressing on the public mind the horrors of unmitigated small-pox—which, thanks to vaccination, the present generation can scarcely realise—that people will be induced to put up with the minor and occasional evils of vaccination.

The recent excavations of the East London Water Company, which have yielded so rich a booty to naturalists and antiquaries, have set for ever at rest the question whether the elk (*Alces palmatus*) has been a denizen of our forest in post-tertiary times. Professor Owen, in a note on the subject, states that at the time of the publication of the "British Fossil Mammalia" he had not obtained satisfactory evidence of the occurrence of the elk. The first and only discovery of elk remains previous to the excavations at Walthamstow was that of an antler in a peat bog near the North Tyne River, Northumberland. This is recorded in the *Transactions* of the Tyne-side Naturalists. Now, however, we have proof that the elk, as well as the reindeer, inhabited the forests round London. "In an old bed of the River Lea," Professor Owen writes, "at from five to eight feet in depth, have been obtained remains of *Bos longifrons*, *Capra Hircus*, with remarkably fine horn cores, part of an antler, two feet eight inches long, of a reindeer (*C. tarandus*), and in another kind of deposit, as evidenced by the darker colour of the bones and a thin partial coating of limy matter, were obtained the humerus, antebrachium, and metacarpus of an elk, closely corresponding with those of the existing Scandinavian species." The characters of the bones of that peculiarly long-legged kind of deer called elk or moose differentiate them readily, Professor Owen adds, from those of the bovines, of the megaceros, and of the wapiti, or other large round-antlered deer. He is disposed to regard such bones as more satisfactory evidences of *Alces* than portions of antler. There seems to be a doubt whether the elk has ever been discovered fossil in France. But Professor Owen remarks that we owe to Julius Cæsar the valuable record of both the reindeer (*Bos Cervus*) and the elk (*Alces*) in the Black Forest and conterminous parts of Germany at the period of his campaigns.

The forger of the spurious Newton-Pascal correspondence is said to have been discovered in Paris. M. Charles, who seemed prepared to defend the authenticity and genuineness of the letters to the death, has at last allowed himself deceived, and himself applied for a warrant against the supposed manufacturer, who is also the purveyor of the manuscripts. M. Charles is said to have paid the accused 150,000 francs for the counterfeit papers.

A death from chloroform is reported from the Hanley Infirmary. The newspapers report that there was fatty degeneration and enlargement of the heart, and that "matter" was present on the surface of the brain.

The death-rate of London is still high. Last week the deaths were 604, the corrected average being 440. Still the zymotic class of diseases is in the ascendant.

"Five deaths from smallpox, 38 from measles, 179 from scarlet fever, 8 from diphtheria, 70 from whooping-cough, 12 from typhus fever, 22 from enteric fever, 18 from simple continued fever, and 185 from diarrhœa were registered."

The Registrar General adds:—

"The deaths from measles, scarlet fever, and diarrhœa exhibit an increase on the numbers in the preceding week. Measles was most fatal in the East districts, scarlet fever in the East and South districts, and diarrhœa in the North, East, and South districts."

A GOOD MOVE.

It is probable, in the event of yellow fever continuing to prevail in Trinidad, that the troops may be transferred from that island to Barbadoes, as we believe that the Secretary of State for War has left it optional with the officer commanding at Barbadoes to remove the troops in case he should consider it advisable to do so.

THE CORONERS' STATUTE AMENDMENT BILL (AUSTRALIA).

We noticed a week or two since that this Bill contained a most objectionable clause which prohibited *post-mortem* examinations without the written authority of a coroner. This clause, we are glad to say, was rejected by the Legislative Council on June 22 without a division.

THE CHADWICK MEMORIAL.

It may be in the recollection of our readers that the good folk at Bolton have determined to erect a memorial to Dr. and Mrs. Chadwick, of Southport, in recognition of their munificent gift of £22,000 to the town of Bolton for the erection of an orphanage and improved dwellings for the industrious poor. We are informed that the following sculptors were invited to send in designs:—Messrs. W. Calder Marshall, R.A., J. Durham, A.R.A., E. G. Papworth, E. E. Geflowski, C. B. Birch, J. Birnie Philip, John Bell, T. Woolner, and Matthew Noble. The three latter declined to compete. Seven designs were sent in, and the one by Mr. C. B. Birch was selected by a large majority. The statue is to be in bronze, nine feet high, on a granite pedestal, and the whole is to cost £850. We believe that the statue of Dr. Chadwick is likely, in Mr. Birch's hands, to prove an excellent work of art and ornament to the town of Bolton. Mr. Birch is well known in the world of art by his charming group "The Wood Nymph," now in the South Kensington Museum, and by many other works of considerable merit.

DR. HESLOP AND THE BIRMINGHAM GUARDIANS.

Dr. Heslop's pamphlet on "The Realities of Medical Attendance on the Sick Children of the Poor in Large Towns" has called forth the indignation of the guardians of the Birmingham board. It was discussed at their last meeting. Mr. Hawley made some severe strictures on the pamphlet, and declared that if he had been guilty of electing any Medical officers such as were described in Dr. Heslop's pamphlet, the sooner they were displaced the better. He eventually moved that "the pamphlet be referred to the Outdoor Medical Relief Committee." Mr. Carter thought the pamphlet unworthy of their notice. Mr. Biddle advised that the Medical officers of the parish should bring an action for defamation of character against Dr. Heslop. The matter eventually dropped without any resolution being carried.

THE FREE MEDICAL SCHOLARSHIPS AND THE EPSOM COLLEGE.

We learn that the Charing-Cross Hospital teachers have offered two free Medical scholarships to foundation scholars of the Epsom Medical College on their passing a first-class matriculation examination in the University of London. If we are rightly informed, no foundation scholar of the Epsom School has obtained, with one exception, a first class at the matriculation; consequently the offer of these free scholarships will be practically inoperative. The real want of the foundationers of Epsom on leaving is means to live—bed and board—without which they cannot pursue any course of study, whether it be free or otherwise. Open to the entire school are the Gilchrist and the Forest exhibitions of £50 a year, tenable

for three years, besides others of less value, including the Wakley, Watts, Martyn, and other prizes of the value of £20 a year. With the exception of the free Medical scholarship in University College, London, which carries with it the Carr Exhibition of £50 a year for four years, there is no special scholarship for foundationers, who, as necessitous orphans, pre-eminently need assistance. The Council of the Epsom College propose to establish three more of the these scholarships, a fund for which is being raised, and to which Sirs James Clark, Thomas Watson, William Jenner, and Charles Locock, Mr. Paget, Mr. Simon, and many others have contributed. The trustees to the fund are Dr. Carr, Dr. Ringer, and Mr. John L. Propert. We heartily commend the fund to the support of the Profession, being assured that it merits universal support.

SCARLATINA AT ASCENSION.

H.M.S. *Orontes* left Table Bay on July 26, having on board the 99th Regiment, a party of Royal Engineers, some military invalids, and a number of women and children, amounting in all to more than 1080 souls, exclusive of the ship's crew. The ship arrived at Ascension on August 10 under sail, the screw having been disabled a few days before. On the 11th a case of scarlatina occurred among the children on board, and those families more immediately in contact with that in which the case had occurred were put on shore. Other cases having occurred, one on shore and one on board, all the families, including those of officers, on the recommendation of a board of Naval and Military Medical Officers, were disembarked and put under canvas on shore. Another case occurred on shore on the 14th, and, the sailing of the ship for home having been fixed for the 18th, it became a question of very serious importance as to whether the families should, under the circumstances, be permitted to re-embark to continue their homeward voyage. Dr. Snell, of the 99th Regiment, who was the Senior Medical Officer, strongly urged that the families, numbering 331 individuals, should be left on the island, and in this advice he was supported by the other Medical officers, naval and military, with, we believe, one exception, and this course was adopted. The disabled ship started under sail on the 18th inst., accompanied by H.M.S. *Perseus*, for the purpose of towing across the belt of calms on either side of the line, and is expected to arrive in England early in October. H.M.S. *Simoom* is under orders to sail, not later than the 24th inst., to bring the party on from Ascension. When we recall the disastrous results in the instance of the *l'Eclair* and other vessels starting on a voyage with infectious disease germinating among those on board, we cannot wonder at the unwillingness of the Medical officers concerned to involve themselves in the serious responsibility of advising or consenting to the continuation of the voyage by the infected families. We can only hope that in the present instance the result may be satisfactory, not only as concerns those left behind, but also the large number of troops whose arrival is now shortly expected. In any case, it will have been a most costly experiment, which, if attended by merely negative results, in the absence of any further spread of the disease among those on the island or on board ship, may be considered to have been unnecessary by some who, had it not been tried on the urgent representations of the Medical officers, would have been among the first to throw the blame and responsibility of the neglect of precautionary measures upon the Medical authorities on the spot. Under the less fortunate contingency of the disease appearing among the troops during the homeward voyage, it will be at least a consolation to know that every effort had been made to arrest its progress. We are glad to think that the measures adopted on the advice of the Medical officers should have been of such a nature as to show that they did not hesitate as to which form of responsibility should be theirs—namely, that which would certainly involve a very large expenditure on the part of Government, although without absolute promise of success, or that which, with an apparent economy of the public funds, might have entailed a lamentable loss of human life, and ultimately a large outlay of money for recruits. Should it turn out that the *Orontes* arrives in England with a number of cases of scarlet fever on board, the administrative resources of the authorities, Medical and military, as well as the military Hospital accommodation, at the port of disembarkation, will be put to rather a severe test, for which we trust that they may be prepared in time.

HEALTH OF CUSTOM-HOUSE OFFICERS.

Dr. Walter Dickson's report of the health of the outdoor officers, watermen, and other inferior officers of her Majesty's Customs during 1868, has just been published. The total number of men employed is 1047; 808 of these are stationed in London, 239 at Gravesend. The mean age of the force at present is 39 years. Dr. Dickson gives a series of elaborate and interesting tables in reference to the character of the diseases under which the men suffered, etc. The general results are as follows:—

"The mean daily number on the sick-list has been 39·5, or 3·7 per cent. The ratio of admissions on strength has been 82 per cent. The average duration of each case has been 16·7 days. The time lost to the service through sickness or accident has been 13·8 days per man. The deaths, including two from accident, were at the rate of 1·4 per cent.; excluding these, 1·2 per cent. Superannuations on Medical certificates were at the rate of 0·4 per cent. Deaths and superannuations have this year been as much above the average number as they were in the last year below it. But, both years being taken together, the means do not exceed, indeed are somewhat under, the average of the ten preceding years."

There are some noteworthy points in the report to which we may refer. The third quarter was remarkable for a degree of heat unknown in this country for nearly a century—the mean of the whole quarter was 64°, or 4° in excess. The health of the force was, notwithstanding, satisfactory, the number of admissions being under the average of the last seven years, the daily average of officers on the list not exceeding twenty-five. Cases of diarrhœa were by no means numerous, nor was their type severe, no tendency to cholera being manifested in any instance. The relative numbers in the last four years have been—

"In 1865 (very hot and dry season)	13
„ 1866 (cholera year, cold and wet)	55
„ 1867 (cold and wet)	16
„ 1868 (dry and unprecedentedly hot)	20

"The mean number of those cases in twelve successive summers from 1857 has been 39. In this year, therefore, the amount of bowel complaint was far below the average, as it also was in the remarkably hot and dry summer of 1865. As the same diminution was observable in the cold and wet seasons of 1860 and 1867, temperature alone would hardly account for it. On the other hand, it is noted that in those years in which cholera was epidemic in the metropolis, even if the force were little if at all affected by it, the number and severity of diarrhœa cases were greatly increased."

In the fourth quarter the health was of the average of preceding years; rheumatism was prevalent during the latter portion of the quarter, in consequence of the season commencing suddenly with cold dry weather and ending with unwonted warmth and humidity. Dr. Dickson's report is a valuable addition to the literature of the public health.

MEDICAL MATTERS IN ITALY.

The *Athenæum* of the 11th inst. contains, in the letter of its Italian correspondent, who writes under the initials "H. W.," two pieces of information which to Medical men in this country will appear rather surprising. An Italian paper (the *Pungolo*) having stated that a special commission has been appointed to inquire into the causes of the intermittent fevers which have for the last fifteen years prevailed in the city under many destructive forms, "H. W." remarks that "there can be little

hesitation in tracing them to the worse than imperfect system of sewerage which exists here, and, say some, to the bad quality of the gas made for the use of Naples." Now, whatever diseases "imperfect sewerage" and "bad gas" may be guilty of, intermittent fevers do not belong to the number. The other and still more startling statement is as follows:—

"In the *Pungolo* of June 26 I find the following answer of Dr. Tommasi, one of our most eminent Medical authorities, to my friend Cavaliere Salazaro:—'You ask me if there would be danger in opening a crypt of the first centuries of the Church, where, perhaps, some who died of cholera in 1856 were buried—would there be any fear of reproducing the malady? I answer at once, such an idea would be a most vulgar prejudice. I assure you, then, that you may enter on any archæological investigation without apprehension.' The permission, therefore, of the Communal Council of Santa Maria di Capua will, no doubt, be given, and we shall soon hear of other matters of interest."

Not at all unlikely, we should say; as unless the explorers are much more fortunate than others who have already tried the experiment which Dr. Tommasi says may be made without apprehension, we may hear of an outbreak of cholera among them. The instances in which cholera has appeared in India among labourers who, in the course of excavations, have disturbed the remains of persons who have died of cholera, are numerous and well known. Dr. Moore gives two very remarkable instances, which, with several others, are quoted in Dr. C. A. Gordon's "Army Hygiene," to show the probability of cholera and other diseases being propagated in this manner. One of them is mentioned by Hugh Millar, where, after the lapse of fifty years, the graves of some Dutchmen who died while their ship was in quarantine in the harbour were opened in search of treasure by a half-witted man, who died of "putrid fever" a few days afterwards. Fortunately the disease did not extend in this instance, but Miss Seward tells a similar story, with the much more unfortunate result of the disease having become epidemic. The opinion expressed by Dr. Tommasi that the idea of the possibility of the reproduction of cholera by such means is merely a vulgar prejudice, could not have been given by that gentleman if he had been aware of the existence of so many well-established facts to the contrary. We wish the archæological explorers well out of their job.

FROM ABROAD.—M. RICORD ON VACCINAL SYPHILIS—M. DEMARQUAY ON CHLORAL.

Among the addresses delivered during the prolonged discussion on "Animal Vaccination," still carried on at the Academy of Medicine, that of M. Ricord is of most interest, not only from the precision and force of the language he employs, but from the importance which attaches to his opinions in all that relates to syphilis. After observing that he is no believer in the degeneration of the Jennerian virus, he points out, as regards vaccinal syphilis, the strange facts that no mention of it was ever made until it assumed an epidemic form in Italy, and that it is an affection so easily cured without treatment. Notwithstanding that in his vast experience he never met with a case, and is persuaded that the grossest exaggeration has prevailed in the recent statements of its frequency, he does not deny its possible existence. But he does most emphatically deny that inoculated syphilis is in the infant a benign affection as compared with congenital syphilis, which, as all know, is so dangerous a disease. There may be in infants, as in adults, severe and mild syphilis, but, whether it be inoculated or not, it is always more difficult of cure in them, offering as they do less resistance. M. Ricord, however, cannot agree with M. Guérin that the diagnosis of the disease is very vague and uncertain, for in neither Medicine nor Surgery does he know any affection more easy of diagnosis in the immense majority of cases. He thinks that in some of the cases of vaccinal syphilis that have been published the diagnosis has been sufficiently exact to compel the admission of the possibility of its existence. In none of these cases, however, has he as yet ever been able to discover the original *vaccino-syphilifère*. It is a singular fact that in subjects of constitutional syphilis all kinds of operations may be performed without this influencing their results; and a vaccine pustule become chancrous has never yet been met with. Erroneous explanations of the occurrence of vaccinal syphilis have been founded on the supposition that the syphilitic blood has been inoculated with the virus. It would require a dexterous operator indeed to take the lymph unaccompanied by blood; for in the purest specimens the microscope always detects blood-globules. It is of importance that this should be borne in mind, for an operator might be ignorantly blamed for omitting precautions to prevent the presence of blood, which it may be impossible to avoid.

M. Latour, in the *Union Médicale*, after adverting to the isolated position in which this long debate has left M. Depaul, lays down the following propositions as the legitimate results that flow from it:—1. The degeneration of the Jennerian virus is far from being proved. 2. There does not exist a single authentic example of vaccinal syphilis, properly so called. 3. The excessively rare cases of syphilis inoculated by vaccination are explicable by conditions which completely exonerate the vaccine virus from all injurious mixture. 4. A large number of pretended examples of syphilis following vaccination justify the most serious doubts as to the accuracy of the diagnosis. 5. Animal vaccination, simply as another source of lymph, is deserving of encouragement, although it possesses no real or sensible advantage over vaccination from arm to arm.

At a recent meeting of the Académie des Sciences, M. Demarquay gave an account of a great number of experiments he had instituted with chloral, and which consisted in injecting from 20 centigrammes to 2 grammes of this substance into the cellular tissue of rabbits. In none of these did it prove fatal. All, at the end of fifteen or twenty minutes, fell into a state of complete resolution, as in the profoundest sleep, which continued from two to three hours. The muscular resolution in these animals was extreme, but they all roused up again, and at the end of two hours seemed to have nothing the matter with them. The same rabbit was employed for several of the experiments.

On the attentive examination of animals so soporised, the ocular and palpebral mucous membranes are found injected, and the vascularity of the ears is quite remarkable. As long as they are under the influence of the chloral their sensibility is excessive. The slightest pinch of the tail, ears, or lips, gives rise to irregular movements and induces plaintive and prolonged cries, while the same animals in their normal state pay no attention to the same amount of pinching. The beatings of the heart become so frequent that at last they cannot be counted; but during the whole period of the state of sopor the respiration continues exactly the same as in natural sleep. The breath gives out the peculiar odour of chloral, showing that this substance is only incompletely decomposed, if it is decomposed, in the blood.

If the rabbits are opened alive during the experiment, the abdominal vessels are found in a state of congestion, and the mesenteric vessels are turgescent. All the mucous membranes are injected, and especially that of the trachea. Taking a healthy rabbit as a means of comparison, this state of excessive vascularisation becomes very evident. The brain, cerebellum, and spinal cord, with their membranes, are greatly injected; but no difference can be recognised in the sympathetic on account of its small size. The muscles are also very vascular and even rutilant, and the arterial blood seems to have taken on a slightly violaceous tint.

M. Demarquay does not believe that chloral undergoes decomposition in the blood, but that it is eliminated by the respiratory organs without undergoing any important modification. He cannot admit the supposition entertained in Germany that, because chloral undergoes decomposition in presence of

alkalies, it also does so when in contact with the slightly alkaline blood, and that the small quantity of chloroform which results from such decomposition explains the anæsthetic phenomena observed. But, in fact, far from being an anæsthetic like chloroform, chloral is possessed of a most marked hyperæsthetic action. Moreover, while the action of chloroform persists only for some minutes, that of chloral continues for hours. Many physiological problems connected with it require solution, and its application as a curative agent has yet to be determined. Thus far we may state as facts that chloral is the most powerful of agents in producing muscular resolution, and that it is the most rapid of all hypnotics.

THE SUPPLY OF BODIES FOR DISSECTION.

A NUMBER of complaints have reached us with reference to the scanty supply of bodies to the dissecting-rooms, and we have considered it our duty to make inquiries, the result of which we now lay before our readers.

That the material which by law is available for dissection is amply sufficient for our students no one will doubt. All unclaimed bodies ought to be sent to the Inspector of Anatomy for the use of students during a period of six weeks before interment; but the masters of workhouses, who are the parties most concerned in the arrangement, prefer to bury the bodies at the parish expense lest they should incur the odium of so-called "friends" who may happen to turn up some time afterwards and profess themselves anxious to provide a "burial" at their own expense. It is evident that a vast number of friendless paupers die annually in our Hospitals and workhouses. The Anatomy Act passed in the year 1835, at a time when the public were considerably exasperated by the disclosures at the trial of Burke and Hare in Edinburgh, has been proved by experience to have been far more stringent than was absolutely necessary to secure the public against any repetition of that crime, and at the same time to keep up a proper supply of bodies for the dissecting rooms. We respectfully maintain, therefore, that some more liberal legislation is the only remedy for this growing dearth of bodies for dissection. We remember the time when all kinds of expedients were adopted for obtaining bodies. Hawkers of fish were sent round to the various villages, and whenever they heard of a death they would endeavour to make arrangements with the friends for the disposal of the body. Unfortunately, early one summer morning, a heavy box was being lifted out from under the fish to be booked for London; the box fell, and the lid came off: the body rolled out on to the ground. Immediately the report was spread of a person having been buried alive and jumping out of the box. The hawker was tried and heavily bailed by his employer (our informant), who barely escaped from the town with his life, having been attacked by an excited mob for supposed burking. The public are more enlightened now, and are fully aware that bodies must be supplied for students to dissect in order that they may obtain an accurate knowledge of the mechanism of the human frame, and are quite prepared for proper legislation. The result of our inquiries has been as follows:—

Mr. Bellamy, of the Charing-cross Hospital, says:—"45 students required parts last session. We had thirteen subjects; of these thirteen three were in for operations on the dead body."

At St. Bartholomew's Mr. Morrant Baker informs us that "about 170 men studied practical anatomy with dissections during the past winter session. The total number of bodies available for the 170 men to dissect was forty. Nine other bodies were obtained, but were used by the lecturers and by those studying operative surgery."

At Guy's Hospital "the number of first and second year's students of the past winter session amounted to 166;" but Mr. J. Cooper Forster informs us that "third and fourth year's men frequently dissect and so partake of part of the supply of bodies, which have been unusually small in number this past year, amounting only to sixty-two."

At St. Thomas's Hospital Mr. Rainey informs us that "only seven whole bodies were dissected and three imperfect bodies;" that "twenty-six names were entered for parts out of the sixty-four students, but that many more would have entered for parts if more bodies had been supplied." Mr. Rainey "would have taken at least five more bodies if he could have had them." Twelve gentlemen requiring "heads and necks" could not obtain them.

Mr. G. Legge Pearse, of the Westminster Hospital, informs us "that twenty-nine students entered for dissection, and that thirteen bodies were used."

Dr. Liveing, of the Middlesex, informs us that "twenty-three students have dissected regularly. Eleven subjects have been used."

Dr. Liveing and Mr. Pearse state that, in consequence of the smallness of their schools and the large number of patients in their Hospitals, the dissecting-rooms are generally supplied with as many subjects as they require, without, as a rule, troubling the masters of workhouses.

"Thirty-four pupils entered for practical anatomy at the London Hospital;" and Mr. Rivington informs us that "the supply of bodies for dissection during the session was twenty-three."

Mr. Norton, at St. Mary's Hospital, says that "there were forty-three men who should have dissected. We had in the dissecting-room altogether eleven subjects."

At King's College Hospital "thirty subjects were supplied for anatomical purposes," and Mr. Wood states that "the number dissecting amounted to about 120."

At St. George's Hospital we have been informed that seventeen bodies were had for dissection; but these did not meet the requirements of the students.

Leaving out of consideration the reports from the Middlesex and Westminster Hospitals, we may conclude that a larger supply of bodies is absolutely necessary in order to secure for the student a sufficient supply of parts, without which it is impossible for him to obtain a knowledge of the structure and relations of the component parts of the body.

From the replies we have received it would appear that three or four of the smaller schools are well supplied with bodies, principally from the wards of the adjoining Hospitals. A student ought to dissect at least four parts in the course of the session, but, taking an average of the past winter session, a student must have thought himself lucky if he obtained two parts for dissection.

Several have complained that bodies were sent at the close of the session when nobody cared to dissect, in order to make up as far as they could the numbers due to each school.

We commend to the notice of those specially interested in the subject the remarks made by "F.R.C.S. Eng." in our columns last month.

"There is no doubt," he says, "that an ample supply of unclaimed bodies might be had for dissection if it were not for the railways and the public. The former make such exorbitant charges for conveying corpses that they have virtually established a prohibitory tariff. In explanation they say they are obliged to adopt this course, as the public would not 'tolerate traffic in human flesh,' but how this was elicited does not appear."

Now that we have a complete system of railways and telegraphs all over the kingdom, there would be no difficulty in supplying our dissecting-rooms with subjects, but, as we said before, we believe the material is nearer at hand if properly looked after by the authorities.

SANITARY LEGISLATION IN GERMANY.—Two young men have died at Jena after eating raw pork. The meat had not been subjected to microscopical examination, and, this being an infrigement of the law, the proprietor of the animal was punished with two months', and the butcher with four months' imprisonment.

LETTERS FROM ST. MORITZ IN THE ENGADINE.

(By our Special Correspondent.)

I HAVE already mentioned in my first letter the great difficulty often experienced in obtaining decent accommodation at this place. I would again strongly urge upon those who intend coming here in the height of the season and who are in delicate health to remain at Coire or some other convenient resting-place until they have obtained a positive assurance that comfortable rooms are at their disposal. Let me mention a case in point. A few days ago I had occasion to call on a French lady of rank, in delicate health, travelling with her English companion, her maid, and a man-servant. I found them placed in a wretched little room, approached by a ladder, and over a hayloft, the servants being accommodated on the landing; and whatever food they needed had to be brought them from the nearest hotel. Now, this lady had engaged rooms some time before her arrival; but as she did not arrive on the precise day she had named, they were not kept for her. Of course, roughing it in this way may be useful to some persons; but nervous ladies in delicate health arriving at St. Moritz on an August evening, with a keen wind blowing along the valley, and something suspiciously like snow in the air (and such evenings do occasionally occur in the Upper Engadine even in August), are not likely to be benefited by even a temporary residence in something little better than a barn, with no possibility of a fire and little that is comforting in the way of food. Wishing to spare invalids this misery, I have ventured to repeat my warning on this head.

Now I will proceed to speak of the waters here.

First as to their composition. I find that some persons have the impression that the St. Moritz waters are strongly chalybeate. This is by no means the case. The amount of iron contained in these waters is comparatively small, as will easily be seen by comparing them with other well-known chalybeate springs.

	Carbonate of iron.
St. Moritz	0·25
Spa	0·37
Tunbridge	0·39
Pyrmont	0·42
Schwalbach	0·64
Orezza	0·80

It is here seen that even the Spa-water contains a larger proportion of iron than the strongest of the St. Moritz springs, while the Orezza water contains nearly four times as much. The waters of the last-named place are also abundantly impregnated with carbonic acid, and are likely to be largely used as they become better known. The spring itself being situated in the island of Corsica, the waters are chiefly drunk after exportation, and not taken largely at their source. In Paris they have long been in general use, but I am not aware that they are as yet much prescribed in London.

The following is the detailed official analysis of the water from the two sources drunk at St. Moritz. There is also a third source, but that has not yet come into use for drinking. One of these is termed the "Paracelsus," and the other the "alte Quelle."

IN 1000 GRAMMES.

	Alte Quelle. Grammes.	Paracelsus. Grammes.
Gaseous Constituents.		
Carbonic acid	2·5485	2·5220
Nitrogen	0·0047	—
Oxygen	0·0015	—
Solid Constituents.		
Carbonate of lime	1·0460	1·2832
„ magnesia	0·1911	0·2412
„ iron	0·0327	0·0454
„ manganese	0·0059	0·0059
„ soda	0·2694	0·2935
Chloride of sodium	0·0389	0·0404
Sulphate of soda	0·2723	0·3481
„ potash	0·0164	0·0205
Silica	0·0381	0·0495
Phosphoric acid	0·0004	0·0006
Alumina	0·0003	0·0004
Bromine, iodine, fluorine	traces	traces
Total of solid constituents	1·9113	2·3287

The water is strongly charged with carbonic acid, which makes it sparkling and pleasant to drink. It also has a distinctly chalybeate taste, and is of rather low temperature—3·5° R.

Practically, then, the St. Moritz water may be regarded as containing a small quantity of iron, about three grains of the carbonate in a gallon, and a considerable amount of carbonate of lime, about 80 grains in a gallon, held in solution by an abundance of carbonic acid.

I am satisfied, from my own personal observation, that the presence of this large amount of carbonate of lime, in the absence of any appreciable amount of aperient saline constituents, renders this water ill-suited to many cases where the use of a chalybeate is indicated.

In the official or semi-official publications, these waters are said to be efficacious in the following conditions:—

1. In chlorosis and anæmia, their causes and consequences.
2. In all nervous affections proceeding from weakness of the nervous or circulatory system.
3. All uterine affections which are not inflammatory or malignant.
4. In stomach affections and disordered digestion, especially those cases which are accompanied with "chronic catarrhs of the stomach or intestinal canal."
5. Weakness of the generative organs, without severe disease of the spinal cord.
6. Vesical catarrh, atonic gout, and atonic hæmorrhoids.
7. In convalescence after all severe diseases.

A tolerably comprehensive list of ailments!—while the few cases in which the use of the waters is said to be contra-indicated are, curiously enough, just those where the patients could scarcely leave home and travel to a distant watering-place. They are "cases of fever, of acute inflammation, of congestion, of most cases of disease of the heart!"

The routine of drinking and bathing, prescribed by the Physicians of this place, begins between 6 and 7 in the morning. The water is supplied from a pump which is worked by an attendant; this is placed in a convenient building, and is surrounded by rows of pigeonholes containing the glasses of the patients. To each pigeon-hole the name of the drinker is fixed. A fee of 12 francs has to be paid on inscribing one's name in the Kurliste.

Patients are ordered to begin with one or two glasses and increase to four or six glasses daily, and to walk for a quarter or half an hour after each glass.

Later in the day, generally after breakfast, the baths are taken. These are regarded as an essential part of the cure, and a course of twenty-five baths is said to be necessary in order to give them a fair chance. The baths are heated by jets of steam, and they are generally ordered to be taken at a temperature of 26° R. at the commencement, and gradually reduced to 23° or even lower. Twenty minutes to half an hour is the time for remaining in the bath.

The water supplied in the baths is derived from the weaker spring, the "alte Quelle," the "Paracelsus" or "neue Quelle" being the one more generally used for drinking. But, owing to the small supply of water compared with the number of bathers, the water of the spring is considerably diluted before it reaches the baths. The baths themselves are also constructed with the view of economising the supply of water as much as possible. They are simply long and narrow wooden boxes, just large enough to receive the body of the bathers. An unusually stout and tall man would find himself straitened for room in one. These boxes are covered in by a movable lid, which fits round the neck of the patient, so that one's head appears outside the box while all the rest of one's body is shut in. This, you will perceive, has somewhat the effect of a modified pillory, and could one be observed, while thus disporting oneself, by some of the small boys of the London streets, it seems not improbable that one might be made the subject of rude remarks.

The bathers are accommodated in small wooden compartments, separated from one another by wooden partitions, and arranged on each side of a long corridor. As the steam by which the baths are heated is allowed to escape freely into these corridors, they constantly become filled with a moist, hot, close, and unwholesome atmosphere, to remain in which for more than half an hour must be very injurious to most delicate persons, especially as they enter from and pass out into a thin dry air, often *very many* degrees lower in temperature than the air of the bath-rooms.

The effect of immersion in water charged with carbonic acid a few degrees below the temperature of the body, is not disagreeable. The heat of the surface of the body sets free the carbonic acid of the layer of water in immediate contact with

it. This accumulates on the surface in minute bubbles, so that the whole of the skin from head to foot, as well as every little hair, becomes covered with sparkling beads of gas. As the temperature of the layer of water in contact with the body rises (and, in order to favour this, one is particularly cautioned not to move in the bath, but to remain perfectly still), the bubbles of gas expand, and at last part from the skin, and escape at the surface of the water. As each little bubble of gas is set free from the skin it imparts to it a slight tingling effect, comparable only to the effect of an intensely feeble galvanic current; and doubtless its effect on the surface is of this nature. The result is that the skin becomes red and congested. If the bubbles of gas be swept off the skin, they do not reappear. The question is—Can these baths have an active curative influence? Or are they, as some suggest, ordered for the purpose of filling up the time of the patients, and also as a source of profit, since a franc and a half has to be paid for each bath? That they can do *harm* I have abundant evidence, as I shall presently show.

Some persons say that they find these baths have a peculiarly soothing effect, and there can be very little doubt that prolonged immersion in warm water, rendered somewhat astringent by the earthy matters it holds in solution, is likely to be soothing and comforting in cases of exalted sensibility and nervous irritation; and, indeed, the stimulating effect of the carbonic acid on the skin may not be without a beneficial influence.

Other persons state that the effect of the baths upon them is to produce a state of intense exhilaration and excitement. But then these are persons of highly excitable nervous temperament—persons susceptible to the influence of electro-biology, and upon whom a few mesmeric passes or a globule of homœopathic medicine will produce marvellous effects. The testimony of all such persons has to be received with great caution. To me the effect of the bath seemed scarcely appreciable. The feeling was agreeable, and one's skin became red, but the exhilarating effect certainly did not surpass, probably scarcely equalled, that of one's ordinary cold sponge bath at home.

But if the good these baths do is in many cases problematical, the harm they occasion in some instances is by no means doubtful.

The mere fatigue which the taking these baths occasions in some cases of great general debility and exhaustion (and many such cases are very unwisely sent here), and the lowering effect on a very weak circulation of remaining for so long a time as twenty or thirty minutes in a bath of any temperature, as well as the breathing, at the same time, the hot steaming atmosphere of the bath-rooms produce in many instances, as I have myself observed, a low feverish condition which it has taken some time to recover from. Especially is this the case in persons advanced in years, who come out of the bath exhausted, chilled, and uncomfortable, and then walk slowly, or perhaps are driven, through an unusually cold air; for it would not matter so much if the baths were taken only on warm fine days.

Then as to the routine of water-drinking. It may doubtless be very wholesome for persons who suffer only from imaginary illnesses, or for those who simply have to brush off the effects of the unwholesome excitement of the habitual life of our large cities, to be made to get up at 6 o'clock in the morning and drink three or four glasses of cold water before breakfast, with free exercise in the open air. But unfortunately cases of real illness are sent here, and the bath Doctors, with rare want of discrimination, prescribe pretty nearly the same *régime* for all alike. A very cold douche to the stomach, before any food has been taken, will, in many instances, and not unnaturally, interfere with the digestive process for the rest of the day, and give rise to distressing weight and flatulence, as well as troublesome headache, which is also a common consequence of this practice. The local Physicians in such cases recommend that the water should be warmed in order to dissipate some of the carbonic acid, the excess of which, they say, is the cause of the headache; but rather is it not the effect of the cold douche on the sympathetic plexuses in the region of the stomach that gives rise to the headache so commonly complained of by those who drink the waters before breakfast?

It has appeared to me that I have been able to make out one point very clearly by observing the cases that have come under my notice here on the spot: it is that persons with feeble and impaired digestive powers and with feeble circulation cannot drink a quantity of cold fluid before breakfast, or remain for a *prolonged* period in baths of any kind, without experiencing considerable augmentation of the distressing symptoms from which they suffer.

I have seen patients most heroically persevere in the *régime* which they have been directed to follow, notwithstanding the irresistible conviction that they were losing instead of gaining ground. At length they have become really ill, and then with what joy have I seen them receive the command to leave off bathing and drinking, especially the early morning draught! The very immediate improvement in health which I have observed to follow, in very many cases, the giving up the bathing and drinking, leaves no manner of doubt in my own mind that the chief health influence in this place is the very pure, clear, bracing air, coupled with the amount of bodily exertion that can be taken in the open air without that fatigue which would necessarily follow in a warmer, moister, and more relaxing climate.

I do not wish to be understood to say that the bathing and the drinking the waters may not be of great value in many cases: all I wish to insist upon is that many, very many persons are sent here who would do much better without any of the water and without any of the baths. So far as my own observations have extended, the best time for drinking the water is about 11 a.m., and again between 4 and 5 p.m. A moderate draught of the cold sparkling water is, at these hours, often agreeable and refreshing.

The cases that appear to derive most marked improvement from the waters and air of St. Moritz are that very numerous class of lax-fibred, leuco-phlegmatic, hysterical women, who commonly suffer from chronic mucous discharges, or passive hæmorrhages, or functional uterine disease. The improvement which is observed in some of these cases is rapid and remarkable. Cases of nervous irritability and nervous depression in both sexes, arising from over-work or over-excitement, or from merely constitutional tendency, often derive very considerable benefit from following the course prescribed for them here.

Those distressing nervous conditions which so commonly accompany the climacteric period of middle age are often very remarkably benefited by a short residence at St. Moritz. The cases which do not do well here are those of the sanguine and bilious temperament. The very dry and stimulating air and the astringency of the waters are not favourable to such persons. In cases of hepatic disorder, the waters of St. Moritz generally do harm, since they tend to arrest rather than promote secretion.

Cases in which there is a tendency to pulmonary emphysema are not adapted to this great altitude. The air seems too thin, as it were, to satisfy their respiratory requirements, and they are consequently unable to make as much physical exertion here as they could in a less rarefied atmosphere.

For the same reason, persons advanced in years very commonly become worse here, and immediately mend when they begin to descend into the lower valleys. Of this fact I have seen several examples.

Some further remarks on the climate of the Upper Engadine, and on some cases of chest disease which have passed the winter here, I must reserve for my next and last letter.

THE ROYAL COMMISSION ON WATER SUPPLY.

The minutes of evidence taken before the Royal Commission on Water Supply are now published, and contain the statements of engineers, Medical men, chemists, and of one professor of logic, Mr. Alexander Bain, all of whom have been examined by the Commissioners. There still remain to be published the appendix, plates, and index. The present volume is a thick bluebook of 488 pages.

In Dr. Letheby's evidence we notice the statements that the organic impurities are not large in London waters, and that the present supply of water to the London people is a "thoroughly wholesome water." Dr. Letheby expresses a decided preference for hard water over soft water for domestic use. On the question of sewage contamination, he maintains that average sewage is so completely lost after being mixed with twenty times its volume of water and allowed to flow a dozen miles as to be undiscoverable by any chemical process.

Mr. Wanklyn considered that the urea present in sewage was rapidly enough decomposed on dilution and exposure, but that there were other organic substances in sewage which did not decompose so readily. Mr. Wanklyn's evidence related chiefly to the use of the ammonia process of water analysis, which was published to the Chemical Society on the day that he gave his evidence before the Commissioners. Further evidence of Mr.

Wanklyn's, which is quoted in the report and will appear in the appendix, shows that the New River water and the water of some of the Thames companies are of excellent quality, and quite as pure as the water of Manchester, Edinburgh, and Glasgow. Mr. Wanklyn, however, found the water of the Southwark and Vauxhall Company to be of very bad quality. This is attributable to defective filtration.

Dr. Frankland, who was examined at great length, said that "water which has once been contaminated by sewage or manure matter is thenceforth unsuitable for domestic use." The London water, all of which has undergone this pollution, he therefore regarded as unfit for use. By no means practicable on the large scale can, in Dr. Frankland's opinion, this contamination be removed. The evidence of sewage contamination of the London water is partly statistical—viz., that a certain number of people actually do put their refuse into the river—and partly chemical—viz., that a certain quantity of nitric acid is found in the water on chemical analysis. The nitrogen of this nitric acid, after a certain correction has been made, Dr. Frankland calls the skeleton of the sewage; but this expression is of course a mere figure of speech. The nitric acid (or nitrates) Dr. Frankland regards as in itself innocuous. The nitrogenous organic matter is the dangerous substance, and the nitrates only acquire importance as being indicative of the possible presence of nitrogenous organic matter which, through the imperfections of chemical analysis, fails to be directly detected.

On making a comparison of the quantities of organic nitrogen actually found by Dr. Frankland in the Welsh and Cumberland waters on the one hand, and in the London water on the other hand, there was, as Dr. Frankland admitted, a slight superiority in favour of the London water. Dr. Frankland, however, has a theory that the presence of more organic carbon in the lake waters than in the London water is a fact in favour of the former, as indicating that the nitrogen is of vegetable rather than of animal origin, and, on the strength of this theory, notwithstanding the smallness of organic nitrogen in London water, would be disposed to prefer the lake water.

Sir B. Brodie and Dr. W. A. Miller gave important evidence in reference to the methods of water-analysis in use by different chemists.

Altogether this bluebook will well repay the trouble of examining it.

REVIEWS.

Lectures on Orthopædic Surgery. Delivered at the Brooklyn Medical and Surgical Institute. By Louis Bauer, M.D., M.R.C.S. Eng., Professor of Anatomy and Clinical Surgery, etc. New York: William Wood and Co. 1868. Pp. 334.

Although orthopædic practice is represented in this country by many very able teachers and active authors, a general and comprehensive treatise on the principles of this department of Surgery has for some time past been much required. Our knowledge of this, as of other branches of the healing art, has of late been rapidly progressive, but the valuable additions of modern Surgeons have remained, for the most part, isolated in special monographs, and scattered over continental archives and theses. That Dr. Bauer has made the best use of very good opportunities, we cannot allow; he has, however, supplied us with a work which will not fail to afford useful knowledge concerning the treatment of distortion and deformity. Though given originally in the form of lectures, his remarks are too controversial to be thoroughly instructive, and, in discussing certain points of pathology and treatment, the author appears more inclined to dwell at length upon peculiar views of his own than to notice fully the generally accepted opinions and practice of other authorities. For these reasons Dr. Bauer's work seems to us to be better adapted for Practitioners than students, and for impartial and critical readers than for those who are likely to become hasty partisans.

Dr. Bauer is a determined opponent of the theory of the constitutional origin of certain diseases which come under the notice of orthopædic Surgeons, especially antero-posterior curvature of the spine from caries and affections of joints. The chapter on cyphosis, or Pott's disease, is an extremely interesting one, and in it the author contends, with much argumentative force, against the view that this serious affection is due to strumous deposit or to any idiopathic lesion of the vertebral structures. From the facts that vertebral caries and curvature are generally met with in infancy, the time of heedless wranglings, that they occur with greater frequency in boys than in girls, that they are met with in equal proportion among the healthy and the poor, and also from the results of post-mortem investigations, Dr. Bauer has been led to conclude that the original cause of the vertebral disease is not a dyscrasia, strumous or otherwise, but a comminution or fracture of one or more vertebræ from injury. The nature of the primary lesion is, according to the author, generally overlooked, and hence he advocates very strongly prolonged rest in all cases of slight injury from falls or blows upon the back.

In the chapters devoted to joint diseases similar views are advocated. "We rarely fail to trace the attack to traumatic antecedents." Dr. Bauer states, and he endeavours to show, that "the strumous theory in its practical application to articular disease is worthless, and rather injurious than otherwise."

However much Surgeons in this country may differ from Dr. Bauer as to the universal application of these views, there can be no doubt that all who take an active interest in orthopædic practice will find in these chapters much clinical and general instruction on the subject of osseous and articular affections, and many valuable suggestions for future consideration.

With regard to the remaining sections on talipes, rickets, palsy, etc., we can only say that every part bears witness that Dr. Bauer has not treated his readers with compiled matter only, or the mere enumeration of well-known facts, but has brought to bear upon his subject the conclusions and results of an extensive experience in the treatment of bodily deformities.

De la Résection de l'Articulation Coxo-Fémorale pour Carie. Par Dr. R. R. Good. Paris: Adrien Delahaye. 1869. Pp. 118.

A marked characteristic of the Surgery of the present day is the restricted use of the knife in disease of osseous and articulate structures, and in the substitution of those partial operations styled excisions or resections, for an indiscriminate removal of useful limbs. With regard to joints of the upper extremity there can be no doubt of their great utility, and of the inestimable and permanent results that have attended these proceedings. Resection of the shoulder and elbow can never, it will be generally allowed, lose that prominent place which they now occupy in the rank of operative measures. Future opinions as to the importance of resections of the hip and knee, on the other hand, are still matters for doubt, since the utility and gravity of these operations are still very questionable. The enthusiasm and energy of the young school of conservative Surgery, the influence of which rapidly extended to Germany and across the Atlantic, has produced some very brilliant results, but its advocacy of resection as applied to the knee and hip has of late years been met by a steady and persistent criticism in certain quarters which renders the ultimate general acceptance of these operations a matter for doubt. The results of resection of the two important joints of the lower extremity, compared with the results of amputation on the one hand, and with the results of the so-called "expectant" treatment on the other, form one of the most important Surgical questions of the day. They are still to be decided, not so much by the isolated records of individual experience, or by the dogmatic assertions of some prominent teacher, as by results and conclusions derived from the study of a multitude of cases well arranged, *complete* and *accurately reported*, and collected without regard to conditions of age, time, or country.

Dr. Good's work gives full information concerning the results of resection of the hip-joint, and, from the manner in which these are arranged and placed before the reader, forms a valuable contribution to the literature of conservative surgery. The author, lately a Surgeon in the American Confederate Army and now practising in Paris, seems to have been much struck by the fact that resection of the hip-joint, though performed frequently and with success in England, America, and Germany, has been almost universally relinquished by French Surgeons, and that no attempt has been made for some years past to repeat the operation. This neglect, he thinks, is unjust, and he endeavours to prove in the present work the utility of this proceeding, which, under certain favourable conditions, promises the most satisfactory results. "The result of our statistics," Dr. Good states, "ought not to discourage those who, like ourselves, believe in the utility of the operation, and the teaching of our recorded cases will give proofs that though resection of the hip, applied blindly and to all cases without distinction, gives deplorable results, success may be assured under certain well-defined conditions, and that a series of cases can be cited in which the number of recoveries almost equalled that of the operations." These conclusions are based upon the statistics of 112 cases of resection of the hip published in the Medical journals of several countries since the year

1860. The operations performed previous to this date have not been noticed, as these were collected and discussed in an elaborate memoir by M. Léon le Fort, published in the following year.(a) Dr. Good has not confined himself to the labour of simply collecting and condensing the published records of operations on the hip-joint, but has also taken great pains to verify the cases and to gain information of the ultimate or most recent condition of the patients reported as cured. Cases in which the patients were still under treatment, and incomplete recoveries with persistence of sinuses, are not included in the statistical tables. The results of these tables, thus carefully and rigorously formed, are very interesting, and show clearly the influence of age, country, and the severity and extent of the disease upon the issue of the operation. Of the 112 cases, 52 recovered, and 60 ended in death. The lowest rate of mortality is supplied by the records of English practice, where it is 34·37 per cent.; in France, where it is highest, it amounts to 85·71 per cent. Dr. Good accounts for the greater mortality in his collected cases, when compared with that indicated by the tables of Le Fort, Heyfelder, and other inquirers, by the fact that the extremely unsuccessful attempts of French Surgeons were never noticed in previous statistical reports. The very high mortality attending these cases of resection of the hip-joint—eleven deaths in thirteen cases—is explained in the following manner:—"We are inclined to think that these operations were performed *in extremis*, as a last resource, on subjects prostrated by disease already far advanced, and at a period when the constitution, in consequence of general exhaustion, could neither support nor repair the inseparable damage of such a proceeding." Sex, according to Dr. Good's tables, seems to have but very slight influence on the result of the operation. From 2 to 12 years of age the rate of mortality is 40·67 per cent.; from 12 to 20 years it is 60 per cent., and above the last age still higher. The cause of death in more than one-third of the cases is described as general exhaustion, and in five instances only as pyæmia. The chapter which is devoted to a discussion of the statistical tables collected by the author contains much valuable information on many points connected with the operation, and an attentive perusal of this section of the work will, we imagine, lead most readers to agree with Dr. Good in his opinion thus concisely expressed in a concluding paragraph:—

"Suppurative coxalgia is a serious disease, which in most cases terminates in death. Resection does not furnish very favourable results, but the operation saves life 46 times out of 100, and, moreover, preserves for the patient a much more useful limb than could be obtained by any other plan of treatment."

The remaining chapters of this work describe the indications and contra-indications of resection of the hip-joint, the operation itself and the after-treatment, and, finally, the ultimate condition of the patients after recovery. Full reports of previously unreported cases in which the operation was performed by Mr. Barwell, Mr. Gant, and other Surgeons, are given in an appendix.

We recommend this work most heartily to the notice of English readers. It is the production of an accomplished Surgeon who has treated the results of much honest and arduous labour in a manner singularly calm and free from bias, and with an unfailing regard to the great importance of his subject.

De l'Uréthrotomie Externe dans les Rétrécissements Uréthraux graves ou compliqués. Par le Dr. Eug. Boeckel, Professeur-Agrégé à la Faculté de Médecine de Strasbourg. Strasbourg: G. Silbermann. 1868. Pp. 56.

This *brochure* is an addition to the great mass of literature on the disputed question of external urethrotomy in the treatment of urethral stricture. Dr. Boeckel advocates the operation very strongly, and believes that it is indicated by the following conditions:—Impermeable stricture, with or without retention of urine; permeable stricture, complicated with fistulæ or foreign bodies in the bladder; traumatic lacerations of the urethral canal, with retention of urine. Ten cases are reported in which stricture of the urethra was divided from without; in three instances upon a sound, in the remaining seven without any conductor. Two cases ended fatally. This work, like the very many small contributions of its class, published abroad, contains much clinical information, proves great industry and zeal on the part of the author, and is characterised by an almost complete disregard of all that has been proposed and practised by Surgeons of other countries, particularly those on this side of the Channel.

(a) *Bulletin de l'Académie de Médecine*, 1861.

PROVINCIAL CORRESPONDENCE.

SCOTLAND.

(*From a Contributor.*)

Glasgow.

In the course of my holiday wanderings I have been to Glasgow, and I have seen there certain things, both Medical and non-Medical, with which I think it might be worth while to trouble you. The first thing that strikes a stranger familiar with our large English towns on arriving in Glasgow is the composite character of the city which he enters for the first time. One part of it resembles Manchester, another Birmingham, a third Liverpool, with a strong *soupçon* of water-side London. The second thing which cannot fail to strike an Englishman is the enormous number of whisky shops. Fancy every third or fourth door in Oxford-street a dram-shop, and you have something like a conception of the principal street in Glasgow. Should you, in search of a glass of beer (which, by the way, you will have some difficulty in finding), enter one of these establishments, you will see before you a long row of close boxes, into one of which you will be stealthily introduced, and the door carefully closed lest any one should see you. When you have time to look round, you will probably find the place lit up with gas, fearfully close, and with a concentrated odour of stale spirits altogether overpowering. London is commonly supposed to teem with gin palaces and suchlike places, but it is nothing to Glasgow, to which, indeed, water-side Liverpool, bad as that may be, must yield the palm. In the above facts you have the key to the drinking system of Scotland. Secresy and stealth are necessary to preserve a fair name in the eyes of the kirk-going public, and the consequent restraints which publicity imposes are entirely withdrawn. You would be horrified to see the enormous casks of whisky—no sham ones either—which cumber the floors of some of the Glasgow dealers. In no instance was I more struck with this system of secresy than in a tolerably large country town I had occasion to visit. I asked a gentleman, with whom I had transacted some little business in which he had shown himself obliging, to visit me at my hotel to take a glass of beer. Ruefully he assured me that such a step would be ruinous to his business, but expressed himself as ready to meet me in that way in his own home. We went upstairs, and a bottle of very good beer was produced, but, before opening it, all the window-blinds were carefully drawn down lest any one passing might be witness to the horrible deed of consuming a glass of bitter beer. Instances of this surface morality, and ten times their number of real depravity, might be multiplied indefinitely.

The principal feature of Glasgow is the river, and the extensive commerce carried on by its means. A sail down the Clyde, one of the most beautiful water-trips in the world, supplies food for meditation in more ways than one. Everywhere you see enterprise; the great number of powerful dredgers at work deepening and improving the channel, the divers constantly at work in the same way, and the well-built river walls show how keenly alive the inhabitants of Glasgow are to one great source of their prosperity. But, to a Londoner, there are other things worthy of attention. One of these is the frequency with which steam-ferries are encountered; and one cannot help wondering why something of the same kind is not to be found on the Thames, where they would certainly pay as well as, if not better than, on the Clyde. But, in another respect, a sail down the Clyde is instructive as compared with one down the Thames. On the Clyde you pass hundreds of ships in the process of construction, on the Thames you don't see one; on the Clyde furnaces are roaring and hammers sounding, and, on the Thames, all is still. Perhaps the following anecdote may help to explain the difference. Not long ago a poor man called on a Poplar *confrère* and asked for some assistance—he was starving. "Why," said our brother, "do you not go to ——'s yard? They want shipwrights there, and would be glad to take you on." "Yes," said the pauper, "but they only give five shillings a day, and I dare not, on account of the trades union, work for less than seven and sixpence." On the Clyde the average rate of wages just now for engineers is not much more than a guinea a week; it may be rather higher for shipwrights, but the difference between Glasgow rates and London rates is too considerable to ever again permit London, at a distance from both coal and iron, to compete with Glasgow, which is close to both, when labour is so much cheaper in the latter than in the former. This capacity for working at cheaper rates, which is common to both the Scotch and

foreign artisan, depends, in a great measure, on the different dietary which is in use in Scotland and in England. In England the artisan must have meat; in Scotland, especially if a married man, he will be content with soup—and Scotch soup or "kail" is very different from the strong decoction of meat which goes by that name in England. The soup, for the most part, is a vegetable soup, in which a portion of meat has been boiled—the meat being not unfrequently reserved for the next day's meal: in short, the Scotchman is more economical, and can live at a cheaper rate than the Englishman can. This is apparent in other respects; over and over again in the streets of Glasgow I have met people without shoes and stockings—not people who could not afford to get them, for the other portions of their dress showed plainly enough that they were well off, but they prefer to go without either. The want of shoes is not that sign of abject poverty it is in England. A walk through the workmen's quarters always reveals curious facts as to their modes of living, and some of them we might detail, but I have sent gossip enough for once.

There is a sharp contest going on here for the chair of Surgery, vacant by the transfer of Professor Lister to Edinburgh. Dr. Macleod, the brother of the well-known clergyman, and himself well known for his Medical writings, would seem to be the popular candidate, and, in especial, to be warmly supported by the students.

As to carbolic acid and other things, more anon.

GENERAL CORRESPONDENCE.

CONTAMINATION OF WATER IN HOUSE CISTERNS, WITH ANALYSIS BY PROFESSOR WANKLYN.

Letter from Dr. Druitt.

[To the Editor of the Medical Times and Gazette.]

Sir,—I beg to send you the following striking example of contamination of water from the effluvia of waterclosets and urinals.

Any one who has anything to do with schools is aware how difficult it is to provide the necessary watercloset accommodation, and to preserve the building from effluvia, especially in the limited spaces appropriated to schools in towns. I happen to be interested in the management of the Curzon National Schools in this neighbourhood, where difficulties of the kind crop up from time to time. Moreover, it is necessary in every school to provide water for the children. They are always thirsty in hot weather, and will drink almost any foul water if there is none of a wholesome sort provided for them.

In the Curzon Schools the whole water supply is contained in an immense iron tank situated under the roof of a large apartment arranged as waterclosets and urinals for 100 boys, and usually presenting a most abominable odour. The water in this tank is largely drunk by the children in each of the three divisions of the school.

In order to see whether water so exposed showed any traces of contamination, I requested Professor Wanklyn to examine it. I give the results in his own words:—

"The results obtained by examination of the water got from the cistern in the school behind your house are as follows:—The water was collected at 9 p.m. on July 6, 1869, and examined the next day. *One million parts* of the water contained

0·37 parts of free ammonia,
0·17 parts of albuminoid ammonia;

whereas the numbers shown by the water supplied by the Grand Junction Company to the school are—

0·01 free NH_3,
0·08 albuminoid NH_3.

The difference is very striking, and illustrates well the effect of exposure to the effluvia of a watercloset and urinal."

Now, it must be remembered that this cistern is but one of ten thousand all over London exposed to like defilement, and probably the source of summer diarrhœa amongst children. I would venture to urge—

1st. That no cistern containing drinking water ought ever to be exposed to effluvia of closets, sinks, etc.; hence, that the drinking cistern in every house should be kept separate from the watercloset cistern, till a continuous supply abolishes cisterns altogether.

2nd. Iron rust is no protection. The interior of the above cistern was rusty enough to oxidise anything.

3rd. All schools should provide pure filtered water, or other wholesome drink—sulphuric lemonade, for instance—for the scholars.

I am, &c. R. Druitt.

37, Hertford-street, London, W., Sept. 13.

ERYSIPELAS AFTER VACCINATION.

Letter from Dr. G. E. Yarrow.

[To the Editor of the Medical Times and Gazette.]

Sir,—In confirmation of the opinion expressed by Dr. Ballard, I beg to forward you the particulars of a case of death from erysipelas after vaccination which occurred under my observation.

A healthy-looking female child, three months old, was vaccinated by me, November 17, 1868, by four punctures on the left arm; it was brought for inspection on the eighth day, and had four small but characteristic vesicles. I heard no more of the case until the evening of December 23, when the mother called upon me and asked me to see the child, as it was very ill. I visited it immediately, and found it sinking from exhaustion. Erysipelas had involved the whole of the left arm, the chest, and had extended into both legs. I administered small quantities of ammonia and bark, but the child died December 25, the thirty-eighth day after vaccination.

The mother informed me the scabs fell off about the twenty-first day, and nothing untoward happened until about the twenty-eighth day, when the arm became slightly inflamed; finding it got worse, she called to see me, but I was not at home. She then took it to a Practitioner in the neighbourhood, who told her it was due to "bad matter," and "he would give her some medicine to make the child sick." This he did. He continued to see it for several days, telling the mother to continue the emetic, "but he feared he should not be able to do the infant any good." I was then requested to see it.

Seven other children were vaccinated from the same vaccinifer with the same lancet, but no unusual symptom occurred in either case.

I am, &c. G. E. Yarrow, M.D.,
Public Vaccinator to St. Luke's, Middlesex.

87, Old-street, E.C., September 8.

MR. LISTON'S CASE OF ABSCESS IN THE NECK.

Letter from Dr. John Topham, of Rome.

[To the Editor of the Medical Times and Gazette.]

Sir,—In the short notice of the late Mr. Liston contained in your journal, there is a slight error in the account of the case of the abscess in the neck communicating with an artery which was hastily opened by that great operator.

The House-Surgeon of University College Hospital at that time was Mr. J. C. Bucknill, now well known for his admirable treatment of the insane and for his manual. I was one of his dressers, and the boy was examined by Dr. Ballard and myself in the out-patients' room previous to Mr. Liston's visit to the Hospital. We recognised the nature of the disease—*i.e.*, that it was a pulsating tumour communicating with an artery.

Directly after seeing the boy and sending him into the ward, I had to go to Mr. Coxeter's to procure some instrument, and just as I entered the ward on my return, I heard Mr. Liston say "Give me a knife," and in a moment he had opened the tumour, the incision being followed by a gush of arterial blood. Harelip pins were used to close the wound. I sat up with the boy all night. He died from secondary hæmorrhage. A careful dissection of the diseased structures was made by Mr. John Marshall, now Professor of Surgery in University College; and it was found that the coats of the artery had been perforated by an abscess, the arterial structures being distinct to the very margin of the aperture. The paper by Mr. Liston was read at the Medical and Chirurgical Society soon after the occurrence, and was published in the *Transactions* with an admirable woodcut illustrating the case.

I am, &c. John Topham, M.D. Lond.

Rome, Italy.

THE NON-RESTRAINT SYSTEM.

Letter from Dr. P. R. Nesbitt.

[To the Editor of the Medical Times and Gazette.]

Sir,—I had the pleasure of forwarding to my friend Dr. Gardiner Hill the enclosed letter relating to the controversy on the introduction of non-restraint in lunacy. The letter was not written originally for publication; but as I find that the expression of an opinion from an independent observer would be of interest, and a fitting tribute to one whom I much esteem, I forward it to you for publication.

I am, &c. P. R. Nesbitt, M.D.

West Brompton, September 13.

"West Brompton, September 4, 1869.

"Dear Dr. Hill,—There are occasions when a man ought to emerge from his retirement if by doing so he can render an act of justice to another. That occasion appears to me to have arrived, after a perusal of the Medical controversy now going on as to the party entitled to be awarded the honour and glory of having demonstrated the practicability of dispensing with mechanical restraint in the treatment of the insane.

"Of my competency to form an opinion on this highly interesting topic, bear with me when I say that it is about twenty-five years since I was one of the resident Medical officers at the Hanwell Asylum; Dr. Conolly was then at the zenith of his fame, though ceasing to reside at the institution, of which he was visiting Physician. Twice a week did he thoroughly devote himself to the work in which his great heart was engaged, and in which he knew no faltering. Thus, though a subordinate officer, I had ample opportunities of making myself familiar with the inner mind of my great master, and of seconding all his generous aspirations, *haud passibus æquis*, to achieve the emancipation of those unfortunates from a degraded and mistaken thraldom. By such circumstances as these I formed an intimate and enduring friendship with him whose character has been so ably and truthfully portrayed by Sir J. Clark. That intimacy naturally brought the then great question of the day prominently to the front. In all our many discussions, Dr. Conolly, with the innate modesty of his nature and love of truth, never pretended to claim the merit of a discoverer. He always manfully asserted that in his application of the principles of non-restraint he was simply following in the footsteps of others, and in all his conversation assigned to you the chief conception, and, though the name of Dr. Charlesworth, with others, was frequently associated with yours, yet he always conveyed and impressed me with the conviction that it was to you, and you only, that humanity was indebted for this last great finishing stroke. Indeed, so thoroughly was I imbued with his sentiments on the subject that I was induced, without the slightest personal acquaintance with you, to become a subscriber, now some twenty years ago, to a testimonial to yourself, by way of recognising your substantial deserts to that palm which I grieve to perceive is now sought to be wrested from you.

"The world may say what it will in endeavouring to withhold from you its meed of approbation, but I emphatically contend that such a vast system as non-restraint could never have been inaugurated in all its amplitude nor brought to a happy issue but for the courageous, indomitable, and untiring efforts of the Resident Medical Officer whose days and nights were consecrated to the noble service. Others, doubtless, supported you, but you were the mainspring of the movement, and disaster would have fallen on your shoulders. I should take shame to myself if I could calmly look on without an indignant protest against the idea of seeking to deprive you of your well-earned laurels, which, as long as life lasts, I shall think you entitled to wear. It is in this spirit I write my reminiscences, and with the further desire, to adopt vulgar phraseology, to "put the saddle on the right horse," that I venture to take a part in what I thought had ceased to be a Medical controversy.

"Believe me, yours very sincerely,

"Dr. Gardiner Hill." "P. R. Nesbitt.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, June 22, 1869.

George Burrows, M.D., F.R.S., President, in the chair.

Mr. John Hilton read a paper on

A CASE OF DOUBLE ANEURISM AFFECTING THE RIGHT EXTERNAL ILIAC AND FEMORAL AND THE RIGHT POPLITEAL ARTERIES, CURED BY PRESSURE UPON THE COMMON ILIAC AND THE FEMORAL ARTERIES.

The case was that of a man, aged 45, admitted into Guy's Hospital, October 15, 1868, with two aneurismal tumours, one occupying the right groin, the other the popliteal space of the right lower limb. The upper aneurism extended two inches above Poupart's ligament. No bruit could be heard in either aneurism, and they were considered to be aneurisms by dilatation. The ilio-femoral aneurism had been first observed two years, the popliteal nine months before his admission. On December 10, an attempt was made to effect a cure by compression of the right common iliac artery. Mr. Hilton had shown that pressure on the abdominal wall, at a point about two inches below the umbilicus, and half an inch from the median line, controlled the pulsation in the two tumours and in the right lower limb, without affecting the circulation in the left femoral artery. The exact spot had been marked with nitrate of silver. On the day named, therefore, a tourniquet was placed on this spot, the patient having been first brought under the influence of chloroform, for without it he could not bear complete compression of the artery even for a minute. The compression was continued for six hours; but when it was withdrawn the tumours pulsated as freely as before, although they appeared to be slightly harder. On December 22 the patient was again placed under chloroform, and the tourniquet was then applied to the same spot as before. Another tourniquet was at the same time placed upon the femoral artery at the apex of Scarpa's triangle. Mr. Hilton gave directions that the pressure should be continued until the aneurisms should no longer pulsate after removal of the tourniquets. The treatment was commenced at 10.30. At 4.40 both instruments were removed. There was not the slightest pulsation in the popliteal aneurism, but the upper tumour, although it felt hard, still pulsated feebly. The tourniquets were therefore reapplied; at 8 p.m. they were again withdrawn; there was then no pulsation in either aneurism. The patient was therefore allowed to come to himself from the chloroform; and the use of the tourniquets was no longer persisted in. On the following day the limb was cold, and sensation in it was imperfect; but these symptoms quickly subsided under appropriate treatment. On March 16 he left the Hospital cured, but still unable to support the weight of the body upon the limb. The remains of the ilio-femoral aneurism could be felt as an undefined fibrous band, about three-quarters of an inch broad; and a similar band, but broader and better defined, marked the seat of the popliteal aneurism also.

Mr. John Birkett read a paper on

A CASE OF ANEURISM OF THE FEMORAL ARTERY TREATED BY LONG-CONTINUED COMPRESSION OF THE COMMON ILIAC.

The man was 41 years old. His constitutional powers had been reduced by intemperance and toil. An aneurismal tumour had been observed eighteen days in the left groin when admitted into Guy's Hospital, although the attention of the patient had been attracted to the part affected by pain and a sudden "snap" twenty-four days previously. The diagnosis of the nature of the tumour was extremely easy. Every characteristic of an aneurism was present. The swelling occupied the upper fourth of the left femoral region; extended into the iliac fossa, beneath Poupart's ligament; was partly solid, and in other parts filled with fluid. The impaired state of the man's health precluding all hope of a successful termination to the disease, if any kind of cutting operation was performed, induced me to employ prolonged pressure upon the common iliac artery. To do this effectually it was necessary to keep the patient under the influence of chloroform for several hours. After suitable local and constitutional treatment, the chloroform was inhaled, pressure applied, and the influence of both kept up for about eight hours and a half. Little if any alteration, however, had been produced on the tumour. The chloroform caused no ill effects. Seven days having elapsed, the above treatment was repeated for nine hours, but no progress towards curing the aneurism resulted. For a day or two afterwards there was more pain produced by the tumour. On the tenth day subsequent to the last attempt at cure, the above treatment was repeated and maintained for about ten hours. At the expiration of that time the aneurismal tumour beat as strongly as ever. The day following, symptoms of pulmonary complications arose, which could not be controlled or removed by any treatment, and he died, having survived the last inhalation of chloroform about nine days. The necropsy showed that pleuro-pneumonia was the immediate cause of death. The upper lobe of the left lung was infiltrated with pus, and other parts of the organ were in a less advanced stage of inflammation. Endarteritis affected the aorta. The kidneys were coarse and large. The aneurismal tumour extended into the iliac fossa above, where it was very firmly united to the surrounding parts, and deeply among the upper femoral muscles in front of the femur. It contained some old and recently formed fibrine, as well as recent after-death coagula. The concluding remarks relate to the duration of the disease, the selection of the method of treating it, the causes of failure to cure it and of the fatal illness.

In reply to Mr. Thomas Smith, Mr. Birkett said the man had very little chance of living when he came into Hospital. His constitution was utterly ruined, and there was no chance of any other operation. He was jaundiced at his entrance, and there were also signs of pyæmia. There was no necessity to invoke the aid of chloroform as a fatal cause; the state of his health was quite enough.

Mr. Robert Brudenell Carter read a paper on

ORTHOSCOPIC SPECTACLES.

The paper is merely introductory to the exhibition of orthoscopic spectacles as contrived by Dr. Scheffler, of Brunswick, and explains the principles of their action. They consist of a combination of lenses and prisms, and their effect is to preserve the natural harmony between the accommodation and the convergence—a harmony that common spectacles disturb. By preserving this harmony they remove the feeling of "strain" that is so commonly felt when spectacles are first worn in commencing presbyopia, or when they are used continuously.

Mr. Jonathan Hutchinson read a paper on

SOME POINTS IN REFERENCE TO TRANSVERSE FRACTURES OF THE PATELLA.

The author commenced by stating that although his conclusions were expressed in a somewhat positive form and without the citation of cases, yet they were not the less based on the careful collation of a large body of clinical evidence. The chief statements were the following:—1. That after the ordinary transverse fractures of the patella, the upper fragment is not permanently dragged upon by the quadriceps; that, on the contrary, the muscle remains quite passive, and that there is not the slightest benefit from elevation of the limb. 2. That the main cause of separation between the fragments is swelling of the soft parts and effusion into the joint, and that when swelling does not occur, or after it has subsided, it is easy to make the fragments touch. 3. That one of the chief causes of the frequent weakness of the fibrous union which results is the presence of fluid (synovia) between the fragments, and that it is not usually difficult, by ordinary means, to bring the fragments quite close enough to admit of union, were it not that the presence of fluid hinders its occurrence. 4. That a remarkable weakening of the quadriceps muscle is a common result of these accidents, sometimes amounting to absolute atrophy. That this partial or complete paralysis cannot be explained merely by reference to long rest of the limb, since the flexors do not share it. That it occurs in some cases in which the union is excellent. 5. That in almost all cases the quadriceps becomes slightly but permanently shortened by contraction, so that, however excellent the union may be, the knee cannot be bent without risk of stretching the uniting medium. That the chief danger after union consists in allowing the patient to bend his knee, and thus drag the lower fragment downwards, there being little or none in allowing him to use the quadriceps as an extensor. 6. That patients with absolute paralysis of the quadriceps are yet able to walk fairly, and suffer no inconvenience whatever from contraction of its antagonists. 7. That "bony union" is probably an exceedingly rare event, whilst close fibrous union is easy of attainment; that it is quite impossible to distinguish between the two in the living patient, and, further, that all statements as to "bony union" are worthless unless made on examination at least a year after the accident. That the atrophic weakening of the quadriceps explains in many cases the patient's lameness, and that its frequent occurrence tends to reduce the temptation to resort to certain heroic and dangerous methods of keeping the fragments in apposition.

Mr. Solly was sorry there were no facts given along with the paper. The propriety of slackening the quadriceps by raising the body, although patent, was, he thought, too little insisted on by teachers, students coming up for examination being generally ignorant of the measure.

Mr. Thomas Smith was glad the subject had been brought up. His best results were obtained when the body was not raised, and he taught this to the students. It was certainly best for the limb to be flat.

Mr. Solly referred rather to the raising of the body than to that of the tibia.

Mr. Savory feared he had to take his share of the blame in this matter. He let his patients lie flat. This was one of John Hunter's doctrines. He could show cases now in the Hospital in which it would be impossible to have better results. So also, with regard to the leg, it was quite a mistake to suppose that they could stop the action of a muscle by bringing its two extremities together.

Mr. Partridge said they treated such injuries in the same way at King's also.

Mr. Birkett asked what Mr. Savory called good results. (Mr. Savory replied when the parts were not more than half an inch apart.) They must really judge by what was seen after a time. The comfort of the position was of much importance.

OBITUARY.

STEPHEN H. GAMES, M.D.

It is with most unfeigned regret that we have to record the death, which took place on August 28, of Stephen Hughes Games, M.D., of Stafford-street, Liverpool, at the early age of 37. Dr. Games was born and received the major part of his Medical education in the town which has been the scene of his most arduous labours and untimely death. He was the son of John Games, M.D., of Earl-street, Liverpool, who survives him. After filling one or two subordinate appointments, he was elected some years ago Medical Officer to one of the parish districts, and it was in performing its duties that he fell a victim to typhus fever. How he performed those duties was most unmistakably evinced on the morning of his funeral. Crowds of poor people thronged the street, and crowded round the door to catch a last glimpse of the coffin of a man who never under any circumstances closed his ear to their appeal for aid, and tears of most genuine grief flowed freely as the hearse rolled away with its load, and the coffin was lowered into the grave. No nobler testimony could have been given to the thoroughness and conscientiousness with which his work had been done than this spontaneous manifestation of sorrow by a class of people who, while pre-eminently susceptible to kind treatment, are none the less quick to know when they are neglected, and to mark their knowledge by their actions—we allude to the parish poor. At all hours and in all weathers Dr. Games performed his duties to the poor with a zeal and conscientiousness which new no flagging. With the rash of typhus on him he still struggled on, trying to do his old work in his old way, and it was not till it was fairly impossible for him to hold out any longer that he asked for help—help which came too late for himself. It would be impossible for any man to work so faithfully as Dr. Games did among the poor, even though he should be more modest and retiring than he undoubtedly was, without attracting the notice of those whose special duty it is to watch over their interests. And not a few who did not know until now the full extent and character of his labours, were surprised on hearing, a few months since, that he had been selected by the guardians as one of the three Medical officers to perform the public vaccination of the town. His private practice was good and increasing; but it is as the faithful friend of the poor that he will be long remembered, and as such that we notice him here.

J. SEATON SMYTH, F.R.C.S. Ed., L.R.C.P. Ed.

On the day succeeding Dr. Games's death, died Dr. Smyth, of Rodney-street, Liverpool. The deceased gentleman was the originator of a Hospital for skin diseases, to which, by his will, he has bequeathed £10,000.

MEDICAL NEWS.

Apothecaries' Hall.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, September 9, 1869:—

Clarke, Thomas Edward, Kirkby Lonsdale.
Kite, John Alfred, Dover.
Smith, Herbert Alder, Hatton-garden, E.C.
Sutcliffe, Arthur Edwin, Manchester.
Williams, Josiah, Newport, Monmouth.

The following gentlemen also, on the same day, passed their First Professional Examination:—

Monks, Frederick Aubin, Guy's Hospital.
Oakes, Charles, Dublin School of Medicine.

APPOINTMENT.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Fotherby, Henry J., M.D. Lond.—Assistant-Physician to the Metropolitan Free Hospital.

NAVAL AND MILITARY APPOINTMENTS.

ADMIRALTY.—The following appointments have been made :—Robert W. Beaumont, Surgeon to the *Penelope*, and Dr. Henry S. Smart, Assistant-Surgeon to the *Forte*. The under-mentioned officers have been confirmed in the rank of Assistant-Surgeons in her Majesty's Fleet:—Mr. John H. Houston, with seniority of November 12, 1867; Dr. Michael U. Greany, with seniority of May 7, 1868; Mr. Philip S. Warren, with seniority of July 11, 1868; Dr. Frederick M'Clement, with seniority of May 10, 1867.

BREVET.—Deputy Inspector-General of Hospitals A. H. Leith, M.D. Retired, Bombay Army, to have the honorary rank of Inspector-General of Hospitals.

BIRTHS.

ARMSTRONG.—On September 11, the wife of Henry Armstrong, M.D., of Peckham House, Peckham, of a daughter.

BRUNJES.—On September 14, at 42, Brook-street, Grosvenor-square, the wife of Martin Brunjes, M.R.C.S.E., of a daughter.

MILLAR.—On September 6, at 48, Albany-street, Edinburgh, the wife of John Millar, M.D., F.R.C.S. and P.E., of a son.

OGILVIE.—On September 2, at Norwood, the wife of J. F. Ogilvie, Egyptian Medical Service, of a son.

PATON.—At Elmbank, Letham, Forfar, on September 5, the wife of David Paton, M.D., of a daughter.

MARRIAGES.

BEADLES—AMEY.—On September 7, at Christ Church, Forest-hill, Arthur Beadles, Esq., Surgeon, to Henrietta, daughter of Henry and Clara Amey, Ledbury-house, Forest-hill.

CANDY—HARDING.—On August 25, at Crilworth, Northamptonshire, John Candy, M.D., Assistant-Surgeon 109th Regt., to Constance, third daughter of Captain John Harding, late Madras Army.

DROWN—LEIGHTON.—On August 31, at Chelveston, Northamptonshire, Dr. Thomas M. Drown, of Philadelphia, U.S.A., to Helen, second daughter of the late Andrew Leighton, Esq.

DUCKERING—WRIGHT.—On September 1, at Old St. Pancras, Samuel Duckering, Assistant-Surgeon H.M.'s Indian Army, to Lilian, eldest daughter of the late John Wright, Esq., of Rotherham.

ENSOR—CROSS.—On August 31, at the parish church, Puddletown, Dorchester, John Arthur Ensor, Surgeon, Tisbury, Wilts, to Harriette Whyle, youngest daughter of the late Samuel Cross, formerly of Lambeth and Brighton.

ILIFF—KEMP.—On September 13, at the parish church of Kyre Wyard, Worcestershire, William Tiffin Iliff, M.D., of 37, Kennington-park-road, to Hannah, youngest daughter of the late Henry Kemp, of Streatham-common.

MILSOME—RICKMAN.—On September 2, at St. Mary's, Staines, Dr. John R. Milsome, of Chertsey, to Mary, eldest daughter of the late John Rickman, Esq., of Staines.

PEARL—TURNER.—On September 2, at Midhurst, by the Rev. R. Morey Weale, M.A., cousin, assisted by the Rev. C. Caudy, M.A., vicar of Shottermill, uncle of the bride, Edward Pearl, Esq., of Windsor, to Harriett Anne, only child of William Turner, Esq., of Midhurst. No cards.

POWER—WALKER.—On September 7, at St. Mark's, Peterborough, J. Walter Power, Esq., of Ely, to Mary Leonora, fourth daughter of T. Walker, Esq., M.D., J.P.

DEATHS.

COOKWORTHY, JOSEPH COLLIER, M.D. Edin., of Plymouth, at the residence of his son, the Rev. Urquhart Cookworthy, the Rectory, Sandford Orcas, Sherborne, on September 10, in his 79th year.

DRYSDALE, A. K., F.R.C.S.E., Surgeon 79th Highlanders, at Southampton, on September 10, aged 36.

FOX, THOMAS, Esq., M.D., Retired Deputy Inspector-General Army Medical Department, at Hfracombe, on August 31, aged 66.

GIBSON, Dr. F. W., late chief Medical Officer of the St. Pancras Infirmary, on his voyage to Australia for the benefit of his health, on June 24.

GIRAUD, MARY, widow of Frederick Francis Giraud, Esq., Surgeon, formerly of Faversham, at Faversham, on September 4, aged 57.

GREAVES, GEORGE, M.R.C.S., L.S.A., at 336, Stutford-road, Manchester, on September 8, aged 63.

GROVES, EDWARD KEET, the son of Edward Groves, L.R.C.P., M.R.C.S., L.M., at Lincoln, on September 4, aged three weeks.

SKERRY, Dr. CHARLES, at his residence at Putney, after a few months' illness, on August 27, aged 58.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

CHARING-CROSS HOSPITAL.—Physician for the treatment of Diseases of the Skin; must have a degree from one of the Universities recognised by the General Medical Council, and be F. or M.R.C.P.L. Applications and testimonials to the Secretary on or before September 28, at 2 o'clock p.m.

EPPING UNION.—Medical officers wanted for the following districts of this Union:—Chingford, Magdalen Laver, Matching, The Parndons, Latton, Nettswell, Roydon, and Thoydon Garnon. Candidates must be legally qualified. Applications and testimonials to J. W. Windus, Clerk to the Guardians, Epping, on or before the 23rd inst. Election on the 24th inst.

GENERAL INFIRMARY, LEEDS.—Resident Medical Officer; must be M.R.C.S.E. Applications and testimonials to the Resident Medical Officer on or before October 4, on which day candidates must attend personally.

GLOUCESTER INFIRMARY.—Assistant-Physician; must have a Medical qualification. Applications and testimonials to the committee, under cover to the Secretary, on or before September 30. Further information may be obtained of the Secretary.

GREAT YARMOUTH HOSPITAL.—Resident Medical Officer; must be L.S.A., and be unmarried. Applications and testimonials to the Hospital committee, Great Yarmouth, on or before September 27.

LEXDEN AND WINSTREE UNION.—Medical Officer for the Ninth District. Candidates must have the qualifications required by the Poor-law Board. Applications and testimonials to W. Howard, Clerk to the Guardians, Colchester, on or before September 21. Election on the 22nd.

LONDON HOSPITAL, WHITECHAPEL-ROAD.—Assistant-Surgeon; must be M.R.C.S.E. Applications and testimonials to the Assistant-Secretary at the Hospital, from whom further particulars may be obtained.

LONDON HOSPITAL, WHITECHAPEL-ROAD.—Junior Assistant-Surgeon. Applications and testimonials to the House Committee on or before September 20. Election on September 21, when personal attendance will be required.

PRESTON AND COUNTY OF LANCASTER ROYAL INFIRMARY.—Senior and Junior House-Surgeons; must be properly qualified, and be unmarried. Applications and testimonials to the Acting-Secretary, 54, Fishergate, Preston, on or before September 20.

ROSS UNION.—Medical Officer for the Third District. Candidates must be registered under the Medical Act, 1858, and have the qualifications required by the Poor-law Board. Applications and testimonials to H. Minett, Clerk, Ross, on or before September 20. Election on October 4.

ROYAL ISLE OF WIGHT INFIRMARY.—House-Surgeon. Applications and testimonials to the Secretary on or before October 5. The duties will commence after November 3.

ST. MARY'S HOSPITAL AND DISPENSARY FOR WOMEN AND CHILDREN, MANCHESTER.—Resident Medical and Surgical Officer; must have both Medical and Surgical qualifications, and be duly registered. Applications and testimonials to J. Barber, Secretary, 41, John Dalton-street, Manchester, on or before September 23.

TIVERTON UNION.—Medical Officer for the Thorverton District. Candidates must have the qualifications required by the Poor-law Board. Applications and testimonials to Charles Marshall Hole, Clerk, Tiverton, on or before September 20. Election on September 21, when personal attendance will be required.

WARNEFORD HOSPITAL, LEAMINGTON PRIORS.—House-Surgeon; must be M.R.C.S. Lond., Edin., or Dublin, and L.S.A. or L.R.C.P.L. Applications and testimonials to the Secretary.

WILLITON UNION, SOMERSET.—Medical Officer for the Williton District. Candidates must be legally qualified. Applications and testimonials to H. White, Clerk, Williton, Somerset, on or before September 18.

WORKSOP DISPENSARY.—House-Surgeon; must have both Medical and Surgical qualifications, and be unmarried. Applications and testimonials to the Committee, Dispensary, Worksop, Nottinghamshire. The duties will commence on November 1.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Bellingham Union.—Mr. John Mason has resigned the Second District; area 99,922; population 2024; salary £20 per annum.

Penzance Union.—Mr. Francis Boase has resigned the Fifth District; area 3834; population 14,486; salary £30 per annum.

Ross Union.—Dr. W. S. Rootes has resigned the Third District; area 15,210; population 5352; salary £72 per annum.

APPOINTMENTS.

Braintree Union.—William T. H. Wood, M.R.C.S.E., L.R.C.P. Edin., to the Finchingfield District.

Holyhead Union.—Owen Williams, M.R.C.S.E., L.K. and Q.C.P.I., to the Holyhead District.

Isle of Thanet Union.—James S. Harris, M.R.C.S.E., L.K. and Q.C.P.I., to the Minster District and the Workhouse.

Stockton Union.—Christopher Young, M.D. Edin., M.R.C.S.E., to the Yarm District.

Wakefield Union.—Wm. S. Mackenzie, L.R.C.P. Edin., M.R.C.S. Edin., to the Normanton District.

Westbury and Whorwellsdown Union.—Edward P. Shorland, M.R.C.S.E., L.S.A., to the Bratton District. William T. Winter, M.R.C.S.E., L.S.A., to the Bradley District.

THE LONDON LABOURERS' DWELLING SOCIETY.—One sanitary improvement, at least, has been attended with success in a pecuniary point of view. The above Society, at its last half-yearly general meeting, declared a dividend of 5 per cent. per annum, free of income-tax. The following facts were mentioned:—The capital of the Society now amounts to £41,700, the Sinking Fund (for the redemption of the leasehold property of the Society) to £1237, and the Reserve Fund (for the equalisation of dividends, or extraordinary expenses) to £4005. Of this last sum £2000 is deposited at interest, in order to provide the means of purchasing temporarily at par any shares that a member may from unforeseen circumstances wish to realise.

ARMY MEDICAL DEPARTMENT.—The report of the Army Medical Department for 1867 has just been published. It appears that there were during the fifty-two weeks ending December 27, 1867, 73,420 men on the average serving in the United Kingdom; the admissions into Hospital were 63,904; the deaths from all causes were 690, of which 53 occurred when the men were absent from their corps; and the average number constantly non-effective from sickness was 3118. These numbers give the proportions of 870 admissions, 9·40 deaths, and 42·47 constantly sick per 1000 of the strength,

being a slight increase in the admissions and mean daily sick, and a slight decrease in the deaths compared with the results for 1866.

THE WILLIAM CARR EXHIBITION OF THE ROYAL MEDICAL BENEVOLENT COLLEGE, EPSOM.—Mr. Theophilus G. Vaudrey, a foundation scholar, of St. Austell, Cornwall, who took a first-class at the recent Matriculation Examination of the University of London, has been presented by the Council of the Epsom College with this Exhibition, value £50 a year, and tenable for four years. Combined with this Exhibition is a free Medical Scholarship, the gift of University College, London. Previous to leaving Epsom Mr. Vaudrey took a classical prize and the first prize in English.

MEDICO-CHIRURGICAL SOCIETY OF GLASGOW.—At the meeting of this Society, held on Friday, September 3, in the Hall of the Faculty of Physicians and Surgeons, the following gentlemen were elected office-bearers for the present session, viz.:—*President:* Dr. J. G. Fleming. *Vice-Presidents:* Dr. E. Watson and Dr. Steven. *Council:* Dr. G. H. B. Macleod, Dr. A. R. Simpson, Dr. Richmond (Paisley), Dr. F. Thomson, Mr. Torrance (Airdrie), Dr. H. Thompson, Dr. James Gray and Mr. Robert Grieve. *Secretaries:* Dr. James Adams and Dr. R. Perry. *Treasurer:* Dr. H. R. Howatt.

INDIAN MEDICAL SERVICE.—The following is a list of the candidates for her Majesty's Indian Medical Service who were successful at the competitive examination at Chelsea in February, 1869, and who have undergone a course of instruction at the Army Medical School, together with the total number of marks obtained at the examinations at Chelsea and at Netley:—

Name.	Studied at	Total No. of Marks—Max. 6900.
C. W. Calthrop	London	5753(a)
A. Wood	Aberdeen	5668
R. C. Sanders	London	5455
E. Sanders	London	5015
B. Franklin	London	4895
F. P. Edis	London	4888
R. T. Wright	Edinburgh and London	4886
G. McB. Davis	Ireland	4856
K. P. Gupta	Edinburgh	4853
J. A. Howell	London	4501
H. J. Linton	Edinburgh and London	4255
C. T. Peters	Edinburgh	4177
H. P. Roberts	Edinburgh	4138
E. Colson	London	4070
C. W. Mackwry	Edinburgh	4025
M. E. Murphy	Ireland and Edinburgh	4021
W. Price	Ireland	3938
S. M. Tyrrell	Edinburgh	3921
W. H. Boalth	London and Glasgow	3863
J. Backhouse	Ireland	3703

COMPOSITION AND QUALITY OF THE METROPOLITAN WATERS IN AUGUST, 1869.—The following are the returns of the Metropolitan Association of Medical Officers of Health:—

Names of Water Companies.	Total Solid Matter per Gallon.	Oxygen required by Organic Matter, &c.	Nitrogen.		Hardness.	
			As Nitrates &c.	As Ammonia.	Before Boiling.	After Boiling.
Thames Water Companies.	Grains.	Grains.	Grains.	Grains.	Degs.	Degs.
Grand Junction	19·47	0·071	0·091	0·000	13·8	3·9
West Middlesex	17·17	0·041	0·078	0·000	13·8	3·3
Southwark & Vauxhall	17·83	0·079	0·076	0·001	13·3	3·0
Chelsea	17·93	0·091	0·091	0·001	13·4	3·6
Lambeth	17·83	0·051	0·066	0·001	13·6	3·2
Other Companies.						
Kent	28·40	0·015	0·129	0·000	20·2	5·9
New River	17·83	0·028	0·076	0·000	13·3	3·4
East London	16·03	0·035	0·091	0·000	13·2	3·1

The quantity of water supplied to the metropolis daily by the several water companies was, according to the last returns to the Medical Officers of Health, 110,094,058 gallons. This was supplied to 466,969 houses, and is at the daily rate of 34·7 gallons per head of the population. The quantity supplied to Paris at the date of the last *Bulletin Statistique Municipale* was, for all purposes, ornamental and otherwise, only 23·6 gallons per head of the civil population.

Note.—The amount of oxygen required to oxidise the organic matter, nitrites, etc., is determined by a standard solution of permanganate of potash acting for three hours; and in the case of the metropolitan waters the quantity of organic matter is about eight times the amount of oxygen required by it.

(a) Obtained the Herbert prize.

FLOATING BATHS.—The New York *Medical Record* states that 50,000 dollars of the tax levy have been appropriated for the immediate erection of two free floating baths, one in the Hudson River and one in the East River. The establishment of such baths in Boston has been productive of the greatest amount of good.

WITH reference to the remarks of Polycletus and Galen on the symmetry and proportionateness of the several parts of the human body, which appeared in the *Medical Times and Gazette* for August 28, our readers may perhaps like to see an interesting and much longer passage on the same subject in Abdottalif's account of Egypt, which may be seen in Latin in White's edition, p. 125, etc., or in French in De Sacy's translation, p. 188, etc.

THE BUCHAN MEDICAL SOCIETY.—The following appointments for 1869-70 were made at the annual meeting, viz.:—John D. Comrie, L.R.C.S. Edin., President; William Alex. Gavin, M.R.C.S. Eng., and Robert Leys, M.D. King's Coll. Aberd., Members of Council of the North of Scotland Medical Association; and William Bruce, M.D. King's Coll. Aberd., Secretary and Treasurer.

AN AMERICAN CASE OF POISONING.—Dr. Schoeppe, a Pennsylvanian "Physician," has been condemned to death for the murder of Miss Strinsche, aged 65, who was possessed of some £8000. Having borrowed £200 of her, he first forged her will in his own favour, and then poisoned her.—*Guardian.*

THE *Boston Directory* for 1869, which has just been issued, contains the names of 303 Physicians, members of the Massachusetts Medical Society; 40, members of the Massachusetts Homœopathic Medical Society; 11, members of the Massachusetts Eclectic Medical Society; 76, who attire themselves in female garments, and 200 "other Physicians." One of this latter class delights himself in the title of "analytic Physician;" another practises "naturopathy;" another goes it upon "equalising" principle—this may be supposed to refer to pockets—another strengthens weak finances by the "Swedish Movement Cure"—the word movement probably indicating frequent change of residence—another is a "magnogothist," and still another is satisfied to proclaim his merits, in good old plain English, as a "bone-setter." Many of the apothecaries also transcend the legitimate limits of their vocation, and furnish advice and drugs at a slight advance upon the regular charges for the medicines furnished. The city, including the newly acquired districts of Roxbury and Dorchester-end—none of the practitioners of the healing art referred to in the above statistics reside in these districts—contains about 230,000 inhabitants. Probably one-half of this number receive gratuitous Medical advice, one-half of the remainder employ homœopathists, eclectics, and others outside of pale of the regular Profession, leaving the latter less than 200 paying persons to each Physician.

ANIMAL VACCINATION AT THE FRENCH IMPERIAL ACADEMY OF MEDICINE.—A discussion on animal vaccination at the above Society was opened some time ago by a very clever speech from M. Guérin, a determined and ardent opponent of that system. M. Depaul, better informed, had but little trouble in overthrowing M. Guérin's assertions; facts in hand, he proved the great value of direct vaccination from heifers. Unfortunately too much personal feelings were mixed up with the debate, and often vaccination was but a pretext used by those very bitter adversaries in order to cast ridicule on one another. The gentlemen that have since spoken, luckily for science, are unbiassed and perfectly impartial, and to them we must therefore look for some light on this important question. The venerable Dr. Bouchardat remarked "that much good could be obtained from animal vaccination, but at the same time we should not do away with arm-to-arm vaccination. Both should march hand in hand—they are not enemies, but allies." M. Hérard, the distinguished Physician of the Maternité, recorded his experience on the subject. He stated that in his wards, he had practically tested the two lymphs. During the last six months, half the children born in the Hospital had been vaccinated direct from the heifer, the other half with human lymph and from arm to arm; he gave some statistics and the results of several experiments made, and concluded thus with reference to the relative success of the two systems:—"When vaccine lymph is taken direct from the heifer, and when that lymph is from the third to the sixth day, and the child a few months old, animal vaccination succeeds almost invariably and quite as frequently as human vaccine lymph." With reference to the transmission of diseases he states: "I find above all things a great advantage in animal

vaccination; by it we are protected from those contagious diseases that can be inoculated, specially from syphilis. There are unmistakable facts of vaccinal syphilis. This cannot be denied without speaking of the case I had the honour in September, 1863, of bringing to the notice of the Academy, and which was received as correct by the most competent members of this Society, and which offered this peculiarity, to me very important, that the same vaccination produced the same day, in the same *mairie* (*mairie de Montmartre*), a similar case observed by M. Chassaignac, and presented by him to the Society of Surgery. Without speaking, I say, of these cases, we have those unfortunate instances of vaccinal syphilis that have originated in this very establishment. What can we ask more from these facts controlled by so many distinguished Professional men?" Speaking of syphilis after vaccination, M. Hérard remarks: "We do not take into consideration the very great difference existing between congenital syphilis and inoculated syphilis. After birth the first kills almost to a certainty; the second, on the contrary, is comparatively mild, and often is cured with the greatest rapidity." M. Hérard, in concluding, said: "Whatever may be the result of this discussion on this difficult subject, we must applaud the efforts made to insure greater activity to vaccine lymph. Whether we renew it with spontaneous cow-pox, as first employed by Jenner himself, and as it has been practised several times since, or whether we retain its activity by repeated inoculations from heifer to heifer, we must acknowledge the value of such endeavours."

PROFESSOR B. HOWARD, of New York, has published his "Plain Rules for the Restoration of Persons apparently dead from Drowning." They are as follows:—"Rule 1.—Unless in danger of freezing, never move the patient from the spot where first rescued, nor allow bystanders to screen off the fresh air, but *instantly* wipe clean the mouth and nostrils, rip and remove all clothing to a little below the waist, rapidly rub dry the exposed part, and give two quick, smarting slaps on the stomach with your open hand. If this does not succeed immediately, proceed according to the following rules to perform artificial breathing. Rule 2.—Turn the patient on his face, a large bundle of tightly rolled clothing being placed beneath his stomach, and press heavily over it upon the spine for half a minute. Rule 3.—Turn the patient quickly again on his back, the roll of clothing being so placed beneath it as to make the short ribs bulge prominently forward and raise them a little higher than the level of the mouth. Let some bystander hold the tip of the tongue out of one corner of the mouth with a dry handkerchief, and hold both hands of the patient together, the arms being stretched forcibly back above the head. Rule 4.—Kneel astride the patient's hips, and with your hands resting on his stomach, spread out your fingers so that you can grasp the waist about the short ribs. Now throw all your weight steadily forward upon your hands, while you at the same time squeeze the ribs deeply, as if you wished to force everything in the chest upwards out of the mouth. Continue this while you can slowly count—one, two, three; then *suddenly* let go, with a final push, which springs you back to your first kneeling position. Remain erect upon your knees while you can count—one, two; then throw your weight forward again as before, repeating the entire motions—at first about four or five times a minute, increasing the rate gradually to about fifteen times a minute, and continuing with the same regularity of time and motion as is observed in the natural breathing which you are imitating. Rule 5.—Continue this treatment, though apparently unsuccessful, for two hours, until the patient begins to breathe; and for a while after this help him by well-timed pressure to deepen his first gasps into full, deep breaths; while the friction of the limbs, which should if possible have been kept up during the entire process, is now further increased. Rule 6.—After-treatment—externally. As soon as the breathing has become perfectly natural, strip the patient rapidly and completely. Enwrap him in blankets only. Put him in bed in a room comfortably warm, but with a free circulation of fresh air, and except for the administration of internal treatment, let him have perfect rest. Internally: Give a little hot brandy and water, or other stimulant at hand, every ten or fifteen minutes for the first hour, and as often thereafter as may seem expedient." We must refer the reader for other particulars to the pamphlet.

A FEVER-STRICKEN SHIP.—The *Mary Jane*, of Boston, U.S., has been picked up at sea adrift. Shortly after leaving St. Domingo the yellow fever broke out, and when she was found all her crew were dead but two, and they prostrate. She was towed into New York.

NEW BOOKS, WITH SHORT CRITIQUES.

Medical Guide to Scarborough. By Dr. C. B. Brearey.

*** A very useful little book for visitors. It gives a good account of the climate and vital statistics of the town, with directions for sea-bathing and taking the waters. This is the fourth edition and the 27th thousand.

The Shakesperian Diary and Almanack: a Daily Chronicle of Events, with appropriate Quotations from the Poet's Works.

*** This *brochure* is published by the London Stereoscopic and Photographic Company, and is an exceedingly interesting production. We append a few quotations having reference to members of the Profession.

"Jan. 26, 1823.—Dr. Jenner died.
'Dost thou forget
From what a torment I did free thee?'—*Tempest*, i. 2."

"Feb. 12, 1841.—Sir Astley Cooper died.
'By medicine life may be prolonged, yet death
Will seize the Doctor, too.'—*Cymb.* v. 5."

"March 30, 1783.—Dr. Hunter died.
'He was famous, sir, in his profession, and it was his great right to be so.'—*All's well*, i. 7."

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Will "Obstetricus" favour us with his name and address, not for publication?

Dr. W. A. Greenhill is thanked.

L.R.C.S.—Some preparation of water glaze, such as that used in the case of the Houses of Parliament.

Buried Alive! and "Le Petit Journal."—One of the stock tales of horror is just now making the round of the newspapers, in the shape of the pretended burial alive of a young lady in France. Here it is, cut from a country paper—

A horrible and suggestive tale comes to us from France. "Buried Alive." Those words can seldom be read without a shudder, and could the grave give up its secrets we should doubtless learn that these sad words have a larger application than we may have thought. One grave has now given up a secret, and a terrible secret it is. A lady in France recently died, and as she had expressed a wish to be buried in the same grave as her daughter, who had died about a year previously, preparations were made to comply with her wishes. The grave was opened, and then a fearful sight presented itself as the lid of the coffin was taken off. "The winding-sheet had been torn open; the right hand, which had disentangled itself from the cerements, was deeply marked with bites—as if the unhappy *revenante* had either sought to quench her stifling thirst with her blood, or had gnawed her flesh, like Ugolino, in blank despair; and the lid of the coffin had been indented by the crucifix which lay on the young lady's breast."

Now let us, for the present, drop the utter improbability of the whole story, and suppose the condition of the corpse when the coffin was opened to have been what was described; is it to be accounted for only on the horrible supposition that the young lady had been buried alive? Certainly not; the displacement of the right hand, the tearing open the grave-cloths, and the indentation of the crucifix against the coffin lid might be simple consequences of the distension by gas which the body often undergoes in its progress towards decomposition. To illustrate this we may say a few words about French newspapers. Of all the differences between the English and French sides of the Channel, there is not one more striking—not language, manners, and food—than the difference in newspapers. On this side, the moment you land, the boys are offering you the robust *Times*, *Standard*, *Star*, papers of enormous size, and filled with what every man ought to know of the affairs of his own country, its home and foreign policy, trade, manners, and occurrences. On the other side they bring you a miserable halfpenny sheet, and scream "*Le Petit Journal*," "*L' p'tit Journal, M'sieu*," offering you positively nothing else. The last of these wretched journals that I bought at Boulogne two years ago, beat everything I could have imagined for viciousness, folly, and filth. On the first page was an engraving coloured and representing some of the amusements of country life. The persons represented were a stupid old nincompoop of a country gentleman, his young and flighty wife, and a *roué* coloured, whom they were welcoming as a visitor. The moral, or *im*moral, may readily be guessed. The last page contained a tale of the most disgusting description. It described the interior of some *morgue*, or receptacle for the dead, in which corpses were received, and arranged on tables, and to the right hand of each corpse was fastened the handle of a bell, so that in the case of any one being really not dead, the slightest movement of the hand might sound the bell and summon the porter. Well, the story goes on to describe how a bard drinker and boon companion of the porter had died of dropsy, and was laid out in the *morgue* as usual. The porter with some friends was drowning his sorrow with *eau de vie*, when, just at midnight, the bell sounded, as if the dead man had come to life again. The porter, terror-stricken, went to see what was the matter, and found that the swollen corpse had burst; hence the movement of the right hand which had caused the bell to sound. A very disgusting story; but what a diseased state of imagination must that be which delights in these charnel-house gropings! We can relate the story only with an apology, as a specimen of mental pathology.

Inquirer.—The exact site of the Auldana vineyards is on the lower slopes of the "Mountlofty Ranges," being several miles from the Torrens, in South Australia.

The London Union Society.—This Society was formed in the commencement of the present year, and already numbers 150 members. All graduates and undergraduates of the London University and all past or present students of the recognised London Hospitals, as well as the other metropolitan Colleges, etc., affiliated to the London University, are eligible as members of the Society, which at present meets once a month, from October to June, for debate, but it is intended, as it gains strength, to develope it into a real London Students' Club, somewhat after the model of the Oxford and Cambridge Unions, so that it may include not only a debating society, but a library and reading-room, and cricket, football, athletic, and boat clubs. The Society meets at present at King's and University Colleges alternately, but has reason to believe that a room in the new London University buildings will shortly be allotted to it. Subscription 2s. 6d. per annum. Copies of the laws and information concerning the Society may be obtained from the Honorary Secretaries, H. T. Hugh Chapman, Esq., M.R.C.S., St. George's Hospital, and H. Newell Martin, Esq., University College.

Rahere.—No "introductory" will be delivered this year at St. Bartholomew's. The dignified remonstrance of Dr. Mayo will, no doubt, be productive of great good; he is a Fellow of his College.

M.D., Southampton.—The laws of the College are like those of the Medes and Persians. The four years required must date from the time of passing the Arts Examination. Read our Students' Number of last week, and write to the Secretary.

A Constant Reader, A Student, J. B., and M.R.C.S., will find all the desired information in our Students' Number published last week. We cannot advise on the subject. Never mind about the prizes.

An Invalid.—The india-rubber sponge is coming into use for pads for the prevention of bed-sores.

A Fellow by Examination.—The Medical Register abounds with similar blunders. The person named is not a Fellow of the College, and on inquiry at the institution we find the other person is not a Member.

Anti-Oxidation.—Mr. Wellborn, in the *Journal of Applied Chemistry*, states that a small lump of camphor placed in a bottle of recently crystallised protosulphate of iron preserves it from oxidation, the salt remaining as a transparent solution after it had been kept three months.

Ear Trumpets.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I shall feel much obliged if any of your correspondents could kindly inform me of the best ear-trumpet for a deaf person to carry in his pocket to make use of when general conversation is going on.

Machynlleth, September 14. I am, &c. H. Lloyd.

F.R.S., Gower-street.—The person named is not a graduate in Medicine of any University, as you may ascertain by reference to the Medical Register and Medical Directory. Neither is he a Fellow of the Royal Society of London or of Edinburgh. He was admitted a Member of the London College of Surgeons in a different christian name from the one now assumed. The "ladies' column" of the *Times* is constantly made the medium for publishing titles to which the advertisers are not entitled.

Mr. S.—There is a monument by Flaxman in Salisbury Cathedral to the memory of William Long, who filled the office of Master of the Royal College of Surgeons in 1800. He was Surgeon to St. Bartholomew's Hospital for thirty-three years; he died in 1818. In the same Cathedral you will also find the monument to the memory of William George Maton, the eminent Physician and naturalist; he died in 1835.

Quærens asks whether Dr. Stuges, in the case related by him in the last number of this journal of pneumonia in which the skin was never hot, used the thermometer or not to determine this point.

A Village Surgeon has forwarded to us a letter on Village Hospitals. He argues in favour of their establishment as likely to be beneficial not only to the inhabitants of small towns and parishes, but to the status and Professional skill of the country Practitioner. In the first case, the patient is well cared for near home, has a clean apartment in some cheerful spot; and, secondly, the young Surgeon has an opportunity of operating on cases which he must otherwise send to a town or county Hospital.

Vaccinators' Difficulties.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—If you think the following anecdote illustrative of one of the many difficulties public vaccinators have to contend with, which prevents effectual vaccination, worth insertion in your valuable journal, perhaps you will do so:—A short time ago I vaccinated with recent lymph, and at four distinct places, the child of a woman who kept a toll-gate. I performed the operation at her own house, as the woman could not leave. Upon calling on the eighth day, I was surprised to find only two vesicles had risen. The cause of the failure of the other two was afterwards elucidated to me by our Registrar, who happening to call at the house about the time, the woman began complaining to him about the hardship of being compelled to have the child vaccinated, and said, "That as soon as Muster Ireland had got out of sight, I spit on 'em, and I rubbed 'em as hard as I could, and I'm darned if two of 'em arn't a risen now."

I am, &c. Edward Ireland (Public Vaccinator,
The Limes, Linton, Cambs., August 28. Linton District).

Histologist.—The microscope made by the late Professor Quekett when only 16 years of age, and with which he made many of his early discoveries, is in the possession of Mr. Stone, of the College of Surgeons.

D. W. F., Cleveland, requests us to state that the correct list of legacies of the late Mr. Rackham, of Pelham-crescent, is as follows:—To the Consumption Hospital at Brompton, £1000; to the Cancer Hospital at Brompton, £1000; to the Hospital for Incurables at Putney, £1000; and to the Westminster Ophthalmic Hospital, £500.

Mr. Thos. Brook writes us in reference to some remarks contained in a late impression respecting his alleged ill-treatment of his daughter. He says it was erroneous to state that the "bruises" were the result of electrical agency. They "arose through applying quite a new contrivance. It is a cataplasm (which caused much curiosity in court) of different metals woven in tissue, and excited by brushing the motor elements with a solution of cupri sulph. et argent. nitras, etc. When wrapped over a large surface of the body, it produces marks which a superficial observer would mistake for bruises. Still, there were real bruises in addition caused by my eldest daughter running a perambulator over the little girl, as also through some planks falling upon her, which facts would have been elicited from my witnesses had not the learned judge stopped the case before they were called." We willingly insert Mr. Brooke's explanation, but we beg to remind him that our observations were founded on the report of the case as published in the newspapers.

Vaccination.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—As one of the many ills erroneously attributed to vaccination, the following, I think, possesses unusual interest. On Wednesday last, a child at the breast, which, on the previous Thursday, had been vaccinated at the Surrey Chapel station, Blackfriars-road, by Mr. Marson, was brought to me covered with an eruption (*urticaria*), which the mother and her neighbours declared was caused by the vaccination. The state of the child, with swollen face, with the breathing hurried and difficult, and the bloated condition of its body generally, at first somewhat puzzled me, and I was disposed to believe that it was a harmless erythematous rash produced by irritation, but the state of the arm not warranting this belief, and it suddenly occurring to me that the symptoms were so strikingly like those resulting from fish-poisoning, I was led to ask the mother if it was at all probable that she had been eating stale fish, when I learned that on the night previous to the eruption making its appearance she had taken mussels with supper. Being now satisfied that the mischief had been communicated through the breast, I treated the case as one of ordinary nettle rash, at the same time giving the mother some medicine and requesting her to bring the child on the following day. The next morning I was pleased to find that there was comparatively but little of the eruption to be seen, and I at once directed the mother to take the child to Mr. Marson, with a note giving particulars of the case. Subjoined is Mr. Marson's reply. I am, &c. A. Farr.

88, Waterloo-road, September 14.

[Copy.]

"Small-pox and Vaccination Hospital, Highgate-hill, Upper Holloway, N., London, September 9, 1869.

"Dear Sir,—I beg to thank you for your note about the child Osborn vaccinated by me this day week at Surrey Chapel. The mischief had clearly, as you state, not arisen from the vaccination. The eruption was much less to-day than yesterday, according to the mother's account, but it still looked bad enough for those so disposed to make a fine story of in these anti-vaccination days. With many thanks for your diagnosis of the case, "I remain yours faithfully,

"F. Marson."

A Young Student.—The study of disease at the bedside can only be successfully carried on by note-taking. The mere "going round" the wards with the Physician or Surgeon in attendance is all but useless. The case must be studied and observed daily, and, if necessary, more frequently by the student himself. Careful observation of half a dozen patients gives more really useful knowledge than the cursory observation of fifty. The case should be taken, and the daily record read over carefully at night. Or, if only rough notes have been made, these should be transcribed in full. It has always been held by the most successful Practitioners of Medicine, that they have owed more to note-taking than to anything else for their knowledge of disease and its treatment. Much has been said with reference to the relative advantages of large and small Hospitals. For the proper study of his Profession the student will find sufficient in the smallest, and not too much in the largest Hospital. But whatever "advantages" either may have, he must depend on his own energies and his own perseverance. Scarpa taught Surgery in an Hospital containing but fifteen beds as successfully as some of his successors did in buildings containing ten times the number. It is by method, arrangement, and firmness of purpose that difficulties are to be overcome. It is wonderful how rapidly difficulties disappear when they are met in a proper spirit. No young student need be disheartened at the real and apparent obstacles in his educational journey. Let him "put his shoulder to the wheel" and all will be overcome.

In our list of Private Teachers in London in the issue of September 11, the address of Mr. Goodwin should have been 319, Camden-road, N., he having removed from 8, Tyndale-terrace.

Parochial Vaccinators.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—On calling a few days ago to vaccinate the child of a patient whom I had attended in her confinement, I was told that the registrar of vaccination had tried hard to persuade the parents to have the operation performed by the district Medical officer. This statement was confirmed by another patient who was in the house, who said that the registrar had also urged her to have her child vaccinated by the same Medical man. There was no

excuse for this interference on the ground of neglect, because neither of the children was three months of age, nor are the registrar and Medical man related to one another. Surely one has enough to try one's patience in having to fill up the cumbrous form of vaccination without having introduced such underhand work as this. An appeal to the board of guardians might possibly result in some form of censure upon the man who overstepped his duties, but more probably do me more harm than good. To say the least, it is very annoying to be interfered with in this way. With a certain class of patients the vaccination is included in the accouchement fee, and I submit that, as this is a sort of gratis work, the registrar ought to be compelled to fill in all such parts of the vaccination form as relate to the father's and child's name, place of residence, etc., leaving only for the Medical man to sign his name and the date.

I am convinced vaccination will never be universally performed till every Medical man is allowed his fee by the guardians in cases where the parents refuse to pay it. I can now speak as a disinterested party, because I never attend cases under a guinea, and I am at present content to include the vaccination fee in this sum. But take the case of a young Practitioner who begins life by accepting half-guinea fees. He cannot be expected to vaccinate the child, as well as attend the mother during her confinement, for so small a sum. The consequence is many of these children escape the vaccination. The parents—at least many of them—are opposed to the operation. Many of them are too proud—having paid their half guinea—to apply to the parish Doctor or public vaccinator, and the poorly paid Doctor is only too willing to let the matter remain in abeyance. Such results look very dreadful in black and white, but I am afraid I can be corroborated by only too many. I am, &c. ALPHA.

*** Several complaints of a similar nature to the above have been sent to us. The "touting" system referred to is most unprofessional and offensive. The Vaccination Act is really causing much well-founded discontent.

COMMUNICATIONS have been received from—

Dr. BAARENBIDGE; Mr. S. BONSALL; Dr. JOHN TOPHAM; QUÆRENS; Mr. R. PERRY; Dr. E. L. FOX; Dr. W. H. DAY; Mr. H. G. HARPER; Dr. W. B. HAMILTON; Dr. D. PATON; Dr. W. B. HUNTER; Mr. THOMAS BROOK; Dr. CARR; Dr. W. F. CLEVELAND; ALPHA; Dr. W. A. GREENHILL; Dr. JAMES RUSSELL; Messrs. W. and A. GILBEY; Mr. G. GASKOIN; Dr. DICKSON; Dr. SUTTON; Dr. HUGHLINGS-JACKSON; Mr. JOHNSON SMITH; Dr. YEO; Mr. J. CHATTO; Mr. SPENCER WELLS; Dr. G. E. YARROW; Mr. BUCKHURST; Dr. MOORE, of Rajpootana; Dr. FAYRER; Dr. COMPIGNE; NEMO; OBSTETRICUS; Mr. R. COOPER TODD; Dr. NESBITT; Dr. FOTHERBY; Mr. H. LLOYD; Dr. QUINLAN; Dr. KELLY; Mr. E. B. GOODWIN; Dr. LETHEBY; Mr. F. MARSON; Dr. J. A. ROSS; Messrs. MACNIVEN AND CAMERON; Dr. H. S. KANE; Dr. JAMES RUSSELL; Mr. J. ASHTON.

BOOKS RECEIVED—

California Medical Gazette, August—Moore on Lunar Influence over Malarious Fevers—Nouveau Dictionnaire de Médecine et de Chirurgie Pratiques, Vol. II.—The Realities of Medical Attendance on the Sick Children of the Poor in Large Towns, by Dr. Heslop—Murray's Report on the Treatment of Epidemic Cholera—Jenner's Practical Medicine of To-day—Report of the Royal Lunatic Asylum of Montrose—Monatsschrift für Geburtskunde—An Inquiry into the Causes of the Present Depression in the Cotton Trade—Report of the Commissioners of Her Majesty's Customs—Medical Experience and Testimony in Favour of Total Abstinence—British Journal of Dental Science, No. 155—Barth on Oxygen—Transactions of the Odontological Society, vol. vi.—Report of the Birmingham General Hospital—A Letter to the Lords of the Admiralty from the Surgeons in charge of the Lock Wards of the Royal Albert Hospital—Nicholson's Essay on the Principles and Practice of Vaccination—United States Government Report on Excisions of the Head of the Femur for Gunshot Injury.

NEWSPAPERS RECEIVED—

New York Medical Gazette—Indian Medical Gazette—Delhi Gazette—Philadelphia Medical and Surgical Reporter—Medical Press and Circular—Reigate, Redhill, Dorking, and Epsom Journal—Birmingham Daily Post—Standard—Australian Medical Gazette—California Medical Gazette—The Newcastle Daily Journal—The Forres, Elgin, and Nairn Gazette.

VITAL STATISTICS OF LONDON.

Week ending Saturday, September 18, 1869.

BIRTHS.

Births of Boys, 1069; Girls, 1058; Total, 2127.
Average of 10 corresponding weeks, 1859-68, 1868·8.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	773	828	1601
Average of the ten years 1858-67	613·4	597·8	1211·2
Average corrected to increased population	...	...	1332
Deaths of people above 90	...	...	...

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-cough.	Typhus.	Diarrhœa.	Cholera.
West	463388	...	3	10	...	8	5	31	...
North	618210	1	4	27	3	16	13	32	...
Central	378058	...	4	26	...	9	8	11	...
East	571158	1	20	62	2	27	11	44	...
South	773175	3	7	54	3	10	15	67	...
Total	2803989	5	38	179	8	70	52	185	...

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·536 in.
Mean temperature	63·5
Highest point of thermometer	80·0
Lowest point of thermometer	51·6
Mean dew-point temperature	55·3
General direction of wind	S.W. & S.S.W.
Whole amount of rain in the week	0·69

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, September 18, 1869, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the year 1869.	Persons to an Acre. (1869.)	Births Registered during the week ending Sept. 18.	Deaths. Corrected Average Weekly Number.	Deaths. Registered during the week ending Sept. 18.	Temperature of Air (Fahr.) Highest during the Week.	Temperature of Air (Fahr.) Lowest during the Week.	Temperature of Air (Fahr.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3170754	40·7	2127	1462	1601	80·0	51·6	63·5	0·69	70
Bristol (City)	169423	36·1	137	76	*74	75·4	48·0	62·1	1·16	117
Birmingham (Boro')	360846	46·1	221	175	175	72·8	49·7	61·0	0·80	81
Liverpool (Boro')	509052	99·7	330	295	304	73·2	50·1	59·3	1·86	188
Manchester (City)	370892	82·7	267	210	*203	75·0	49·0	60·0	1·65	167
Salford (Borough)	119350	23·1	93	60	53	73·4	48·6	60·2	1·87	189
Sheffield (Borough)	239752	10·5	180	126	125	73·0	51·0	60·4	2·39	241
Bradford (Borough)	138522	21·0	78	71	69	72·5	52·5	60·0	1·58	160
Leeds (Borough)	253110	11·7	166	129	157	74·0	52·0	61·0	1·48	119
Hull (Borough)	126682	35·6	77	59	80	73·0	48·0	60·1	1·54	156
Nwestl-on-Tyne, do.	130503	24·5	121	69	59	...	...	...	...	...
Edinburgh (City)	178002	49·2	125	86	82	68·7	48·0	57·8	1·20	121
Glasgow (City)	458937	90·6	304	268	234	68·6	49·7	58·4	0·80	81
Dublin (City, etc.†)	320762	32·9	150	158	135	73·5	45·5	59·8	0·43	43
Total of 14 large Towns	6546587	35·5	4274	3244	3351	80·0	45·5	60·3	1·32	133
Paris (City)	1889842	...	...	...	872 Week ending Sept. 4.	..	...	...	...	...
Vienna (City)	560000 (1863)	...	...	...	270	...	...	59·2 Week ending Sept. 4.	...	...

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·536 in. The barometrical reading decreased from 29·76 in. on Tuesday, September 7, to 28·99 in. at the end of the week.

The general direction of the wind was S.W. and S.S.W.

Note.—The population of Cities and Boroughs in 1869 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous.

* The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

† Inclusive of some suburbs.

APPOINTMENTS FOR THE WEEK.

September 18. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 1½ p.m.

20. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 1½ p.m.; St. Peter's Hospital for Stone, 2½ p.m.

21. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.

22. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.

23. *Thursday.*

Operations at St. George's, 1 p.m. Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

24. *Friday.*

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

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,, Burgoyne, Burbidges, & Co.	,, Evans, Sons, & Co.	,, Hodgkinsons, Stead, & Treacher	Messrs. Wright, W. V., & Co.
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By BENJAMIN W. RICHARDSON, M.D., F.R.S.

ON FURTHER RESEARCH WITH THE LARGE INDUCTION COIL OF THE ROYAL POLYTECHNIC INSTITUTION.(a)

GENTLEMEN,—Since we last met there have been several recorded cases of death by lightning which, in a striking manner, illustrate some of the facts that have passed before us here in our experimental essays. Amongst other cases, I notice one which has recently occurred in Belgium. A monk, engaged with his brethren in the fields carrying hay, was leading the horses drawing one of the loads, when, an hour of prayer having come, he kneeled by or near to an iron fence. While in this position he was struck by lightning, and was killed instantly. On his body were found several of the characteristic marks of an electrical stroke, such as we have seen to follow upon the discharge from the Leyden battery. But the mark which caused the greatest wonder was an arborescent mark. The exact figure of a tree, says the narrative, was left on the body, the branches being defined in the most perfect manner, to the minutest ramifications.

We know now what the meaning of this appearance is: that it is the definition of venous trunks, as Beccaria first and correctly taught.

The mention of these marks on the body leads me to make one other preliminary observation respecting the metallic stains or markings which it is said have been seen on the body after lightning stroke. I maintained in a previous lecture that these markings are ecchymoses, and this often true; but I should like to supplement that observation by repeating the further observation that they may be true metallic lines, when the metal on the body which has been struck is sufficiently thin to be fused by the current of force which vibrates through it.

We will prove this proposition by experiment. We will take a foot which has been removed from a young pig immediately after the animal was killed and dressed. The skin is beautifully white and delicate. Around the foot we will lay a thin gold wire or chain, and then discharge from the large Leyden battery through the wire. This done, I pass you round the foot, and you will see distinctly, not only a line marking what was the position of the wire, but the metallic gold, inlaid as it were in the skin. We may accept, therefore, that the vulgar statements of the finding of metallic lines on the bodies of persons struck by lightning are sometimes true. I failed before to illustrate this fact because the wire was too thick, and conveyed the discharge without being fused. And here there is suggested to us a very important piece of knowledge bearing on medico-legal investigations. Persons are sometimes found dead after lightning storms, and, it may be, a doubt arises respecting the cause of death, or, if the cause be clear as from lightning stroke, respecting identity of person. In such a case the detection of a metallic mark on the body would be of the greatest moment. The portion of skin containing the mark may be carefully dissected out, and from the colour of the stain an idea may be obtained as to the metal that has left the stain. Moreover, by subjecting the part to chemical analysis, the precise metal may be determined. Armed with these two facts, the Medical witness could not only say that the mark he found on the body was a true metallic mark, which nothing except electric discharge could strike on the body, but he could further say that the deceased, at the time of being struck, wore or carried a certain metallic substance, of gold, silver, copper, or other metal. In some measure, too, the character of the stain would determine the intensity of the discharge which produced it, and the thickness and substance of the metal which had been fused. A discharge of low intensity might produce heat of the metal and a burn, but it would not fuse even a very thin metal in such a manner as to leave a true metallic stain. A discharge of great intensity, such as we produce with the cascade battery, would produce no stain and probably no mark at all; in other words, it would not be diverted from its course, but would penetrate directly through the organism. The discharge which effectually produces the stain is that which we obtain from the common Leyden battery.

When gold or other metallic substance is fused by the discharge in contact with the natural coverings of animals, such as fur, hair, or feathers, the metal seems to combine with the parts so intimately as to form a part of the structure. In the fur of the rabbit we saw, at last lecture, the gold producing a kind of natural pigment, so that one might say, looking at the animal which was originally white, that it was now grey and white: the colour lasts, too, until by new growth the fur is replaced. If, therefore, we cannot turn a black white, a process which may not in time be so difficult a task after all, we can turn a white to greyish black with perfect readiness.

An exceedingly pretty experiment in this same direction may be made with the feathers of birds. Here is a feather of exquisite whiteness; I have woven through it some thread of gold: here is another similar feather through which I have woven thread of silver. I will ask our friend Mr. Pepper to pass the Leyden discharge through these metals interwoven with the plumage. He does so, and now you see the feathers are entirely changed in colour, variegated in wavy lines. The feather interwoven with gold is of purple tint in the coloured parts; the feather interwoven with silver is of silver grey, like the feather of a grey parrot, and so firmly is the metal implanted it could not readily be removed except by chemical action, which would break up the structure. Vitruvius, telling of the interweaving of gold in the tissues used for dresses by the rich dames of antiquity, informs us that, in order to preserve the gold, the dress, when it was no longer wearable—when it was tattered, we may presume, or out of fashion—was put in an earthen vessel and burnt over a fire. Then the ashes containing the precious metal were carefully gathered together and put into water, where they were treated with quicksilver, which picked up the gold, and converted it into a mass which in these days we call an amalgam, which amalgam, he says, was afterwards made to yield back the gold by compression through a piece of cloth. By our modern science we could even be more economical than the artisans of the time of Vitruvius, for we could mark cloth with gold, using grains where they used ounces, and still retaining the power to get our gold back again when we desired. The amalgamation of metallic substances with organic bodies by electrical discharge, such as we see in the feathers before us, opens up a curious physiological question—viz., the part which metals, in a state of very fine subdivision, play in effecting the colouring of many structures of living animals. Here is a red feather plucked from one of the birds called the Turaco. The researches of Mr. Church have proved that this feather contains the metallic element copper, and he has produced for us from it a red colouring matter, which he has named Turacine, and which contains nearly six per cent. of copper. In Turacine the metal copper is a true chemical combining element—as perfect a combining element as sulphur and carbon in albumen. But I must stop, and proceed to another and different topic.

ON THE CONDITIONS FOUND AFTER DEATH FROM ELECTRICAL SHOCK.

Our experiences of the condition of the organs of the body after death by electrical discharge are more varied and extensive than have yet been recorded. In the experiments with this large coil, animals of different kinds and of different sizes, from small rabbits to full-sized sheep, have been instantaneously killed either by the ordinary Leyden or by the cascade discharges, and the state of the visceral organs has been studied immediately upon, and at varying periods of time after, the death. Much still remains to be accomplished, and all remains to be accomplished in respect to minute or microscopical changes. I will epitomise, then, what has been observed simply by the unaided vision, and, to make the narrative systematic in arrangement, I will begin with the brain, and pass downwards through the different structures. The external lesions need not be named, as they have been incidentally recited in preceding lectures. To make the history to be rendered more conclusive, we have killed to-day, by instantaneous shock, several animals; and Dr. Sedgwick, to whom I am so much indebted for the most effective aid, has been kind enough to make dissections of the various parts, so that you may see what has occurred as I pass from one structure or organ to another.

The Brain: its Surrounding Parts and Appendages.

The vessels of the brain, after both kinds of shock, are found distended. The sinuses are enormously distended, more so than the quantity of blood which they hold would seem to account for. The arteries, on the contrary, are contracted and

(a) Delivered at the Royal Polytechnic Institution on Tuesday, July 13.

empty. In one or two instances there has been found a small effusion of serum beneath the arachnoid, and in one case there was a film of blood beneath the same membrane, showing rupture of vessel. The brain itself (as far as mere observation with the naked eye is of value) has in all cases apparently escaped injury. The structure of the brain is of natural pink hue; congestion of the minute vessels and vascular points are absent altogether. The same observations extend to the medulla and the spinal cord. The cord itself is healthy, but there is turgescence of the vessels. Often, on lifting up the brain and medulla, there is a free escape of bubbles of gas. The membranes show great redness and vascularity in parts whenever the fatal discharge is made to course, from the head to the inferior or hinder extremities of the body.

The Lungs and Air-passages.

The lungs in every case have been found natural. The organs are left filled with air, of pink colour, and free of any trace of congestion. On the pleural surface there were observed, in one or two animals, small ecchymoses indicating the course the electric current had taken, but there was no sign of injection, no redness, and no effusion. In one of our experimental observations Dr. Sedgwick and I noticed a very singular phenomenon. An animal had been killed instantaneously by the discharge from the large Leyden battery. The body was at once laid open, and the lungs were found in a perfectly natural condition, as described above. We brought the animal from the Leyden battery to the front of the coil, and passed a series of flaming shocks through the body, directing them from the brain to the hinder limbs. As each shock was given the return movements of the animal were most striking; they were like momentary flashes of life in and through the whole muscular system, voluntary and involuntary. But, more remarkable still, as we watched the lungs, we saw that under the influence of the shocks the previously pink and healthy organs assumed a paleness, and in time became as white as pure chalk. The shocks were telling upon the vessels of the lung, the vessels of the pulmonary tract, producing contraction of them, with complete expulsion of the remaining blood contained in them.

The Heart.

The heart in all cases is gorged with blood on the right side, and not unfrequently the left side contains a large quantity of blood. The blood is darker than is usual in the venous, and very dark in the arterial chambers. In one case, from the distension of the right auricle, the muscular wall was found ruptured, and blood had exuded from the opening. This rupture of the heart is not uncommon after death by lightning. In the *Medical and Physical Journal* I find a report of an accident in which four horses, in team, were killed by lightning, and in all it was found that the heart was ruptured. We detected in a few cases excess of fluid in the pericardium; in these examples the vessels of the heart were intensely distended. We also saw on the inner surface of the pericardium one or two ecchymosed spots in two of the animals.

Alimentary Canal.

Very important changes are found in the alimentary canal in many cases of death from electrical shock, and some changes in all cases. It would appear that the alimentary tract is an excellent conductor of the electrical current. The stomach in one case was found ruptured, and in two cases the walls of the organ were softened as if in an early stage of gangrene. In another case the intestines along the whole tract of small intestine were intensely injected through their structure, and were of dark purple-red colour. The change was so striking in a sheep that the butcher who dressed the animal detected it.

Injury to the alimentary system has been seen in the human subject after shock by lightning. A typical case of the kind is published in volume viii. of "Medical Facts and Observations," by Mr. Patrick Paterson, Surgeon of the 29th Regiment of Light Dragoons. In this case one Nathaniel Bailey, a recruit of the regiment, thirty-five years of age, of corpulent habit of body, and rather disposed to obesity, applied to Mr. Paterson, complaining of failure of his sight, with uneasiness and sense of fulness in the epigastric region. On attempting to swallow either solids or liquids, he felt some resistance to their descent high up in the throat; he had also slight headache confined chiefly to the forehead. His pulse was natural, his body constipated, his appetite bad. His pupils were much dilated, and the iris of each was but little sensible to the action of light. He could not read the largest print, however near to him, and objects at a distance put on a confused and indefinite form, and seemed of much larger size than was natural.

He dated the origin of his complaints from two days before, when, travelling upon the top of a stage coach from Pershore, he had sensibly felt a flash of lightning affect his sight, and soon after experienced some uneasiness in the stomach. On being interrogated relative to this circumstance, he told Mr. Paterson that he felt himself somewhat shocked at the time the lightning dazzled his sight, but could not positively say whether it proceeded from the lightning or from an accidental movement of the carriage, so transient was the sensation. A bolus was prescribed at once, but it did not operate, and the attempt to pass food into the stomach became less successful. On the following day articulation became indistinct, like that of a person suffering from croup, and the tongue and fauces were dry, without any thirst. Next day the breathing became stridulous, and, as the uneasiness of stomach continued, emetics were given, but without any effect; it seemed, says Mr. Paterson, as if there must be some mortal affection of the stomach which had utterly deprived it of all power of being ever again called into action. The man died on the fourth day, and on opening the body the stomach was found gangrenous within, over a very large extent, the external surface being inflamed and livid. The inflammation was not that of great action. The gangrene, commencing near the cardia, extended over the whole of the stomach to within two or three inches of the pylorus. A portion of the mesocolon, of about the size of half a crown, was of a bright red colour, and of a very fine, delicate, membranous texture. The other parts were natural. In this case there was communicated to the stomach a shock equivalent to the shock from a mechanical blow, causing an almost complete paralysis of the organ. These effects of electrical and of lightning shock on the alimentary system are such as should be known and remembered. In a forensic point of view, the knowledge of them might be of extreme importance, since, in a case of doubtful death from pure lightning stroke, the appearances in the stomach, in the absence of correct knowledge, might be mistaken, and that readily, for the effects of an irritant poison.

The Liver.

The liver in our experiments has not been discovered as a seat of serious lesion. Rupture of the gall-bladder, which has been spoken of as having followed upon lightning shock, we have not observed, but the gall-bladder is usually distended. Rupture of the structure of the liver has not been observed.

Kidneys.

The kidneys have been always found congested, but not subject to any other lesion, the congestion itself being connected with the congestion of the large vessels and of the right side of the heart; it would appear to be a secondary result.

Peritoneum.

In several cases the surface of the peritoneum has presented a line of deep, dark, ecchymosed spots. The spots have been well defined, and dark as jet-black ink stains, and often arranged in a line mapping out the course which the electric current has pursued in its passage through the body. In a sheep killed by the discharge, a chain of these spots was traceable over the peritoneal surface, from the under-surface of the diaphragm over the kidneys, and down into the pelvis.

The condition of the muscles and of the blood has been already described in the previous lectures.

Cause of Death from Electrical Shock.

Many theories have been advanced to account for the cause of death from lightning and electrical shock. The view held by John Hunter was perhaps the earliest that was received, and has been the one most firmly maintained. This view is "that death is instantaneously produced in the muscles, which therefore cannot be affected by any stimulus, nor consequently by the stimulus of death." The view thus so singularly and, as it would seem to those who have not tried to understand the meaning of Hunter, so enigmatically expressed, is based on the notion—believed by its author to be a fact—that muscles do never contract after death by electricity. This idea we have seen not to be based on fact, and the theory founded upon it falls altogether to the ground.

Other authors have supposed that in all cases of death the fatal result is due to mechanical injury—to rupture of some structure or structures which are essential to the continuance of life, and the integrity of which cannot be broken without a fatal catastrophe; while a third class have attributed death to spasm of the heart and of the muscles of respiration.

It seems to me, from the experiments we have made in this place, that strictly none of these views are correct, but that the immediate cause of death is of a more simple nature. I trace the cause of death in all cases where it is instantaneous to the process of sudden expansion of the gaseous part or atmosphere

of the blood, combined in extreme degrees of shock with a sudden conversion of animal fluid from the fluid into the gaseous condition. Let me take an egg in illustration. I will make a pin-hole at each extremity of the egg, and pass the wires from the Leyden battery, positive and negative, one into each hole. I will next discharge the battery, and, from the expansion which occurs, the shell of the egg is torn into fragments, and it, with what it contained previously, is cast about many feet, I may say yards, in all directions. Let me modify this experiment. I take the head of a dead fowl, and dissect back the skin from the crown of the head. Then I connect the medulla with the negative pole of the battery, and, having charged the battery, I direct the positive pole towards the exposed portion of skull, and make the discharge. See what has happened. Although, from the fact of the head being removed from the body, there is an opening by the spinal canal into the skull cavity, yet, such has been the expansion, the skull is not merely fractured, but a portion of it, of the size of a sixpence, is lifted off entirely, and the brain is exposed to view. By this experiment we see what is the instant effect of electrical discharge on the animal body. In proportion to the power of the shock there is expansion within the organism. There is expansion of the blood, distension of vessel, and, according to the degree and place of expansion, there is infliction of serious injury.

In reviewing the character of the injuries caused by the electrical discharge, we see clearly the simple effects of expansion, and, by this key to our readings, we are able to understand every lesion. The arborescent markings of external veins, the great distension of the large veins and of the right side of the heart, the rupture of the right side of the heart in one of the cases, the serous effusions, the ecchymosis, and the rupture of the stomach, are, one and all, phenomena at once explainable on this simple exposition. Equally clear on the same exposition are the nervous phenomena. The sudden insensibility reaching the insensibility of death is the result of sudden expansion within the closed cavity of the skull—expansion by which the molecular construction of the nervous mass is disturbed, disarranged, and irrevocably broken.

Nay, more, by this same exposition we are able to understand the phenomena following upon those minor shocks which we have seen producing temporary insensibility and what, in a certain sense, may be called anæsthesia. In these examples the structure of the brain is disturbed, but not irrevocably broken; there is induced a loss of function, but by time and rest the order is restored, the different minute parts, by attraction of cohesion, come again together, the centres are reformed, and with the restoration of natural structure there is restoration of natural action.

By this same exposition we may also readily account for those local lesions and secondary effects of local lesions which we have traced as following after electrical shocks and lightning shocks that have not been sufficient to kill—perhaps not sufficient at the time to lay the body prostrate and insensible. The paralytic state, the catalepsy, the epilepsy, may all be traced to pure disarrangement of nervous matter from the one physical cause, *expansion*.

A last and extreme condition yet remains to be thought of, and that is the complete disorganisation which has been observed, after lightning-stroke; when the blood is left fluid and incoagulable, the body distended with gas, and the destruction of organic parts well-nigh universal. Once more, in exposition of these conditions, expansion, due to vehement force of stroke, is sufficient to account for all the phenomena. The blood in such cases, as Dr. Cleveland has ably pointed out, is decomposed throughout the body, as it is in our closed tubes when we send through them, charged with blood, the Leyden shock: the colour of the blood is changed to deep black, and gases of decomposition are instantly set free, while in a greater or lesser degree the same change extends in the soft solids. In a word, there is general decomposition.

Treatment after Electrical or Lightning Stroke.

When an animal has received a lightning stroke or an electrical shock which at one shock paralyses the heart, the death is the most complete and sudden of all deaths; nothing, indeed, admits of being done. But in many cases the action of the heart continues after the respiration has ceased and after complete unconsciousness, and it might be expected in these instances that some line of treatment would be possible which should restore respiration and the other functions of life. I regret that in most cases every means which may be devised will fail; but there are three methods of recovery which have been employed, and all of which have been tested by experiment on the inferior animals with varying success. I will notice them in what seems to me the order of their value.

Venesection.—The free abstraction of blood is the first and best treatment after lightning shock. In one of the cases related in a former lecture, where several men on board ship were struck by lightning and were rendered insensible, it will be remembered that free bleeding was employed with the utmost benefit, and that from one man no less than fifty-two ounces of blood were drawn. This practice is in entire accord with principle. At a moment when all the large veins and the right cavities of the heart are tense almost to the point of rupture, and when the brain is bearing a compression which causes unconsciousness, what can be more reasonable than to take off the distension by making a free opening into the circulatory system? Presuming even that the heart has ceased to beat, the opening of a vein can do no harm, because the vein will fail to bleed, and therefore no blood will be lost; presuming that the heart has not ceased to beat, but is failing from the pressure which is being exerted upon it, then the least removal of that pressure is the surest mode of setting the organ free. We have had here some most unexpected and important evidences of this truth. We find that if a sheep, which is about to be slaughtered, be first struck down by the discharge—by the discharge from the cascade battery, or by the discharge from the ordinary Leyden battery of one hundred square feet, superficial—the animal, on receipt of the discharge through the body, falls as if dead, and is in fact dead. But if now, instantly, the throat be transfixed by the butcher, in the usual way of killing sheep, in some seconds after the blood begins to flow the animal shows what would appear to be the signs of recovery—that is to say, the respiratory movements are renewed, and before the actual death there are the general convulsive movements which follow death from simple hæmorrhage.

Experience and experiment thus combine to teach us that the first step to take, if called to a person stunned by lightning, is to draw blood from a vein. I should myself be inclined to draw from the external jugular vein, and to lay the body perfectly horizontal, so as to get an easy outflow.

Artificial Respiration.—Artificial respiration has not, as far as I am aware, been tried on the human subject after death by lightning-stroke. We have tried it here in several cases on animals which have been struck down by the discharge, and I have devised for these experiments a pair of pocket bellows, which leave nothing to be desired in respect to the production of a perfect and accurate imitation of natural respiration. The bellows are constructed really on the plan of the bellows invented originally by John Hunter, reinvented by M. Gorcy, of the Military Hospital of Neufbrisac, in 1790, under the name of the "apodopnic" bellows, and again reinvented, about 1835, by Mr. Read, of Regent's-circus, Piccadilly. They are, as I have modified them, different from those which preceded, in being constructed of india-rubber, and in being exceedingly portable and manageable. By one grasp of the hand with these bellows we fill the lung of the animal, through one nostril, with fresh air, and by relaxation of the grasp we extract the impure air from the lungs—the bellows having two chambers, one for feeding the lung with pure air, the other for removing from the lung impure air.

But despite all this care to make the process of artificial respiration practically perfect, we have found it by itself of no real efficacy in treating animals which have been struck by electrical discharge. I will make here an experiment in point. With one discharge from the Leyden battery we will strike down a large rabbit. I find the heart of the animal is still beating, and at once, by inserting the bellows-tube in the nostril and setting the bellows in gentle action, I induce artificial respiration. See, now, how accurate is the representation of the natural act of breathing; you might conceive that the animal was alive. But I keep this action up for any time without result; the nervous centres are under pressure, or are disorganised by separation of part, and the heart is under pressure which it will struggle to oppose in vain, until it becomes paralysed by its own efforts to lift its column of blood. I do not therefore attach any importance to artificial respiration as a primary method of restoring animation after lightning-shock, but I think it would be an admirable adjunct to treatment by free venesection. Directly the heart were set at liberty from its bonds, the contraction of the right ventricle, effectively made, would send a wave of blood into the pulmonary circuit; and if then that charge of blood should be allowed, by means of artificial respiration, to meet a charge of fresh air, the best results might naturally be anticipated. I would venture to lay down, as the second important rule in all cases of shock by

lightning, that, so soon as a vein can be got to yield blood, the lungs should be gently and steadily charged and emptied of air by the action of a double-acting bellows, such as I have used to-day.

Electrical Excitation.—Paradoxical as it may seem, it is nevertheless true that electrical excitation has been proposed as a means of recovery from electrical and lightning shock. Mr. Kite, a writer of no mean pretensions in the last century, urged this practice very earnestly, and the Royal Humane Society, in its report for the year 1785-6, inserted a letter from one "Humanus," of Bristol, supporting the same view. Amongst other arguments used by "Humanus" was the narrative of a case in which the practice was actually and, he thinks, successfully employed. On Thursday, June 18, 1782, he relates that a house in Gravel-lane, Southwark, was struck by lightning, and an elderly man was thrown with violence from his chair and taken up for dead. In this hopeless state "electrisation was performed by a skilful Practitioner of Guy's Hospital, by which remedy the man was at length entirely restored." The most potent advocate of this method of treatment, however, was Dr. Abilgard, a French Physician, who corresponded with Benjamin Franklin, and won from that philosopher great admiration. Abilgard's theory was founded on experiments on fowls, in which he showed that, after fowls were apparently struck dead by violent electrical shock passed through their heads, and were not recoverable by ordinary means, they were soon reanimated by gentle shocks passing through *the heart and lungs*. To some extent there is a reason, I find, in this argument. If the electrical discharge be passed purely and simply through the brain of an animal, it produces a concussion which strikes the animal senseless, and does not necessarily kill. In this state the heart remains in motion, and if the respiration be sustained, either by artificial means or by exciting the respiratory muscles, recovery will sometimes, especially in young animals, occur. At this point we must "season our admiration" for the use of electricity *versus* electricity. In an animal or man struck down by lightning, the injury is not specially localised to the brain; the heart shares in the disturbance, and the transmission of the electrical shock through the organ would be more likely to lead to disaster than to good. We have tried here electricity as a restorative from electrical shock through the body, in every practicable manner, and, although we can often excite muscular action even for an hour after death, we have not succeeded in doing more than produce contractions with each stroke administered, and by which the natural power of contraction, under excitation, resident in the muscles has definitely declined. On the whole, therefore, at this stage of thought, I should rather discountenance the practice of electrical excitation as a remedy for shock from lightning or electrical discharge.

And now, gentlemen, I have to announce that our meetings must come to an end until October. The time is not long, but is very necessary as a time of preparation for the winter course, and as a partial time of rest from labours which, it is not to be concealed, are sufficiently severe. I thank again the proprietors of this most useful Institution, and their excellent Professor, Mr. Pepper, for the great privileges they have accorded to me, and I thank you most sincerely for the countenance and encouragement with which you have favoured me. The *Lancet*, in an article on physiological research, spoke powerfully and feelingly the other day on the enormous difficulties under which those few—alas! very few—men lie, who endeavour to keep alight the torch which can alone show the way to the highest ranges of Medical science and art. The writer, gentlemen, did not, I assure you, overstate the difficulties. They are the severest of all in science, and in England are most severe, because, out of the Professional circle, they are unrecognised, and the victory over them is crowned with no reward. Strange is it, nevertheless, that in England the victory over these difficulties has been the most practical, the most progressive, the most useful. Here our Harvey unravels the mystery of the circulation of the blood; Mayow opens up the discovery of the respiratory functions; Willis unfolds the brain and nervous system; Black reveals the analogy of animal and common combustion; Priestley makes known the existence of oxygen; Humphry Davy founds the system of annulling pain; Charles Bell defines the division of the function of nerves; and Marshall Hall demonstrates reflex action. Basic discoveries all, on which our science, the world over, rests. The men I have named fought against the difficulties peculiar to the study of physiology, even as we do, and stand before us to be obeyed and followed. Following them myself in a simple way, though not for a moment presuming to be like them in anything save their earnestness of purpose, I experience no pleasure so great as that of feeling I have your support in striving, like them, our immortal masters! to sustain the unmatched glory of English physiology.

VOTE OF THANKS TO DR. RICHARDSON FOR HIS LECTURES.

At the close of the above lecture,

Mr. Spencer Wells said that something more than the warm applause which had just greeted Dr. Richardson was due to him at the close of this series of the very remarkable courses of lectures which had delighted not only the many distinguished men from various parts of the world who had listened to them and witnessed the hundreds of experiments by which they were illustrated, but which had been carried by the Medical press far and wide wherever our language is read, and had been made known by translation throughout Europe. On looking over the lectures published in the *Medical Times and Gazette*, the leading topics embraced a field of research so wide that they raised a feeling of wonder and admiration—wonder at the originality and industry of the physiologist, and admiration of the great practical benefits conferred on suffering humanity by the Physician. The first lecture, on healing by first intention, had been followed by the general use of that combination of tannin and collodion which was every day proving of more varied usefulness. The very remarkable lecture on the influence of extreme cold on nervous function, and the following lectures on anæsthesia which led to an extended trial of the substance sold as bichloride of methylene as a substitute for chloroform, had not yet produced their full effect; for, unhappily, the art and commerce of the day were far behind the science of the day. Science communicates freely without reward the result of laborious investigation, and too frequently dishonest tradesmen or ignorant artisans reap a fraudulent profit from scientific work, which they either cannot understand or else understand too well. All Dr. Richardson's discoveries had been thrown generously open to the world. Most of them had led to extended inquiries in other countries, and even when some correction had followed, great good had been done and new truths added to the domain of science. Following up the topics considered in the series, many gentlemen would recollect the very important lectures on the cerebral origin of intermitting pulse, on the condensation of gases in the respiratory process, on false aneurismal murmurs, on increase and decrease of animal heat, and on the properties and uses of peroxide of hydrogen and of ozonic ether. A friend by his side told him that if Dr. Richardson had done nothing else, the good he had done by teaching us how this ozonic ether relieves the distressing paroxysms of dyspnœa in the later stages of phthisis would be enough to earn for him the gratitude of the suffering all over the world. He (Mr. Wells) could speak from his own experience of the enormous practical value of the researches on the causes of excess of fibrine in the blood and its deposit in the heart during life. The interesting lecture just concluded, with those which preceded it on the phenomena and cause of death by lightning, served still further to show how wide is the scope, and how valuable are the results, of Dr. Richardson's researches and teaching. They are thrown freely open to the whole Profession; they have raised the character and extended the reputation of English physiology, and have not been less useful to British Medicine. They have lessened human suffering and saved human life, and are well worthy of something more than the formal vote of thanks which he (Mr. Wells) was proud to propose.

Mr. Streeter seconded the resolution, which was put and carried unanimously.

Berlin University.—The Rector Magnificus for the ensuing year is Herr Geh. Medicinalrath Professor Dr. Du Bois Reymond, and Professor Dr. Reichert is the Dean of the Medical Faculty.

Billroth *versus* Kraus.—Dr. Kraus, the defendant in the action brought against him by Professor Billroth for having inadvertently stated in his journal, the *Wiener Med. Zeitung*, that he had left a sponge in the abdomen after ovariotomy, has presented a verbatim account of the trial in two supplements, in order to exhibit what he considers the unjust conduct of the Professor towards him. He states that during the trial Billroth's pupils and assistants cheered all statements that were made by witnesses or advocates in his favour, and hooted those of a contrary character.

ORIGINAL COMMUNICATIONS.

THE HISTORY AND PRACTICE OF ANIMAL VACCINATION.

By HENRY BLANC, M.D., F.R.G.S., etc.,
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At the International Medical Congress held at Lyons in 1865, Dr. Viennois, who had vainly endeavoured to find some means of avoiding vaccinal syphilis, publicly proposed to abandon human vaccine lymph, and to return to Jenner's first practice —namely, vaccination direct from the cow. On that Dr. Palasciano, of Naples, informed the meeting that animal vaccination had been adopted at Naples for many years, and was attended with many practical advantages. It appears that Dr. Troja, of Naples, shortly after the introduction of vaccination in Italy, in order to obtain a more active lymph, had recourse to retro-vaccination. After him Galbiati, one of his pupils, adopted this practice, which became so popular that "orthodoxy" became frightened, and Galbiati was officially forbidden to vaccinate direct from the cow. Galbiati resisted and fought bravely for the good cause he had undertaken; but his enemies were too numerous and too powerful, and, at last conquered, he died of misery and despair.

But Galbiati did not die in vain. His labours, like all that is good and true, could not be so easily crushed, and another brave man had the courage to accept his dangerous legacy. Dr. Negri was more fortunate than his predecessor; he was, nevertheless, on several occasions, the victim of the bitter warfare "vested interests" waged against this reform. Twice, says Dr. Lannoix, *cet homme de bien* was cast into prison—once on the charge of being a Liberal, a second time on that of being a Conservative. Dr. Lannoix, of Paris, who was present at the Medical Congress of Lyons, deeply impressed with the benefit his country would reap from the introduction of animal vaccination, at once proceeded to Naples, and, after studying the system under Dr. Negri, returned to Paris, bringing with him an inoculated heifer.

In the meanwhile the popular prejudice in Belgium against vaccination was so general, that Dr. Warlomont, the able Director of Public Vaccination in that country, fearful lest, in the absence of vaccination, small-pox would reappear with all its former virulence and malignancy, applied to Dr. Lannoix, and obtained from that gentleman an inoculated heifer, with which he began to practise animal vaccination in Brussels. I may here state that he had but little difficulty in overcoming all honest opposition, and not long ago he informed me that, during the first six months of the present year, he had himself vaccinated at Brussels more than 2000 children.

At the present day animal vaccination is not only very extensively practised in Italy, France, and Belgium, but has also of late been introduced into Prussia, Austria, and Russia. During the last winter I had the pleasure of studying animal vaccination under Dr. Warlomont, of Brussels, who, with much cordiality, instructed me in all the details of a system he has so completely mastered. On two occasions I also visited Dr. Lannoix's establishment in Paris, and to that gentleman's kindness I am indebted for much practical advice. On May 5 I vaccinated, with heifer's lymph obtained from Dr. Warlomont and from Dr. Lannoix, my first heifer in London, and since then I have kept up a regular succession of inoculated calves; nor shall I regret the arduous task I have imposed myself, nor the considerable expense to which I have been put, if the Medical Profession will only give a fair trial to such a safe, harmless, and highly valuable prophylactic as heifer lymph, and follow after me in my endeavours to bestow upon the public no more a doubtful and untrustworthy protection against small-pox, but one deemed worthy of all confidence by the great Jenner himself.

I am happy to state that in this country several Medical men have applied to me for heifer lymph in order to introduce in provincial towns the system I am now working in London; amongst them Mr. J. Greene, of Birmingham, and Dr. Cassells, of Glasgow, have been the most persevering, and consequently of the most successful.

In 1866 Dr. Lannoix, of Paris, abandoned the Neapolitan lymph for some spontaneous cow-pox found by Dr. Depaul, the Director of Public Vaccination in France, on a cow at Beaugency. In July, 1868, Dr. Warlomont also met with a case of spontaneous cow-pox, and from it renewed his supply. However, both these gentlemen found no difference whatsoever in the appearance of the vesicles due to the old and to the more recent lymph. As I have already mentioned, I inoculated my first heifer with lymph from Brussels and Paris, and found that the eruption was the same for both. Mr. Ceely, of Aylesbury, kindly gave me some crusts collected on a case of spontaneous cow-pox seen by him in 1842; out of twelve inoculations made with this lymph I obtained on the heifer three vesicles; with these on the following calf I obtained a dozen vesicles; from these I vaccinated some children, and both on the calf and on the children the lymph of 1842 followed the same course as the more recent lymph of Beaugency and of Brussels.

It is necessary to insist upon the following fact:—The vaccine lymph at present used by animal vaccinators in France and Belginm, and by myself and by those I have supplied in England, is spontaneous cow-pox taken from cows. This lymph has never passed through the human body, and has no connexion with the Neapolitan lymph, of whose origin at one time some doubts were expressed.

In selecting the calves we propose to inoculate, great care should be taken to ascertain that the animal is in perfect health and in first-rate condition. The question of health is not of much importance with reference to the possibility of the transmission of disease, because, if in any way "seedy," the inoculation will partly or completely fail; but with this failure the link is interrupted, and, if no preserved lymph has been kept in reserve, much inconvenience must necessarily follow. Calves from five to six months old should be preferred: too young they sicken, too old they are difficult to manage. It will necessarily require a much more lengthened series of inoculations in order to arrive at some precise rules, but, as far as I have observed, it appears to me that strong calves give a stronger lymph, delicate calves a weaker lymph; also that in white or light-coloured calves the eruption appears sooner, the vesicles are larger, and arrive at maturity a day earlier than in black or brown calves. In warm and moist weather the eruption is quicker in its development, in cold weather somewhat later. From these two observations I would therefore advise that dark calves should be selected in warm weather, and white or light-coloured calves in cold weather. Male and female calves are alike suitable; the only important point is to select those whose skin is fine and transparent, and the mammæ or scrotum full and plump.

In order to vaccinate the calf, it should first be bound and held firmly upon a table by a couple of assistants; any strong table will answer the purpose. Mine is of common deal wood, provided with six iron rings. Two men seize the calf and place it on the table. The forelegs are bound together and then tied to the front rings, the right hind-leg is tied to the posterior ring on the table, and the left hind-leg is lifted up and fixed by a rope to a ring placed above. A loose rope is passed over the neck, so as to keep the head down. The calf thus secured is easily managed. To avoid dirt, a circular hole is made in the table, to which is adapted a zinc pot in which the excreta are received. First of all, the mammæ or scrotum and the surrounding abdominal region must be very carefully shaved. I dispense with the Continental practice of scraping the poor brutes in order to excite vascular action; I allow them the luxury of a good layer of soap and a sharp razor, but after the shaving the parts are frictioned with a dry towel.

To inoculate the calf different plans are followed—either superficial incisions of about half an inch in length, smaller and deeper incisions, or valvular punctures. Dr. Warlomont prefers the long incision, Dr. Lannoix the smaller one. I have tried both, and now generally inoculate by long incisions and by valvular punctures, kindly suggested to me by Mr. Marson. The long incisions give more lymph, but I believe that it is not quite so active as the one obtained by the valvular puncture. I therefore prefer the last for vaccinating children, and from the first I collect lymph for inoculating other heifers. I make on the mammæ or scrotum, and on the abdomen, from 100 to 150 punctures or incisions. I inoculate a heifer every eighth day.(a) If at that date I find on the heifer some vesicles still transparent, I use them for inoculating the fresh calf. Sometimes none are found in that condition, at other times only a very few; it is therefore necessary on the sixth and seventh days always to collect a certain amount of lymph for inoculating the next calf, as well as to have a supply on hand in case of accident. Although lymph in tubes frequently fails when applied to man, it retains for several weeks all its properties when inoculated into the bovine race. Care must be

(a) Having shortly to return to my duty in India, I have been obliged to give up practising animal vaccination in London.

taken before filling the tubes to add a drop of glycerine to the lymph, otherwise it would adhere so strongly to the tubes that it could not be blown out again. I am careful that every incision and puncture is well touched with lymph. Between the thighs, and on the mammæ themselves, on account of the higher temperature of these parts, the vesicles rise sooner, and are also the first to lose their limpidity; therefore I have seldom found any of them fit for use on the eighth day. When the weather is warm, in order to have some good vesicles for the eighth day (for inoculating the next heifer), I make on the abdomen a certain number of punctures with lymph preserved for a month or six weeks; whether the cause lies in the lymph or in the cooler spot, the important fact is that usually the vesicles developed under these conditions are a day late. But as in man, the individual susceptibility of the calf has also some influence. In the majority the eruption is beautiful—all the vesicles following a regular course, and yielding an abundance of lymph. In a few rare instances a great many of the vesicles are arrested in their development, or are quite superficial, almost dry, and early lose their transparency. To inoculate a calf carefully it requires about an hour; as soon as the operation is completed, the calf should be removed from the table, made to drink some milk, and tied in his stable. A cloth bandage in summer, one of flannel in winter, should at once be tied round the abdomen. By this the parts are kept warm, the calf is not annoyed by the flies, nor can he lick the inoculated spots. For this reason also the head rope should be rather short.

Great care should be taken to see that the stable is kept very clean and well ventilated. The walls should be whitewashed once a week, and the litter frequently changed. I have tried many different varieties of food, and I now prefer milk—a quart morning and evening—and a few pounds of hay during the daytime. If the stable is not very clean, and if the food disagrees with the animal, diarrhœa soon makes its appearance, and, if not checked at once (chalk mixture and tincture of opium), it will greatly modify the course of the eruption, even cause it to wither, or to become purulent and useless.

The course of the cow-pox eruption on the heifer is as follows:—

2nd day.(b)—Nothing visible. A few specks of dried blood alone mark the places of the punctures.(c)

3rd day.—Around several of the punctures a reddish circle can be perceived, and by looking with a magnifying glass several of them appear slightly raised.

4th day.—Papulæ visible; more developed on mammæ; same red circle; by passing the finger on the less apparent even there we feel a small hard elevation.

5th day.—Vesicles forming; some increasing in size; limited areola; eruption on mammæ more advanced.

6th day.—Vesicles with a transparent apex, more inflamed, but areola still limited. Some of the vesicles are flat, whitish, with slight central depression. The animal keeps in good health, eats well, but the pulse is rather frequent, and the temperature higher.

7th day.—All vesicles larger, transparent; less inflamed areola. The vesicles rise above the skin, are round, hard, even; central depression better marked; on many a slight yellowish crust is forming.

8th day.—Central crusts more marked; vesicles raised, hard, a few still transparent; on the mammæ all are whitish, and contain turbid lymph; pale areola. Animal's health good; no increased temperature nor frequency of pulse.

9th day.—Vesicles larger, more elevated, white; crusts larger and darker; no areola; a few secondary vesicles are rising.

10th day.—Vesicles rather shrunken, white yellowish crusts, larger and browner. Secondary vesicles larger, contain a little turbid lymph.

11th day.—Crusts darker, and covering almost completely the vesicles; around some of the vesicles an external whitish rim is forming, very superficial.

12th day.—Crusts dark brown, almost all dry; they adhere to the vesicles; under the crust a few drops of turbid fluid are found.

I have never followed the eruption beyond the twelfth day.

The cow-pox vesicles in heifers being deeply seated, the lymph only flows, or can only be made to flow by punctures, on or after the eighth day, when the great abundance of its fluid parts renders the lymph almost useless for vaccinating purposes. The best lymph is that of the fifth, sixth, and sometimes of the seventh day. Often on the fifth day nothing or very little is visible—mere pimples rather felt than seen; these, however, give the best and most active lymph. On the sixth and seventh days these deep-seated, hard vesicles, with a very small, often hardly perceptible apex, should always be selected and preferred. Several of those who on my recommendation have made some experiments with animal vaccination felt very discouraged on the fifth day at seeing no vesicles. On informing me of what had occurred, and the course of the eruption being explained to them, on subsequent occasions they obtained most beautiful results, whilst they had previously failed with the fine large vesicles of the seventh day yielding easily a large supply of lymph. I have often astonished my visitors by showing them the large amount of lymph that could be obtained from what appeared a mere dot. The lymph is deeply seated; the only question is, then, how to get at it? The Italian method of proceeding is to slice off the vesicle, and scrape off from its base the lymph required.

In Brussels and Paris this plan has been abandoned and the lymph forced through the vesicles by applying strong pressure at the base; for this purpose Dr. Lannoix uses a common forceps with a catch so as to keep it closed, and Dr. Warlomont a large and powerful specially made forceps. Mine is a modification of Dr. Warlomont's, smaller and nearly circular so as to compress but the base of the vesicle, and provided with a slanting slide so as to be able to increase or lessen the pressure at will. The vesicles of the fifth and sixth days, I have said, are the best, but from one of these vesicles is the first or last lymph the most active? Dr. Warlomont considers both equally good; Dr. Lannoix prefers the last. From my experience I do not like the very first drop; I generally wipe it off with the lancet and wait until more appears. I use the subsequent lymph as long as it flows easily; evidently, from the deep position of the vesicle and the Italian practice of taking the lymph from the base of the vesicle itself, the greatest activity should be found in the last drop of lymph. Vaccination, to be perfectly successful, should be made direct from the heifer. The person to be vaccinated should be brought near the heifer, the first small drop of lymph not used, and for each separate puncture the point of the lancet should be charged with fresh lymph from the vesicle. A very little lymph is required, but it is necessary that it should be warm and taken on the lancet only at the very instant it should be used. The lymph after a few minutes' exposure to the air becomes so glutinous, so much like a thick solution of gum, and adheres so firmly to the lancet, that it may be introduced repeatedly under the skin without leaving any of it in the little wound. To this cause are due many failures. I cannot too much, therefore, insist on these two points: the person to be near the heifer, and the lancet to be charged each time for every separate puncture.

By the passage of the spontaneous cowpox through the younger animal, the virus has lost its acrimony, and is never attended by any serious local inflammation. Should however, in some instances, the vaccinated arm be slightly inflamed around the vesicles, I have found that a coating of collodion (colledion one ounce, castor oil twenty drops) invariably arrests the progress of the inflammation after one or two well-made applications. I will just mention here that after one or two human generations the virulence and the acrimony of the lymph are greatly increased, and I leave for the present this fact to be explained by those who do not believe in the influence of the human body on the irritable acquired properties of vaccine lymph.

I have long ago advanced that preserved liquid in tubes, heifer lymph, could not be depended upon. I am still somewhat of that opinion, although of late, by using some precautions, lymph in tube has proved more successful. I allow the first drop or two of lymph to flow, and then fill my tube. I keep the tube open for about ten minutes, and then blow the lymph on a watch-glass; by that time a liquid portion surrounds a fibrinous thread. With the end of the tube I rub, and mix as well as possible both parts together. I then fill the tube again and seal it at once.

Dried on ivory points, heifer lymph gives very good results indeed, and daily I receive from those to whom I have supplied points very favourable accounts of the results obtained. Every point should be charged three times, and, as soon as the lymph is dry, put in a well-stoppered bottle, or in satchels of goldbeater's skin. Those not employed from one week to another I charge once more with fresh lymph on the following week before distributing them. I believe that those who fail can blame but themselves, as I never, or at least very seldom, hear of failures by those who apply them carefully. I always

(b) Supposing the heifer to be inoculated on a Monday at noon, at noon on the Tuesday the 2nd day begins.

(c) The course followed when incisions are made instead of punctures offers no material difference from the one now described.

recommend the practice suggested by Dr. Ballard—that is, to make on the arm a few superficial scratches, allow the blood to flow, and, when it is stopped, to clean the scratches with some blotting paper. The points should then be well rubbed in on both sides, and the little blood and lymph that may have been rubbed around the incision should then be collected with the point, pressed on the scratches, and there allowed to remain and dry.

Animal vaccination, we may conclude from the details I have given, is attended with a good deal of trouble, must be surrounded with much care and attention, requires the whole time of a person entirely devoted to this one object, and, I may add from personal experience, entails considerable expense. Why, then, should we adopt a practice offering so many difficulties, when, by remaining satisfied with what we have, we get on pretty well, if not to the satisfaction of the public, at least to our own? But we cannot remain satisfied any longer with the actual human lymph; the prejudices in the public mind are deep-rooted and wide-spread, and we should be unworthy of the confidence and trust placed in us should either trouble or expense be allowed to stand between us and our duty.

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CASE OF RARE POISONING.

By H. SMILEY KANE, B.A., M.D., etc.

So little seems to be known of the physiological action of hemlock and its allies on the human body, that it is even questioned whether they are uniformly poisonous. A case has occurred in my practice which may throw some light on this subject. I was called hastily a few days ago to see Jane D., a child of four years of age, who had been suddenly attacked with a strange illness. On reaching the patient, no satisfactory information could be obtained as to the probable cause of the alarming symptoms; all that the child's mother could say was that she appeared to be in her usual health a few minutes before the seizure, that the phenomena which I then witnessed were the first notice of the attack, and that they had continued uninterrupted in severity for upwards of an hour. Some neurotic poison was evidently at work. Could it be strychnine? From what I have seen on two or three occasions of the effects of that poison, I was strongly disposed to think it was. The body was very rigid, but not curved as in strychnia poisoning; no opisthotonos, but as if flexor and extensor were balanced in spasm; the legs were stretched straight out, the arms were flexed at the elbow in a right angle. There was no paroxysm, nor the slightest intermission apparent in the rigidity or its intensity. The muscles of the face only, and the fingers of both hands, kept convulsively twitching as in some forms of chorea, and so incessant and rapid were their movements that the eye could not follow them. The muscles of mastication were in rigid spasm, clenching the jaws as firmly as in the worst forms of tetanus, and those of deglutition were probably in the same condition. The eyeballs were both in the same condition, firmly fixed, and drawn upwards and inwards, apparently as much as they could be, in a line corresponding with the combined action of the superior and internal recti. Notwithstanding this inordinate disordered action of the recti, the pupils appeared natural, and were perfectly obedient to light. The chest being firmly fixed, ordinary respiration was hardly perceptible; the face was pale and cold, and at varying short intervals a convulsive attempt at respiration was made to expel the froth and blood gathering in the mouth. The tongue was half bitten through about an inch from the apex; this was the source of the blood in the mouth. The heart's action did not appear to be at all disturbed; the pulse at the wrist was probably weaker than usual, but its throb seemed perfectly natural and regular. As might be expected, there was complete insensibility to all surrounding objects—a silent helplessness that might have been mistaken for death, had it not been for the twitchings of the face and fingers and the sudden desperate efforts at respiration, bubbling through the clenched teeth in frothy blood.

In the absence of all definite information as to the exact nature of the cause of these abnormal phenomena, one course only could be followed in treatment—to combat existing symptoms, and be prepared for others as they arose. A warm bath was speedily prepared, but failed not only to relax the spasms, but even to produce the slightest redness of skin. A quantity of chloroform, poured on a pocket handkerchief, was then freely administered by inhalation, and, with a few deepening inspirations, the spasm passed off, and the child lay easy, breathing stertorously. An attempt was then made to induce vomiting; mustard and tepid water were given in large quantities; swallowing was perfect, but vomiting would not ensue. Probably the mucous membrane of the stomach was in the same bloodless condition as the outer skin, and insensible to the stimulus of the mustard, as the skin was to the ordinary impression of the warm bath. The very presence, however, of so much mustard in the stomach made it now doubly desirable that vomiting should be provoked, and half an ounce of antimonial wine was accordingly administered in a single dose. This too failed, and the hope of exciting vomiting was then abandoned.

Except in the lungs there seemed to be no fear of congestion of any of the vital organs, and, as elimination of the poison was probably impracticable, the tactics next adopted were to support the nervous system with suitable stimuli till the force of the poison should spend itself, if happily the child survived. Whisky was given in small doses (teaspoonfuls) frequently and cautiously, the pulse being constantly watched, and with an anxious apprehension of local congestions. Two or three teaspoonfuls had been thus administered, when with a single sudden jerk, as if in obedience to the hand of a wire-puller, all the old symptoms returned, unabated in intensity and of precisely their previous character—rigid spasm of the body and limbs, and convulsive twitching of face and fingers.

The effects of the chloroform had passed off. It was again immediately administered with the same result as before—disappearance of the spasm—and in the same unmeasured manner. The effects observed were to regulate the dose. An enema of turpentine, with tepid water and soap, was then resorted to, and produced a copious motion, the rectum having been full. This was repeated in about ten minutes after, but without any result; the whole digestive canal, indeed, seemed to be singularly free from any signs of disturbance or irritation, such as one would instinctively look for from the presence of a powerful poison of whatever kind. Thirty drops of turpentine were then administered by the mouth in sweet milk, and the stimulant was proceeded with as before. At a somewhat longer interval than had elapsed between the first and second attacks of spasm, another supervened, but apparently not so aggravated, though it lasted longer, and yielded much less readily to the chloroform, which was again administered as before. The change in the nature of the paroxysm seemed favourable, and, on the assumption that the vital force of the poison was dying out, the stimulant was given more sparingly. For about an hour and a half after the third and last paroxysm short and rapid fits of twitching would pass over the face, or for a moment seize the forearms and fingers at lengthening intervals, varying from five to twenty minutes. In three hours from the time of my arrival the battle was fairly fought out, the child having fallen into a deep natural sleep, which continued undisturbed till late in the evening. A dose of castor oil was administered at bedtime, and on the following day, except the slight sickness that might be looked for, and the soreness of the tongue, the child was in her usual health.

When there was breathing-time to inquire into what the poison really was, it turned out that the child had vomited slightly a short time before she was first seized with the spasm, and that the circumstance had been forgotten. There were chewed green leaves in the vomited matter, but the mother had thought that they were part of the chopped vegetable of the broth which the child had eaten twenty-four hours before. On examination these leaves turned out to be decidedly umbelliferous. The playmates of the child then supplied the full information. She had eaten some of the little parsnips (?) that grew wild at the foot of an old damp wall in the garden, thinking them to be the same as one she had got share of on the previous day, and which one of the bigger girls had found growing alone among the turnips. She had evidently eaten at least the leaves of either *Œnanthe crocata* L. (hemlock dropwort) or *Æthusa Cynapium* L. (fool's parsley), for specimens of both these plants were found growing in the locality. Both are popularly reputed to be equally poisonous, and, as they are so closely related to one another, it is highly probable that their poisonous properties would manifest themselves in the same way. Our information is very confused as to which and how many of the plants of the hemlock order are really poisonous. Dr. Christison says that the roots of *Œnanthe crocata* gathered in a sea-side locality in the vicinity of Edinburgh were innocuous, and it is stated that ordinary parsnips occasionally become poisonous. Further investigation will probably show that the poisonous properties of these plants depend altogether on, or at least are modified to a very great degree by, the nature of the soil in which the plants grow. The specimens about whose

poisonous properties I have been writing were found at the foot of an old decaying wall, in a damp shady place which was never dug or weeded, and leaves falling from the neighbouring trees through many autumns had raised a little bank of black manure against the wall, which supported a rank vegetation of weeds, and afforded a congenial habitat for poisonous mosses and deadly-looking mushrooms.

Antrim.

ON THE CONDITION OF THE SEMINAL SECRETION IN DISEASE.

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(*Continued from page* 275.)

GODART, in the note adjoined to his work on the monorchides and the cryptorchides, gives an account of thirty-five subjects attacked with bilateral epididymitis, in all of whom spermatozoa were absent. He has also observed the disappearance of the indurated portion of the testicles, and yet the individuals remained unfit for fecundation. He calls particular attention to the necessity of attending betimes to the resorption of the plastic exudation. This may be seated in the loose cellular tissue surrounding the epididymis and the commencement of the vas deferens, or it may exist between the coats of the canal itself, rarely ever in its interior. And Godart adds that by the aid of purgatives and iodide of potassium both internally and externally he has been able to cause the resorption of these epididymary indurations even after they had lasted for more than ten years. In 1856 he published the result of two autopsies; both patients died of consecutive peritonitis, the one twenty, the other eighteen days after entry into the Hospital. The seminal vesicles in both cases, corresponding to the side where the epididymitis had existed, were found smaller than those of the opposite side, and the fluid therein contained, besides being less in quantity, possessed no spermatozoa like those of the healthy side. Godart, moreover, believes that the terminal circumvolutions of the epididymis or the origin of the vas deferens may become obliterated by an accumulation of phosphate of lime and thus give rise to a spermatocele, the same as if caused by a plastic exudation from an inflammatory state of these parts.

Curling does not believe in the frequent occurrence of epididymary obliterations, not even when there exist a tumefaction and an induration of the parts, as does M. Gosselin, and he explains the rarity of these obliterations in his own practice by the care which is taken in the treatment to avoid their occurrence.

Cullerier, in his "Précis Iconographique des Maladies Vénériennes," thinks the influence of obliterations has been exaggerated. This theory seems to him too mechanical, and he believes the spermatic secretion is especially affected by an inflammation of the testicle itself. The greater part of the syphilographers, however, though they cite no observations in support of their theory, agree with M. Gosselin. These are MM. Rollet, Langlebert, and Martin. Only M. Fournier does not affirm this point, and he holds that the great majority of obliterations of the epididymis are merely temporary, but may also, adds he, persist and even become definitive.

From these historical points, which I have endeavoured to produce as faithfully as possible, it is easily seen that the opinions as to the frequency of the re-establishment of the spermatic outlets in bilateral epididymitis, or as to the influence of the persistence or the disappearance of the induration in these circumstances, are yet divided. Whereas M. Gosselin and especially Godart consider the restoration of the opening of the epididymis as an exception, Curling and Fournier believe the contrary to be most frequently the case. Whereas M. Gosselin believes that the repair of the spermatic passage always coincides with the resorption of the indurated portion of the epididymis, Curling thinks the semen can still pass, in spite of the induration of the tissues enveloping them, through the excretory ducts, and Godart admits that the retention of the semen below the point primitively diseased may be lasting, even though the induration have disappeared.

My own observations will, I trust, aid in the study of these points in question. The patients suffering from bilateral epididymitis, in whom I have been able to examine the seminal fluid, are twenty-eight in number. I shall divide them into two classes, placing those in whom the origin of the first epididymitis dates back one or more years, and where the second epididymitis occurred at variable periods, in one class, and those subjects in whom the first orchitis dates some weeks or months only, in the second class. In each of these two classes are fourteen patients. The dates of the epididymitis are as follows:—

First Class.

Date of First Epididymitis.	Date of Second Epididymitis.
45 years.	10 years.
19 „	19 „
16 „	14 „
14 „	12 „
12 „	5 weeks.
10 „	6 months.
6 „	6 years.
5 „	5 „
2 „	1 „
2 „	1 „
2 „	1 „
2 „	1 month.
1 „	45 days.
1 „	30 „

Second Class.

Date of First Epididymitis.	Date of Second Epididymitis.
11 months.	20 days.
6 „	3 weeks.
4 „	15 days.
4 „	20 „
4 „	20 „
3 „	17 „
2 „	50 „
7 weeks.	3 weeks.
7 „	25 days.
6 „	15 „
6 „	3 weeks.
35 „	30 days.
30 „	8 „
15 „	15 „

Twenty-one of the twenty-eight patients had no spermatozoa in their seminal fluid. I believe it useless to detail these observations. The seven remaining patients possessed spermatozoa. Of these four belong to the first, three to the second class.

1. Patient, age 40 years, has had a blennorrhagic epididymitis of the right side ten years ago, and an epididymitis of the left side, produced by venereal excesses of one night six months ago. The right epididymis—the side of the first accident—is yet considerably indurated, the one on the left side but very little. The seminal fluid—5 grammes—is viscous, opaline, and of great transparency. There are spermatozoa, from ten to fifteen in number, a few leucocytes and epithelial cells.

2. Patient, age 33 years, good constitution, had gonorrhœa seven years ago; twenty months afterwards a double orchitis declares itself in consequence of a horseback ride. His virile faculties have diminished; each epididymis is enlarged and indurated. The seminal fluid—1·50 gramme—is viscous and of a milky aspect. 150 to 200 spermatozoa, and numerous fatty granulations.

3. Patient, age 31 years, had a blennorrhagic epididymitis of right side two years ago. One year afterwards a hydrocele comes on in the opposite testicle, for which puncture and an injection of iodine are practised. The epididymis on the side of the hydrocele examined after the puncture is found enlarged and indurated. The one of the right side is hard to the touch, but presents no enlargement. The seminal fluid—2 grammes—is very viscous, and contains from fifteen to twenty spermatozoa under each microscopical preparation.

4. Patient, age 24, good constitution, has had a double epididymitis in consequence of gonorrhœa and a long journey on foot five years ago. He was then treated and cured by M. Puche. To-day his testicles are of ordinary size, and each epididymis is neither enlarged nor indurated. He has preserved all his virile faculties, and is the father of children. The seminal fluid—4·50 grammes—not very viscous, presents 150 to 200 spermatozoa, crystals of phosphate of magnesia, leucocytes, and sympexions.

The three subjects of the second class present the following peculiarities:—

1. Patient, 19 years old, of good constitution, entered the Hospital fifteen days ago for an epididymitis of the right side brought on by frequent masturbation. An inflammation declares itself on the left side four days later. There is no discharge from the urethra, and the inflammatory symptoms soon subside, leaving neither swelling nor induration of the parts.

The semen—1·50 gramme, milky, odoriferous, and viscous—presents from fifty to sixty spermatozoa, numerous fatty granules, and leucocytes.

2. Patient, aged 20 years, entered with a bilateral non-blennorrhagic epididymitis produced from a strain in attempting to lift a heavy load. Each epididymis, though but little indurated, is augmented in volume. He was cured one month afterwards, when the seminal fluid—3 grammes—contained numerous spermatozoa, fatty granulations, leucocytes, and pigmentary cells.

3. Patient, aged 30 years, presented himself at the consultation with a chancre of the penis. He had an epididymitis two months ago, for which M. Labbé had practised puncture of the tunica vaginalis. Ten days afterwards an inflammation of the other testicle declares itself, but is now completely cured, and has left no trace of induration or enlargement. This, however, still exists on the right side. The seminal fluid—2 grammes—is opaline, viscous, and contains from fifteen to twenty spermatozoa.

Analysing these observations, we find five out of the seven cases of epididymitis, where the spermatozoa had returned, of a non-blennorrhagic character. They were brought about by an excess of coition in one, by an excess of masturbation in another, a horseback ride in another, a strain in another, and the fifth from an unknown cause; but the patient assured me that he had no discharge from the urethra at the time of the accident.

Now, if we consider that all the cases which resulted in azoospermia—*i.e.*, twenty-one—had their origin in gonorrhœa, we are authorised to form an infinitely more favourable prognosis, as regards the return of spermatozoa, for the non-blennorrhagic epididymitis than those following gonorrhœa. The cause of the disease in the remaining two of the seven patients in whom the return of the spermatozoa had been realised was doubtless gonorrhœa. But the disease in one of them came on after a fatiguing foot-journey, and the accidents were so slight that that he was cured in the course of ten days. When I examined this patient five years afterwards, there existed no trace of plastic congestion in either of the testicles. The other patient had had a bilateral blennorrhagic epididymitis, it is true; but only the right side was seriously affected. The inflammation of the opposite side was dissipated in a few days, and left no swelling or induration behind.

The double cases of epididymitis which were followed by azoospermia did not present this character of simplicity. They all lasted fifteen, twenty, thirty, and even sixty days, and all were accompanied by some local or general inflammatory reaction. We may therefore establish a difference between the light and the intense cases of blennorrhagic epididymitis—the first only are susceptible of a return to permeability, the second run great risk of remaining definitely obliterated.

It is, doubtless, to a diminution of the inflammation that we can look for an explanation of the reappearance of the spermatozoa in the non-blennorrhagic cases; but it is also probable that the plastic extravasation in the traumatic cases only takes place outside of the epididymis, in the loose cellular tissue surrounding it, and thus simply flattens or compresses its circumvolutions, but not obliterating them.

If to the published cases of bilateral blennorrhagic epididymitis in which a return of the spermatozoa has been noted I join the two of my own, and compare them to the cases which resulted in azoospermia, we find:—

Gosselin	25 cases.	5	return of	spermatozoa.
Godart.	35 „	1	„	„
Liégeois	23 „	2	„	„
Total	83 „	8	„	„

These numbers speak for themselves. They will suggest to every one the importance of the antiphlogistic treatment, the necessity of calming the inflammatory element, on the intensity of which seems to depend the danger of definitively obliterating the excretory duct of the seminal fluid.

What is the prognostic value, as regards the spermatozoa, of the disappearance or the persistence of the epididymary induration? Among the 21 patients where the obliteration persisted, we found, as a general rule, a partial or a complete induration of the epididymis. This state of things existed in 15 of the 21 patients. But in 6 this was not the case; either one or both epididymis, to the touch at least, seemed normal.(a)

In 7 of the 28 cases of bilateral epididymitis in which the return of the spermatic functions has been noted, 5 were free from induration of either one or both testicles, and the remaining two in whom the induration still persisted were patients with non-blennorrhagic epididymitis. The result is that the disappearance of the epididymary induration indicates a return of fertility in the generality of cases. This rule, already laid down by M. Gosselin, is, however, not without exceptions, for it may happen that the spermatozoa do not pass, although the induration has disappeared; or, as Curling has observed, the spermatozoa may make their way through the excretory ducts in spite of the induration. This fact, however, only occurs in those cases where the epididymitis is of a non-blennorrhagic origin. We shall find frequent proof of this further on.

The question as to the influence which an epididymitis may exercise over the secretion and excretion of the seminal fluid is one of too much importance to be limited to the general result of these observations. Let us enter into a few details,

(To be continued.)

(a) The history of these six patients offers nothing unusual, and so I omit them.

COMPULSORY VACCINATION.

By R. H. BAKEWELL, M.D.,

Medical Officer of Health and Vaccinator-General of the Colony of Trinidad.

The great amount of interest which attaches at the present time to the subject of vaccination is my excuse for throwing out a few very crude ideas on the subject.

During the twenty-one years in which I have been in the habit of vaccinating, I have seen very few cases in which any skin disease followed the operation so soon after as to be fairly attributable to it. Nevertheless, I feel bound to say that the amount of testimony I have heard against it from mothers, and the number of cases of skin eruptions, especially, which they have declared to have followed vaccination in children previously free from anything of the kind, led me to infer either that some vaccinators have been very careless as to the sources of their lymph, or that certain constitutional diseases may be conveyed by vaccination.

Since I have been in Trinidad, and particularly since I have been Vaccinator-General, my attention has been much directed to the subject of leprosy and its possible propagation by vaccination. It is a strange but undoubted fact, that leprosy is greatly increasing in this island; that it is attacking the children of most respectable parents, who want nothing in the way of diet, etc. And moreover, it is attacking the children of Europeans, where there can be no possibility of hereditary taint. Now it is worthy of remark that in this island vaccination has of late years been compulsory, and that a large proportion of the younger people were actually vaccinated during an epidemic of small-pox a few years ago. The general opinion among Medical men is that it is quite possible that leprosy may be propagated in this manner. It is curious, too, that in those islands where vaccination is not much used there is very much less leprosy in proportion than here. I was particularly struck, when I was visiting Cumana to make a report on the method of Dr. Beanperthuy, to find that in a town of about 9000 inhabitants there were only some fifteen or sixteen cases. In Port of Spain, with double the population, it is believed there are hundreds. I have heard various estimates, but none less than 250. One gentleman assured me that he knew personally that ten lepers lived in the same street as himself. I know of one house in which there are four belonging to one family.

With the view of obtaining some data on this important point, I have adopted the system of registering the name of the person from whom the lymph is obtained, so that if at any future time leprosy should come on, it can be ascertained in most cases whether the person from whom the lymph was taken is also a leper. The prejudice here against vaccination is very strong, and solely, I believe, on this account.

Trinidad.

The late Dr. William Bullar, of Southampton, bequeathed £3000 to the Royal Southamptonshire Infirmary after the death of his only surviving brother.

On Sunday, August 8, Dr. Rubidge, M.B., of Port Elizabeth, Algoa Bay, died suddenly about noon. He had visited the Hospital in the morning, and subsequently a patient. On returning home he complained of being tired, asked for some soup, which was given him, and then lay down on the sofa, and must have almost immediately expired. He was a man of considerable scientific attainments, an admirable Physician, and will be much missed by a large circle of acquaintances and friends.

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REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

KING'S COLLEGE HOSPITAL.

CANCER OF THE LUNG.

(Under the care of Dr. BEALE.)

J. H., aged 41, was admitted into King's College Hospital, under the care of Dr. Beale, on April 26, 1869. He had never had any particular illness, but at times suffered from dyspepsia. Some years ago he had a cough and pain in the chest, for which he was treated with cod-liver oil. For the last ten months he had lost flesh, more particularly the last two or three weeks; he also had pain over the left side of the chest and between the scapulæ, and sweated a good deal at night. On admission he was fairly nourished and able to walk about; he complained of loss of appetite and pain over the left side of the chest; he had a dry cough, night sweats, and constipated bowels. On examining the chest, the expansion on the left side was found much diminished; there was absolute dulness both in front and behind; no vocal fremitus, but the voice sounds were twangy; tubular breathing was heard between the scapulæ and in the supra-spinous fossa; elsewhere breath sounds could not be heard except above the clavicle. The right lung seemed to be quite normal. The heart was displaced, and the apex beat appeared at the end of the ensiform cartilage; a blowing sound was heard with the systole at this spot. The man had pain all over the left side of thorax, but not at any one spot in particular; no friction sound could be heard. There was some bulging of the lower left intercostal spaces, and the superficial veins on the left side of the chest were enlarged. His appetite was bad and his bowels confined; he slept pretty well at night. He was ordered mist. quiniæ 3j. ter die s. He went on in this condition for some time, becoming gradually weaker.

May 25.—There was some vesicular breathing heard over the supra-clavicular and supra-spinous fossæ; the dulness in front extended across the median line; the systolic murmur was now heard best at the base of the heart. The man did not suffer from much dyspnœa, but he was much weaker and sweated a good deal at night.

June 7.—Considerably worse, and confined to his bed. A small hard tumour was noticed in the left axilla, which gave him a good deal of pain. It was treated with hot fomentations and poultices. The superficial veins over the chest were enlarged, and those of the left arm now became prominent. At the left base the voice sounds were not ægophonic, and at the lowest part there was a tympanitic note, owing to the stomach being distended. No air seemed to enter the left lung except at the apex.

19th.—The left arm was more swollen. He complained of much pain and headache. His appetite was much worse, and he was evidently much weaker. He had a cachectic look, and was much emaciated. There was no alteration in the physical signs.

25th.—He was much worse, and suffered a good deal of pain. He seemed to die at last of exhaustion.

A post-mortem examination was made by Dr. Kelly thirty-three hours after death. The body was much emaciated, and the left leg very œdematous. On opening the chest, the heart was found displaced, so that the apex was at the ensiform cartilage. The right pleura was normal, and the right lung seemed to be quite healthy. The left side of the chest was occupied by a large tumour, which encroached a little to the right of the median line; it completely filled that side of the thorax, and was adherent to the chest-wall by some slight fibrous bands. There were about 2 oz. of fluid in the pleural cavity. Above, the tumour extended above the clavicle, and was continuous with a small tumour in the neck; below, it reached to the diaphragm, but here the mass was very thin, so that, the stomach being close to, a resonant note was found on percussion. In the upper part the tumour had invaded the whole of the lung tissue, but behind and below a shell of lung tissue surrounded the mass; at the inner side the pericardium was firmly adherent to the tumour. On removing the lungs, the bronchial glands were found to be very much enlarged and to have all the characteristics of medullary cancer; thence the deposit had spread along the bronchial tubes and vessels into the left lung, more especially into the upper lobe; there were no separate deposits, but the whole formed one mass, which had started from the glands as a centre. Although the large vessels were closely surrounded by the cancerous material, which, in fact, had attacked their outer fibrous coats, yet their calibre was not encroached upon, and so there was no œdema of the face or neck. The right lung weighed 26 oz. and the left lung 6 lbs. On section, the mass was of a yellowish colour, soft, and juicy; under the microscope the juice was found to contain an immense number of oval or roundish granular cells; some were tailed and had a nucleus. There was a good deal of fibrous stroma, chiefly in portions taken close to the vessels. The heart weighed 9 oz., and was of normal size; the pericardium was vascular and slightly adherent; at one spot the cancerous growth had pressed through the parietal layer, and so was in contact with the surface of the heart; the valves were healthy, and the murmur heard during life was probably due to the pericardium being implicated and giving rise to a soft friction sound. The only other cancerous deposit in the body was in a gland in front of the spine, which was as large as a walnut; it had pushed the pancreas forward, but the latter was not diseased. The liver, kidneys, and spleen were healthy, but congested. A black coagulum was found in the left iliac vein: this seemed to have caused the œdema of the left leg which came on a little before death. The thoracic duct could not be traced, it was so involved in the tumour, but probably the rapid emaciation in the latter part of the man's illness was in a great measure due to pressure on this duct.

Remarks.—An interesting feature in the clinical history of the case was the slight daily variation of temperature. In a case of phthisis where tubercle is being deposited it generally happens that the variations in temperature, as shown by the thermometer, are very great, there being often two or three degrees difference between the morning and evening observations; the highest point is attained at night. In this case there were no marked changes, nor did the temperature vary much above the normal. The obstruction to the return of venous blood, as shown by the enlarged veins of the thorax and left arm, pointed to a tumour within the chest, although at first the case appeared very much like pleurisy; yet the physical signs were most marked in the upper part of the chest, and the dulness extended across the median line. Although the glands in the roots of both lungs were affected, the right lung was quite free from disease. At no time were the voice sounds altered on speaking, nor was there any spasm of the epiglottis, nor was there any brassy cough, as is so often met with in cases of aneurism which involve the recurrent laryngeal nerve. There never was any expectoration, nor did the man suffer from hæmoptysis.

CANCER OF THE SKULL; SECONDARY DEPOSIT IN THE LUNGS AND CERVICAL GLANDS.

(Under the care of Dr. PRIESTLEY.)

Sarah B., aged four years, was admitted into the Pantia Ralli Ward, under Dr. Priestley, with a tumour on the upper and back portion of her head, on January 13, 1869. This tumour had been coming for about a month or six weeks, and had been gradually increasing in size; the child had not lost flesh, nor were there any constitutional symptoms. The mass on the head was as large as an orange and not at all painful; it was firmly attached, and seemed to rise from the bone itself; although rather soft at the apex, a hard rim could be felt at the base, as is usually met with in cases of cephalohæmatoma. The child seemed intelligent, and had no cerebral symptoms; it was able to play about, and ate and slept very well. In a few weeks the child's health began to suffer, and the tumour increased considerably in size; the skin could not be moved freely over the mass, but still there was no pain.

Before long the glands along the sterno-mastoid muscle on each side began to be enlarged, and the veins around to become distended; the tumour on the head was evidently continuous with the diseased glands, and its surface was smooth and firm.

At the same time there was loss of flesh and appetite, so that, while the body was emaciated and pale, the head and neck were puffy and swollen, and the superficial veins coursing over the enlarged glands were much distended.

A short time before this she was removed into the female Surgical ward, and placed under the care of Professor Partridge.

Pain was never a marked symptom, nor was there ever any paralysis or any evidence of the brain being implicated; pressure on the tumour caused no change in any of the

symptoms. It was clear that the disease was malignant in its nature, and that it originated from the skull.

On March 9 the child died from exhaustion. A post-mortem examination was made by Dr. Kelly twenty-four hours after death.

At the upper and back portion of the head, and continuous with the general surface, was a hard immovable tumour as large as a small cocoanut; behind and below it was continuous with a mass of enlarged glands in the neck. The skin was very firmly adherent to the mass, and had to be dissected off. The tumour was of a whitish colour, firm in consistence, and about four inches thick in the centre; thence it gradually sloped down, so that the base of the tumour involved all the occipital and the posterior halves of the two parietal bones. On removing the calvarium the dura mater was seen to be quite healthy, except at one small spot on the right side of the superior longitudinal sinus where some cancerous material had passed through, and had formed slight adhesions to the pia mater; the brain substance was nowhere implicated. In the front portions of the parietal bones small cancerous nodules were scattered in the substance of the bone and in the diploe. Although the bones on which the mass rested were much infiltrated with cancerous deposit, yet at no point was there any fracture, and, with the exception just mentioned, the whole of the tumour was outside the skull; thus the vault of the skull formed the base of the mass, and the growth of the disease was nearly limited to one side, although it is usual in cases of cancer of the flat bones for both sides to be implicated. In its growth the skin had become involved, but there was no ulceration of the surface, nor had the hair been affected. The glands in the neck were much enlarged, and by obstructing the venous circulation had caused the puffiness of the face. In the muscles, such as the thyroid and pectoral muscles, small cancerous nodules not larger than a pin's head were scattered about, but their actual seat seemed to be in the fibrous tissue between the muscular fibres. Passing downwards, the bronchial glands were much diseased; they were soft and white on section, and exuded a creamy juice in which were found the elements usually met with in medullary cancer. The mass on the head was firmer than the tumours elsewhere from the abundance of the fibrous stroma there, as might have been expected where cancerous material slowly infiltrates skin and periosteum. One thoracic gland close to the diaphragm was diseased, and one or two of the lumbar glands were similarly affected. Both lungs were full of cancerous nodules, which were scattered about equally in both organs, with healthy portions of lung between; there was no continuous deposit from the bronchial glands, as in the case of J. H. above related, and it seemed likely that the morbid material had entered the blood in the veins of the neck, and then had been carried by the circulation to the lungs; this appears the more probable as both lungs were nearly equally affected, and the deposit had clearly not spread along the bronchi or vessels.

No other organ was affected beyond those already mentioned, and it will be noticed that while the mass was at first confined to the head, the glands became at last diseased, and were so most of all in the neck, to a much less degree in the thorax, and least of all in the abdomen; and the same was noticed in the muscles, of which nearly all in the neck were diseased, while none in the abdomen were affected, and only a few of the thoracic ones. In these cases the morbid material seemed to have spread gradually, and not to have been carried by the circulation.

Drinking Fountain and Cattle Trough Association.—The following extract from a report of the above Association will show its claims to public support more efficiently than any elaborate appeal to the humane and benevolent. At the fountains it is estimated that nearly 300,000 people drink daily in the summer, more than 8000 having been known to drink at one fountain in a single day, many of whom are working men, who would otherwise be compelled to resort to the public-house to quench their thirst; and the Association thus not only relieves one of the most pressing wants of the itinerant poor, but also prevents many of the industrial classes from contracting habits of intemperance. 123 fountains and 125 troughs have been erected, and are kept in repair and supplied with water by this Society, and the Committee are urgently in need of funds to sustain its operations; they earnestly solicit contributions to enable them to continue and to extend a work the beneficent effects of which are experienced by so many million human beings and animals every year.

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Medical Times and Gazette.

SATURDAY, SEPTEMBER 25, 1869.

MR. SIMON ON THE EXTENSION OF THE CONTAGIOUS DISEASES ACT.

Virchow, in one of his well-known treatises (we have not the book at our elbow, and are obliged to quote from memory, but we believe it to be the Treatise on Tumours), says that of all pathologists Herr John Simon is the richest in ideas. We fully concur in Virchow's opinion, and, as a proof of it, are glad to find that Mr. Simon, in his latest report, instead of falling in with the current morbid philanthropic views, gives forth his own ideas on the subject of the extension of the Contagious Diseases Act to the civil population. Of course we are the more pleased, inasmuch as Mr. Simon's sentiments are identical with those maintained in this journal. More than a year ago we said(a)—"To tax the decent people of a district or parish expressly for the maintenance and cure of the prostitutes who may choose to harbour in it, is repugnant to the dictates of justice and common sense." At the same time, we advocated that extension of the Act to garrison towns which has since been effected. There is a well-known article in the July number of the *Westminster Review*, to which we may refer in passing, and which argues that the extension of the Contagious Diseases Act to the civil population would not only not accomplish the object in view, but would introduce a new set of evils. For the present, however, let us content ourselves by indicating Mr. Simon's views on what he calls in plain English the "question of State interference to provide for the disinfection of prostitutes."(b)

In the first place, Mr. Simon takes the case of the army and navy by itself. Here are masses of men kept for public purposes in an unnatural condition, and it is both to the public interest and a matter of public duty to preserve them from the consequences of that artificial condition; but no conclusions from what is done in the army and navy are applicable to civil practice.

As regards the civil population generally, we find the "Association for the Extension of the Contagious Diseases Act" setting forth the propositions that persons infected with venereal diseases are dangerous, and ought to be shut up; that common prostitutes should be subject to compulsory Medical examination, and to detention if found diseased, and so long as they continue so; and, as a corollary, that Hospital accommodation should be provided in order to carry the scheme into effect. It may be mentioned in passing, that it is asserted that 18,000 prostitutes are practising in London, of whom one-third are

(a) *Medical Times and Gazette*, May 23, 1868, p. 555.
(b) "Eleventh Report of the Medical Officer of the Privy Council, etc., 1868." London. 1869.

diseased. Now say that accommodation is required for 3000 only, there must be about half a million spent in buildings, and about £100,000 per annum for maintenance, besides the salaries of the Medical inspectors and staff of police. Where is this money to come from? From voluntary contributions? Impossible. From the proceeds of a rate or tax? There are plenty of people in arrears with rates and taxes already, and these persons are, as Mr. Simon says, not likely to consent "to see the prostitute kept in Hospital at their expense for weeks or months, not necessarily from the exigencies of severe illness of her own, but essentially that she may be made clean for hire, lest any of her users should catch disease from her. They would remember, in contrast, that for themselves wonderfully little is done by authority to protect them against false weights and measures and adulteration of food; and they might regard it as a strange caprice of law which should oblige them to contribute to the cost of giving an artificial security to their neighbour's looseness of life."

It must be admitted, says Mr. Simon, that the living a loose life and catching disease are private voluntary acts, from which no citizen has any right to call on the Government to protect him. If it be argued that the evil does not stop with the first sufferer, but may spread to the innocent, the same may be said, in a degree, of every misdeed and misfortune. And to constitute grounds for State interference (assuming that such action could be effectual, which is denied) it ought to be shown that the damage caused by venereal disease is so gigantic as to overrule the sound general policy of non-interference, and that the good to be attained would be worth the cost. Mr. Simon distinctly gives it as his opinion that very exaggerated notions are current as to the diffusion and malignity of venereal diseases, and that the gain to be attained by the costly system of suppression would belong fundamentally to those branches of venereal disease which do not produce permanent infection, such as soft chancre, or pseudo-syphilis, and gonorrhœa. Modern science (or rather the Edinburgh school, John Bell to wit) has enabled us to differentiate gonorrhœa from syphilis; and, later still, to distinguish the uninfecting from the infecting sore; and the work, not only of prevention, but of cure, may be expected to go on with greater vigour for the future in the natural course. We no longer call every venereal lesion syphilitic, nor do we treat all alike with mercury.

With regard to the prevalence of true syphilis, and to its consequences, secondary or hereditary, Mr. Simon has taken steps to show the fallacy of popular statistics. He has availed himself of the services of Mr. Wagstaffe to count the patients at certain Hospitals and Dispensaries, and the results differ widely from the romantic estimates of the "Association" and of the *Westminster Review*. Whereas it is stated by the "Association" that from one-fifth to one-third of the sick poor are suffering from "contagious disease of the gravest character, constantly transmitted from parent to offspring, whilst the *Westminster Review* fills a page with frightful, but not fairly drawn figures, Mr. Wagstaffe quietly reduces the total percentage of *all* venereal disease among the whole population that seeks gratuitous relief at Hospitals, Dispensaries, and Workhouses at 7 per cent., of which only about one-half are syphilitic. Mr. Wagstaffe's observations are founded on 13,000 cases, being about one-fourth of the sick poor population during one week in London.

We fully concur in Mr. Simon's observations, that taking *syphilis* by itself, the detection is often so difficult, the proof of infection by a given person so slight, that it will evade any ordinary organisation. We shall have done enough if we have induced our readers to pause before giving in their adhesion to this latest scheme of meddlesome philanthropy. The letter of our Surgical Correspondent from Paris in this number of the *Medical Times and Gazette* shows that, as regards a civil population, the great source of disease is not the public women, but the clandestine prostitutes, who evade all inspection, and will continue to do so. Meanwhile, let it not be imagined either that there are no remedies for prostitution and its evils, or that we are indifferent to them. Mr. Simon justly calls attention to the importance of early marriages; of an improved moral sentiment, which in time may cause incontinence of the male to be as disgraceful as that of the female. We would add, let the greatest kindness and sympathy be shown to all victims of venereal disease, and especially to poor women; and above all, let there be stern repression by the police of all outward show and temptation to vice. No man can walk along Piccadilly after 11 o'clock without being solicited by at least thirty women. All this should be summarily put down, and if vice cannot be prevented, at any rate let the indulgence in it be made a little more difficult.

INDIAN MEDICAL OFFICERS AND THE GOVERNMENT.

We again refer to this important subject. The Government of India seem determined to do everything they can to annoy and disgust the Medical officers in their service. In the *Gazette* of July, 1868, appears the following:—

"Leave taken under the rules now prescribed will not involve forfeiture of any appointment except in the cases herein specially provided for.

"The cases thus specially provided for are mentioned in Rule XII. 'Absence on Medical certificate for a longer period than two years at one time, or departure on such furlough within three years of the date of return from a previous furlough.'"

These rules are now in force for every department except the Medical. The Government, with respect to that, in January last issued the following order:—

"Under a recent decision of the Government of India it has been ruled that regimental Medical charges are not considered appointments in the sense of Clause 2 of G. G. O. No. 1064, of 1868 (the furlough rules), and consequently Medical officers holding such charges have no claim to any portion of the allowances attached thereto when absent on furlough to Europe, nor any lien on the appointment after departure from India.

"Medical officers, like all others holding staff appointments other than regimental, who may accept the furlough rules of 1868, and who are holding appointments, will continue to hold them on furlough under the provision of the order above referred to."

But this was not enough. The *Delhi Gazette*, in some excellent remarks upon the subject, says:—

"But apparently repenting of permitting even Medical officers 'holding appointments' to hold their just rights, another disgraceful order, dated June 17, 1868, No. 669 of 1869, is published. This places Medical officers in civil appointments in the same position as their military brethren, depriving them of appointment on furlough; and hence, as will doubtless be ruled in the Financial Department, involving forfeit of all claim to any portion of the furlough allowances. The order referred to runs as under:—

"'The following resolution of the Government of India, dated June 9, is published for general information:—Resolution: The Governor-General in Council, having considered the views expressed by the several local Governments and Administrations, is of opinion that a Medical officer in charge of a civil station should, when proceeding on furlough, retain a lien on some similar appointment—*i. e.*, the charge of a civil station of the same class, or some other civil charge of equal emoluments. He should not, as a general rule, have any claim to re-appointment to the same station.'"

The issuing of these orders has excited intense disgust among all ranks of the Medical service. It is an insult and an injury. The effect is to lower them in every way. It is but, however, another specimen of the scandalous manner in which our Indian brethren have been systematically treated by the Government. They cry out for more Doctors, expect to get the "pick and choose" of them, and then treat them in this disgraceful way. If this kind of system be persevered in, the Indian will become as unpopular as the Naval Medical Service, and must be content to have second- or third-rate men. Lord Lawrence has the credit of inflicting

the last blow upon the Doctors, and Lord Mayo, acting on bad advice, follows suit. The *Delhi Gazette* thus summarises the position of Doctors in India :—

"Medical officers are now thus placed in comparison with all other Government servants in India: 1st. The majority receive less pay than laid down by the Secretary of State as the allowance of their rank. 2ndly. They are not permitted to retain their appointments on leaving India on furlough. 3rdly. Having no lien on their appointments, they have no claim to 50 per cent. of the pay. We advise the Doctors to petition Parliament on what, if we understand the matter right, is a gross piece of injustice."

THE SCARCITY OF SUBJECTS FOR DISSECTION.

Whatever may be the more remote causes of the scarcity of subjects for dissection, the immediate cause is unquestionably the apathy of masters of union workhouses. Nor can their indifference well be wondered at when it is remembered that, in interfering in the matter, they have everything to lose and nothing to gain, much risk and trouble, and no thanks or reward. As, however, at present, the workhouse appears to be the least objectionable source for the supply of the schools, it becomes necessary to consider the remedy for the difficulty which undoubtedly exists.

Though they are already familiar to most of our readers, it may be well briefly to recall the circumstances under which the supply of bodies is drawn from the workhouse. Section 7 of 2 and 3 Wm. IV., cap. 75. (the Anatomy Act), provides that any party having lawful possession of the body of any deceased person, may permit the body to undergo anatomical examination, unless the deceased, either verbally, or in writing, shall have expressed a desire to the contrary, or unless a surviving relative shall require the body to be interred without such examination. The practical working of this section is that the board of guardians becomes the "party having lawful possession" of the body, and that the master of the workhouse is by them authorised to take the necessary steps under the provisions of the Act. This course is not adopted, however, by all or nearly all boards of guardians, and, even when it is, the section is only put in force as regards the bodies of *unclaimed* paupers. If the guardians chose to stretch the Act in favour of the schools, all apparently might be sent, whose bodies had not been specially exempted by the desire of either themselves or their relatives.

Section 8 enables any person to direct that he himself shall be anatomically examined after death; but, in effect, this section is rendered useless by its proviso, "unless the deceased person's surviving husband or wife or nearest known relative, or any one or more of such person's nearest known relatives, being of kin in the same degree, shall require the body to be interred without such examination."

Section 16 operates to the prejudice of the schools, repealing so much of 9 Geo. IV., cap. 31, as permitted the bodies of persons convicted of murder to be dissected, and directing that instead they be either buried or hung in chains. The hanging in chains was done away by 4 and 5 Wm. IV., cap. 26.

The Act further prescribes the formalities as to certificates, etc., to be observed with a view to the prevention of malpractices.

The source of supply, then, is narrowed to the cases of paupers, without known relatives, dying in the workhouse—the person upon whom the schools practically depend for the utilising of this source of supply being the masters of the workhouses, who, it appears, are at the best indifferent, at the worst obstructive.

A reason for the difficulty which is experienced in inducing masters of workhouses to exert themselves in this direction is not far to seek when it is borne in mind that no reward is offered. More, that if a pecuniary inducement were held out, the master, if he accepted it, would incur the penalty imposed by Section 31 of 7 and 8 Vict. cap. 101, which provides that it shall not be lawful for any officer connected with the relief of the poor to receive any money from any dissecting school or school of anatomy, or Hospital, or from any person or persons to whom any body may be delivered, or to derive any personal emolument whatever for, or in respect of, the burial or disposal of any such body, and any such officer offending as aforesaid shall, on conviction thereof before any two justices, forfeit and pay a sum not exceeding £5. The master, too, always runs a certain amount of risk, inasmuch as he has to satisfy himself that the deceased has no known friend, and, when he believes that he has settled that point beyond dispute, and has given the necessary notice to the Inspector of Anatomy, and the body has perhaps been removed, friends appear, and are not readily pacified as to the strictly legal character of the proceedings. In short, it is for the workhouse master by far the safest and readiest course to let the burial be done by the contractor in the usual way, and not to trouble himself about anything so unprofitable as the cause of science.

Further, it must be remembered that the master of the workhouse, however willing he may be to take the necessary steps to secure the body for anatomical purposes, is powerless to do so *proprio motu*. It is for the board of guardians to give the requisite authority, that board being the "party having lawful possession of the body" within the terms of the Act first above mentioned, and although it is apparently open to them to give such authority by a general resolution, and so to avoid the necessity of dealing with individual cases, they exhibit a decided reluctance to adopt any such course. How is this reluctance to be overcome, or should it be nullified by legislation? Should an attempt be made so to amend the 2 and 3 Wm. IV., cap. 75, as to leave to boards of guardians no option, and to render compulsory those clauses which are now only permissive? Might not the tendency of any endeavour of the kind be rather to decrease than improve the supply? It is so easy to frame compulsory Acts, and so difficult to enforce them (*e. g.*, the Vaccination Acts), and boards of guardians, to judge by the past, would be exactly the authorities to evade the law. Sentiment, half-education, and jealousy of their own powers, would all unite to inspire them with a spirit of opposition. Even as the law now stands, a minority in a certain provincial union succeeded but too well in rendering useless the good intentions of a majority, by whom was passed a resolution enabling the workhouse master to give up for dissection all unclaimed bodies. A few of the members who were averse to the practice took care that all those bodies should be claimed which might otherwise have been surrendered for anatomical examination. Should the law be made compulsory, other modes of evasion would probably suggest themselves, and the prejudices of nurses and other ignorant persons would cause them to urge the dying to make a declaration in compliance with the terms of section 7 of 2 and 3 Wm. IV., cap. 75, to the effect that they desired that their bodies should not be given up.

We believe that among the numerous suggestions having for object the increase of the number of subjects, has been one to the effect that the Poor-law Board should take the matter in hand with the view of pressing the several boards of guardians to exercise in favour of the anatomical schools the powers vested in them by law. Looking, however, to the scant success which has heretofore attended the Poor-law Board in its efforts to influence boards of guardians by the gentle suasion of circulars or the personal representations of inspectors—even in matters in which the Board has been backed by public opinion and the press—it seems unlikely that much can be expected to result from the aid of Whitehall.

Some advance might doubtless be made towards combating existing prejudices could the Anatomy Act be so administered as never to allow uncomfortable scandals and rumours to crop up. Were the well-informed enabled conscientiously to assure the poor, the ignorant, and the prejudiced that all bodies were

duly buried, and buried complete, that the certificates given in pursuance of the statute invariably related to the subject named, and that no indignity was ever offered to the dead, then it might be possible, even without any alteration in the law, to induce the custodians of bodies to place them at the disposal of the inspectors of anatomy. But it appears useless to hope for any such improvement while at intervals cases are reported such as the old story of the Newington Workhouse and its resurrectionist master. The story is too well known to need repetition here, but at the time it was so unmistakable in its effect on the parochial mind as during the period following to take one hundred from the usual average of subjects. If this be the effect of an unfavourable rumour, we may safely assume conversely that, if no such rumours arose and nothing occurred to foster prejudice or offend sentiment, a corresponding increase in subjects might be looked for. But, though something may be hoped in this respect, and much improvement has undoubtedly been apparent under the administration of the present Metropolitan Inspector of Anatomy, the practical solution of the difficulty appears to be to offer a suitable premium to those having the care of the bodies: for instance, if something were given in aid of the rates, the effect would doubtless be to interest the guardians in the matter. It might even be advisable to procure such an alteration in the law as would enable the workhouse master to receive a small premium for each subject—of course, guarding by every possible means against malpractice of any kind, such as the disposal for anatomical purposes of the bodies of those whose friends would have claimed them had they been made aware of the death. This could only be done by the repeal of the proviso to Section 31 of 7 and 8 Vict., cap. 101, before mentioned. The clause, however, must, of course, have been inserted after due consideration and for sufficient reason, and should not be hastily upset. Till the reasons which led to its adoption are known and discussed, it would not be safe to advise the repeal of the clause.

DR. HESLOP ON MEDICAL ATTENDANCE ON SICK CHILDREN OF THE POOR IN LARGE TOWNS.

Dr. Heslop, in a powerfully written pamphlet on the above subject, has brought about his ears a perfect hurricane, partly of praise, partly of blame. In his capacity of Physician to the Children's Hospital, Birmingham, Dr. Heslop has seen the evils attending the present neglect of the children of the poor too often by the poor themselves. He investigated the previous history of 383 children brought before him during six weeks, beginning May 25, 1869—

"Of these 383 cases, 341 had not previously been taken to a Medical man; 154, or two-fifths of the whole, had applied to a druggist alone; 33 to a Surgeon alone, or one-twelfth of the whole; 187, or about half of the whole number, had previously been altogether without even the rudest aid; 163 had employed either a druggist alone, or (in 9 cases) a Surgeon conjointly with him; 1 only had been to a Birmingham General Hospital before applying, and 1 to a London Hospital two years previously."

Dr. Heslop next proceeds to examine certain of his cases individually. Of the first twenty-eight in his tables, twenty had not been treated by any one. They had been ill for periods varying from one day to two years and a half, and some of them were seriously diseased. Seven had been seen by a druggist, and only one by a Surgeon. Such, Dr. Heslop maintains, is a

"Faithful picture of the kind and amount of Medical aid obtained by the sick children of the poor in our large towns, for there is no reason for presuming that Birmingham differs from other cities in this respect. The inference is forced upon us that these children are neglected, and that this neglect needs to be obviated by better arrangements than those now existing. It may be said that the Poor-law Medical officers are the proper persons to deal with the children of the destitute. Granted, if these officers were so circumstanced as to command the confidence of their patients. This is not the right time or place to indicate the organic changes needed in this department of Medical labour. I will content myself with declaring that I know the disastrous effects of our Poor-law system, both in principle and in detailed administration, upon the officers engaged in working it. I shall not speak hardly of my brethren engaged in this work. Tempted as they are, I know not why I should presume to think I should be different from them were I placed in their position. But this I know full well, that these gentlemen in our large towns do not possess the confidence of the sick poor; that mothers prefer the druggist, with his pennyworth of deadly syrup or of calomel powder, to the so-called care of the bankrupt parish Surgeon, or his utterly unqualified assistant."

"What, then, is the refuge of these unhappy people? They resort to the druggist—to the tradesman who gets his livelihood by the sale of drugs. All he knows of disease is, that drugs are good for it, whatever may be its guise. Some of my hearers, who know how much more moderate are our views than those formerly current with regard to the efficacy of drugs in many acute diseases, will think the intervention of the druggist peculiarly unfortunate. We fail to recognise in him, even dimly, the features of a High Priest of Nature—of a Physician armed with all the knowledge attainable of the science of life. What is left undone among children must be serious enough, but how infinitely small this evil appears to us when compared with the positive injury inflicted by an ignorant and self-seeking pretender to Medical skill!"

On these and such-like facts and statements Dr. Heslop grounds his appeal for more Hospitals for sick children, for he objects *in toto* to the present system of parochial relief. He shows from statistics that general Hospitals do not meet the exigencies of the case, and concludes with the following sweeping statement as to the qualifications required of a Poor-law Medical Officer under the present *régime*:—

"They are, that the Doctor should be poor—if a bankrupt, so much the better; that he should be young, half-educated, and inexperienced, without too many private patients; or, on the other hand, that he should be old, without being less ignorant, to whom the world has cruelly denied its confidence in other walks of practice. A large and growing family forms a sensible addition to his claims. If he has already lost his fair name, either in a Professional or private capacity, the guardians, with an honourable regard for the interests committed to them, give him an opportunity of retrieving himself in the high latitudes of public office. Socially he must not be too far removed from the region where slang and gin-and-water reign supreme—for the Doctor must not be above or different from the guardian who elects and pays him, not to speak of clerks and relieving officers. But the most weighty of all the unspoken requirements remains behind. I find it hard to define—though it is fundamental, nay, a terrible reality. Perhaps from the guardian's point of view it is easiest comprehended by saying that the Poor-law Surgeon must be a man 'without any nonsense.' Wine and meat cost money—this comes from the pockets of the tax-payer. The Surgeon who orders too freely such articles injures this last estimable person, and becomes thereby an undesirable officer. It is all a matter of sentiment after all. No doubt some poor people want nourishment rather than physic; but why did they become poor? Why should the honest burgesses be burdened with payments of this sort because the Surgeon is weak, and unable to comprehend the difference between a respectable rate-payer and a poor wretch who thinks he needs that his body should be sustained?

"I summarise these requirements in this formula—any Surgeon in a large city is good enough for the service of the parish, if only he is bad enough.

"I cannot persuade myself to delineate the natural results of these advertisements, with such conditions expressed and implied. I willingly draw a veil over the character of the men who respond to them. Still more willingly do I desist from entering on a picture of the depth of humiliation and ignorance—of recklessness and hardness of heart, finally, step by step, reached by those cursed with success in their efforts to obtain a Poor-law Medical appointment in a large English town. Alas! the Surgeon who enters those gates must leave all hope behind. If by its fruits we know the tree, we have an easy method of knowing the Poor-law system, which is a disgrace to the Government, a perpetual source of dishonour to the Profession of Medicine, and the cause of cruel injury to the

poor, who at once despise and reject its aid, excepting in their direst necessity."

We have on this occasion allowed Dr. Heslop to speak as much as possible for himself, abstaining from all comment. Undoubtedly, the condition of affairs is the reverse of satisfactory; but we question if Dr. Heslop's proposal would prove a panacea, and we cannot but take grave exception to Dr. Heslop's general statements with regard to our Poor-law Medical officers. Undoubtedly there may be men in the service of the Poor-law Board of low qualifications, low propensities, and low behaviour; but we know that such men are the exception, not the rule, and the general statement of Dr. Heslop is an undeserved libel upon men of undoubted respectability who strive earnestly to fulfil the arduous duties of their calling in their appointed sphere, however humble. What various feelings Dr. Heslop's able pamphlet has already called out may be seen elsewhere in our columns.

THE WEEK.

TOPICS OF THE DAY.

The disputes at St. Bartholomew's Hospital, which have resulted in the very discreditable act of petty tyranny on the part of the self-elected governing body of that institution to which we drew attention last week, will not be without good result if they present afresh to the attention of Medical men the utter mockery of benevolence, waste of energy, and caricature of scientific Medical treatment which are combined in the indiscriminate "out-patient practice" of many of the London Hospitals. It is farthest from our intention to inveigh against a properly limited and conscientiously conducted out-patient *clientèle*. But such a thing is, in our experience, a rare exception in the so-called "charities" of London. What we have instead is a host of people, some ill, some idle, herded together for hours in Hospital atmosphere, interchanging contagion, neglecting their homes, losing their independence, for the sake of being literally looked at by a jaded Physician or Surgeon, who, after he has "seen" them, writes at haphazard a form for some stock mixture which, originally invented with a special regard to cheapness, may or may not be properly dispensed, and is given to the patient in a wine bottle without a cork. Take, for instance, St. Bartholomew's, where the House-Physician, Dr. Mayo, has been discharged because he was too honest a man, and had too much respect for his own character as a Physician to act the practical lie of seeing and prescribing for two or three hundred patients in the course of a morning. Is there a word to be said in defence of the system there in force? Is the Physician the better for it? Are the students? Are the patients? A provincial Practitioner has lately attacked the manner in which the duties of pauper Medical practice are discharged by the paid Poor-law Medical officers of our large towns. But we would ask, supposing his statements unexaggerated, which is better attended to—the Birmingham pauper or the pauperised artisan of the casualty room of St. Bartholomew's—the first of our London Hospitals—where, if report be true, all means of diagnosis, except the occasional and momentary use of the eye and the tongue, are dispensed with, where chest cases are treated without the aid of the stethoscope, kidney disease guessed at without the test-tube, and where the duties of the Physician might be performed with equal precision and benefit to all concerned by an automaton?

We have so often descanted upon the injurious effect upon the morals and independence of the working classes, and upon the disastrous consequences entailed by this system of indiscriminate Medical relief on the rank and file of the Medical Profession, that we do not care at present to reopen the distasteful subject. We would only call attention to one special kind of out-patient practice, the abuse of which is exerting the worst influence on the prosperity of the general Practitioner. We mean that form of "charity" in which the Hospital, special or otherwise, competes with the general Practitioner for the half-crowns of the lower middle classes. We could name special Hospitals which encourage and invite patients indiscriminately to attend, holding out the bait of a special fitness on the part of the Medical or Surgical staff to treat their complaints. The "Hospitals" could not keep their doors open without these half-crowns. The Medical men of their staff "enjoy" their position at the expense of their unattached brethren. They are cheaper than the cheapest apothecary, for at many of these "charitable institutions" the patient pays his half-crown once and may go as many times as he pleases. The patients think they have a perfect right to all the attention they receive, and have no idea that they are the recipients of charity. Only recently a highly respectable and accomplished Practitioner in the West-end of London was attending one of these institutions as the representative of a member of the staff who was enjoying his annual holiday. Our friend was busy prescribing for the half-crowns which were flowing into the coffers of the charity, when in came a very respectable well-to-do middle class patient of his own. As may be supposed, she was somewhat taken aback at the sight of her own Medical attendant. "La! Dr. So-and-so," she said, "I did not know that *you* knew anything about these diseases"

The death of the Master of the Mint has been read of with unfeigned regret by a large number of our Profession who were in years past his pupils at University College. Professor Graham was foremost amongst the chemical philosophers of his age. His researches on the subjects of the diffusion of gases, dialysis, and the constitution of salts are second in importance to none. He was never a fluent lecturer, but he taught by his experiments, which never failed; and he was always ready to render help and explanation to those who sought his aid. He was a kind and courteous gentleman as well as a sagacious experimentalist and a profound philosopher.

A process is said to have been discovered at Darjeeling in India by which an illuminating gas has been obtained from sewage. Our ordinary coal gas is a mixture of many hydrocarburetted gases and vapours with other gaseous bodies, amongst which are free hydrogen and carbonic oxide. Sewage throws off heavy and light carburetted hydrogen, and it is this fact which seems to have given the idea of utilising it as a gas producer. The experiments have been so promising that the Indian Government has granted 4000 rupees for the prosecution of the inquiry. We hope it may prove successful, and that it will in time confer the triple benefit of lightening our darkness, cleansing our rivers, and diminishing our gas rates.

On Tuesday last Mr. J. Macarthy and Mr. Henry Reeves were elected Assistant-Surgeons to the London Hospital, thus filling the vacancies caused by the resignation of Mr. Curling and Mr. Little. There were five candidates for the two appointments. Mr. Reeves's election will leave vacant the post of Demonstrator of Anatomy at the Middlesex Hospital.

The alleged case of poisoning at Newport, where a boy was charged on his own written confession with destroying his master's daughter with poisoned wheat, turns out to be at least "not proven." The boy asserted that, besides poisoning the child, he had poisoned fowls with the same grain. Professor Taylor examined parts of the body of the child, and failed to detect poison. Dr. Tidy, of the London Hospital, has since submitted some of the viscera to examination, and has also analysed portions of a chicken alleged to have been killed, but with the same result. The boy asserted at the adjourned inquest that he was coerced into making the confession by the mother of the deceased girl, and the evidence of the Medical man who attended her was to the effect that she died from meningitis. On this evidence the jury returned a verdict that there was no evidence to prove that the child had come to her death otherwise than naturally from inflam-

mation of the membranes and substance of the brain. The boy asserted that his mistress refused to give him a character unless he confessed that he had poisoned her daughter—a statement which is almost incredible.

The newspapers have lately contained the report of a case of a "smasher" who died suddenly from hæmorrhage in Pentonville Prison. The post-mortem examination revealed the presence of a counterfeit half-crown, which had lodged in a pouch in the gullet, and caused ulceration and perforation of the aorta. The curious part of the case was that he had not been observed to swallow with difficulty.

It appears that some sharp practice has been going on in the ordinary route of Welsh tourists. The Medical men of Aberystwith write to the *Times* to say that visitors are systematically prevented from visiting their town by reports, which meet them at various stations *in transitu*, to the effect that illness is rife at Aberystwith. Messrs. James, Roberts, Gilbertson, and Morris Jones assert, on the contrary, that their town is in a remarkably good sanitary state, and as free from disease as any town in the kingdom.

One of the recent prosecutions under the Vaccination Act was that of a woman who was summoned at Greenwich for having failed to take her child on the eighth day to be inspected. The woman said that she did not like to bring her baby out in the rain. She was fined, however, 20s.

The death-rate continues high. Zymotic disease is still the principal cause of the mortality. Last week there were registered 6 deaths from small-pox, 21 from measles, 178 from scarlet fever, 13 from diphtheria, 64 from hooping-cough, 6 from typhus fever, 21 from enteric fever, 12 from simple continued fever, and 139 from diarrhœa. Scarlet fever was most fatal in the East and South districts, hooping-cough in the North and East districts, and diarrhœa in the East and South districts. The deaths were 103 in excess of the estimated amount.

If the fears that are entertained for the fate of the Lord Justice Clerk prove to be well founded, Mr. Moncreiff, the present Lord-Advocate, will in all probability be offered this post, one of the high law prizes which have hitherto eluded his grasp. In that case there will be a vacancy in the seat for the Universities of Aberdeen and Glasgow, and another chance for a Medical candidate.

THE LATE MR. GEORGE GREAVES.

We understand that Mr. George Greaves, whose decease was announced last week, met his death whilst "on duty." As consulting Medical officer of the Chorlton Union Workhouse, he took part in an amputation. The disease of the patient infected his thumb, blood-poisoning followed, and in a few days he died. This is the second death which we have recorded within nine months of a Poor-law Medical officer from disease contracted in the discharge of his duties. We understand that the guardians have it in contemplation to make a grant of money to the widow and family of Mr. Greaves; if so, their intention does them honour.

THE SOCIAL SCIENCE CONGRESS.

The Thirteenth Annual Meeting of the National Association for the Promotion of Social Science will be held at Bristol on the 29th inst., under the Presidency of Sir Stafford Northcote. The meeting promises to be one of great interest, the locality itself being enough to attract visitors, the health-giving downs of Clifton and the pleasant excursions proposed constituting great inducements to those who seek to combine a holiday with the pursuits of social science. The excursion to Tintern Abbey and the Vale of the Wye could not be excelled, and is sure to induce many members to leave Bristol and the Congress.

Among the questions to be discussed which will interest our readers, are the limits which ought to be placed on charitable endowments, whether infanticide can be diminished by legislative enactment, and how the administration of the Poor-law may be improved.

The Health Section is to be presided over by Dr. Symonds, of Clifton, Dr. William Budd being one of the Vice-Presidents, with Dr. Beddoe, Mr. Davies, and Mr. Tibbits as local Secretaries. The special questions proposed for discussion in this section are—

1st. Can Government beneficially further interfere to limit the spread of infectious diseases?

2nd. What legislative measures might be proposed to deal with cases of uncontrollable drunkenness?

3rd. Should the Contagious Diseases Act be extended to the civil population?

We hope that our brethren who visit Bristol will enjoy their holiday.

THE ADMIRALTY AND THE SURGEONS IN CHARGE OF THE LOCK WARDS, DEVONPORT HOSPITAL.

A difficulty seems to have arisen between the civil Surgeons in charge of the Lock-Ward patients in the Royal Albert Hospital, Devonport, and the Admiralty, which has ended in the proposal to supersede the honorary staff by a paid officer directly responsible to Government. The statement made before the Royal Commission on Contagious Diseases that the treatment of the gentlemen in charge of the Royal Albert Hospital was unsatisfactory in various ways, has called forth a rejoinder on their part—a rejoinder we are happy to make more public. It may be premised that the Surgeons in charge are Dr. Row, and Messrs. Laity, Bulteel, and Swain, names sufficiently well known in the Profession to command respect. That they have been successful, under the provisions of the Contagious Diseases Act, in diminishing the amount of disease, not only among the prostitutes of the port of Plymouth, but, what is of far greater importance, among our sailors and marines, statistics clearly show. Not only so, but their success has been proportionately greater than at any other place to which the Act applies. This in itself constitutes an *à priori* reason why a change should not be made in the mode of management; but there may be reasons more potent why such a change should be made. It has been alleged that certain discrepancies in practice and results exist among the present Surgical staff. We should like to know where such discrepancies do not exist. Any man may have a succession of bad cases, and a certain latitude in practice is not only allowable in, but characteristic of, all men. The proposal to give the Visiting-Surgeon—that is to say, the gentleman who examines the women and who sends them in for treatment—any power over the treatment adopted by any Surgeon of the Hospital, is simply insulting. If it be desirable—which we greatly question—that the enormous powers given by the recent extension of the Contagious Act should be centred in one man, the plan might answer, but the more checks on any abuse of these powers there are, the better for every one concerned. Unlimited power is good for no one.

Another accusation brought against the honorary staff is that they have discharged women yet uncured. They show emphatically that in a certain number of the alleged cases this was not so, and that in all the others, where a speedy readmission rendered matters suspicious, there was ample time for reinfection to take place.

When grave accusations are publicly brought against men of standing like those of the honorary staff of the Royal Albert Hospital, we hold it our duty not only to give them an opportunity of appealing to their universal brethren, but of giving the weight of our opinion on their side. There are many matters of minor detail which are embraced in their letter, but these are of local rather than of general interest. Such is not the case when men are charged with incompetence or something worse, and accordingly we

beg to assure the gentlemen who have thus come forward to defend themselves against such an accusation of the sympathy and goodwill of their brethren at large.

WATER SUPPLY AT GIBRALTAR AND MALTA.

THE visit of the trial fleet to Gibraltar has once more brought into view a sanitary defect of that station which has never yet been adduced, we believe, as a plea for extravagant outlay in Ministerial explanations. We read of want of water in the place, of dependence on two brackish wells, with apprehensions expressed of a further reduced supply little short of total exhaustion. Officers with families find themselves compelled to expend a large slice of their income for this main element of subsistence. The same holds good of Malta, where performance has fallen so lamentably short of what is really needed to be done to remedy the deficiency. Were it not that we are too much accustomed to regard the sea as our dominion, we might feel alarmed at the suggestion that in a season of dry weather either one of these fortresses is reducible—how much more under pressure of disease! When we think of the lavish expenditure for commercial interests at Hong-kong, is it, we ask, too much to expect somewhat more of care and precaution for our national honour nearer home, and for the health and convenience of our garrisons? In discussions recently before the public as to the value of Gibraltar as a possession, one argument for its cession to Spain was founded on this scantiness of water. Where, then, are geological science and our boasted engineering skill?

INDECENT HANDBILLS.

THE law as at present in force is sufficiently strong, we believe, to punish offenders against morality who advertise, either by handbills or otherwise, in a manner which is offensive to decency. At all events, in the City of London a late conviction has proved this, to a certain extent, to be the fact, as the following report of a case heard this week at the Mansion House will show:—

"Albert Bell, who described himself as a Doctor of Medicine and a Licentiate of the Royal College of Surgeons, appeared before Alderman Sir Robert Carden on a summons which charged him with aiding and abetting one William Eckley in posting a certain handbill on some Corporation property in Upper Thames-street, without the sanction of the City Commission of Sewers.

"The prosecution had been directed by the Court on Saturday last, when the man Eckley was brought up in custody, having been caught in the act of posting one of the defendant's bills in a place frequented by the public in Thames-street. He then made a statement implicating the defendant, against whom a summons was accordingly issued. Eckley, on Tuesday, appeared as a witness in the case, and proved that the bills in question had been given him to post at the defendant's house, and that he was paid 12s. a week by the defendant personally. On the day in question, he walked to Woolwich and back, and posted the bills in numerous places. On his way back he affixed one to the wall in Thames-street, and was arrested. He had not been specially sent there, but his instructions were general.

"The defendant admitted that he had sent the witness to Woolwich, but not to the City, and said he was annoyed when he heard what had been done. He stated, in answer to the Court, that he was ignorant that it was equally illegal to post the bills at Woolwich and elsewhere.

"Sir Robert Carden said there could be no doubt the defendant had aided and abetted the commission of an indictable offence, and a member of his profession should have been unequal to consent to such practices. Although it had nothing to do with the case, he might say that he had received a letter from a gentleman complaining of an indecent pamphlet being sent to his house by the defendant. He should strongly advise the public not to consult him, as he knew well how to serve them when once in his clutches, and to keep them in his power by means of threats of publicity. The man Eckley stood in a very different position, being compelled to work for the defendant to support his family.

"Eckley said he was starving at the time.

"Sir Robert Carden imposed upon him a nominal fine of 1s., and upon the defendant Bell a fine of 40s., with the alternative of one month's imprisonment, adding that that was the most he could do, and that he had disgraced himself and his Profession.

"The defendant said it should not occur again, and at once paid both fines."

Now, our police are pretty active, under the guidance of Colonel Henderson, in "putting down" several nuisances which annoy the respectable inhabitants of the West-end of London. Why does he not carry out the law with respect to those outragers of public decency who thrust dirty little bills into your hands as you walk along, or post them in urinals and other filthy places? We commend this "nuisance" to the notice of the "active Police Commissioner."

A VINDICATION.

WE have much pleasure in inserting the following extract from the *Hertford Mercury* of Saturday last. Mr. Beaumont is a gentleman of high respectability and reputation in his Profession, and it must be a source of sincere gratification to his brethren that he has come out of a painful ordeal with an unspotted character:—

"On Wednesday evening a meeting was held at the George Inn, Turner's-hill, for the purpose of presenting an address to Mr. John Beaumont, Surgeon, of Crossbrook-street, whose moral character had been impugned in certain proceedings taken against him in the Divorce-court. The address, which was signed by the Rector (the Rev. J. G. Faithfull), by seven resident Medical men, and by the leading inhabitants of the place, congratulated Mr. Beaumont on the successful termination in his favour of the cause of "Barnes *v.* Barnes and Beaumont," and then went on to say—'We have always regarded you as entirely innocent of the crime imputed, and consider you entitled to the highest praise for the bold and energetic measures you adopted to vindicate your moral character, not only for the satisfaction of yourself and friends, but also upon public principle, as none are safe from such charges, so easily made and yet so difficult to disprove. We also beg to offer our utmost sympathy for the trouble, anxiety, and expense which have been imposed upon you, and to assure you of our continued sentiments of confidence and esteem.'"

FROM ABROAD.—PARIS MORTALITY RETURNS—THE PRINCE OF DUPES—THE NEW VINE DISEASE.

OUR readers are aware that for some time past the Paris municipality has issued its mortality in a weekly bulletin, in place of the monthly one that it has published during the last four years. This, of course, is a step in advance, but the value of the returns entirely depends upon the basis upon which they are constructed. This, the Paris Medical press declares, is faulty in the extreme. In the first place, the information as to the cause of death is not derived, as with us, from the certificate of the Practitioner who treated the case, but from the official visitors (*médecins vérificateurs des décès*), who repair to the abode of the deceased on his death being announced, in order principally to verify the fact of its occurrence, and derive their information as to its causes, as best they can, from the friends. The necessary imperfection of a *post-obit* diagnosis thus arrived at need not be dwelt upon; and, moreover, it is stated that these officials, in order not to arouse alarm amidst the inhabitants of the locality, not unfrequently dissimulate the real name of the disease, so that in a great number of cases they have endorsed the returns as deaths from diarrhœa which really arose from cholera. When we recollect how sturdily the municipality refused any returns as to the deaths from cholera during the last severe epidemic, and almost denied its existence, we can hardly expect it can at once reconcile itself to the publication of the naked truth. Certainly, in the event of another epidemic prevailing, no reliance will be placed on returns which are at once imperfect in their compilation and liable to official

cooking. Lastly, it seems that the examination and arrangement of the returns, erroneous as they are, are intrusted to a non-Medical *employé*, who, as M. Vacher observes, might innocently enough return a male death from puerperal peritonitis! For these and other reasons the *Gazette Médicale* declines the future publication of these returns until the necessary improvements have taken place.

The distinguished mathematician, M. Chasles, has been under the humiliating necessity of confessing to the Académie des Sciences that he has exhibited an amount of gullibility which, did it rest on less indisputable testimony, would be simply incredible. As every one knows, he has for the last year or two been deluging the Academy with manuscript letters of Newton, Pascal, Galileo, and other scientific celebrities, contesting well-established claims, and rendering it necessary, had the documents been genuine, to almost rewrite the history of science. To every doubt he replied by new confirmatory letters, drawn from what seemed an inexhaustible budget, until their number amounted to hundreds, if not thousands. Those which related to Newton contained such obvious discrepancies and inaccuracies that their spuriousness has been long since established among ourselves, and whenever any of the other letters have been submitted to the critical examination of competent persons they have broken down in like manner. Not only foreign *savants*, but numerous members of the Academy, have loudly expressed their disbelief in their authenticity, and called on M. Chasles to declare the source whence he obtained this ever-flowing supply. This he determinately and repeatedly refused to do, and so the matter rested. The other day, however, M. Chasles came forward with all the simplicity said to characterise the true *savant*, and stated that he had been made the victim of a band of forgers, the chief of whom he had delivered over to the police. How these ingenious scoundrels practised on their dupe, and continued to ease him of what is stated to have been almost a fortune, long after his suspicions ought to have been aroused by the reclamations the letters already published had excited, the tribunals will hereafter disclose. In the meantime, we think M. Chasles owes the world of science some expression of regret for having allowed himself to be made the medium of no inconsiderable amount of annoyance. Coming from such a source, and backed up by no inconsiderable persons in the Academy, these documents have induced an amount of attention, investigation, and correspondence on the part of those who could ill afford such sacrifices of time. At all events, is is to be hoped that so humiliating an occurrence will be a lesson in future for the Academy itself, and that it will not again incautiously admit statements merely because their tenor is favourable to the claim of French *savants*, without previously submitting them to those tests of authenticity under which these in question must have broken down.

The winegrowers in France are in a state of great consternation at present in consequence of the attacks made on the roots of the vine by a parasitic insect, the *Phylloxera vastatrix*, the ravages of which are said to exceed in extent those of the celebrated oïdium. All means of destroying it have hitherto proved fruitless; its ravages, on the contrary, are on the increase, so that quite a panic prevails among growers in districts beyond those at present infested. M. Naudin, in a recent communication to the Academy of Sciences, points out that the vine is cultivated in an unnatural forced condition, and becomes predisposed to and unable to resist morbid influences. Although this may be necessary for its productive cultivation, he believes that much may be done to obviate the consequences of the exhaustion of the soil which at present takes place. He especially recommends sowing the soil with cruciform plants for a year or two, and digging these in as green manure. M. Marchand, as a more direct remedy for the present evil, strongly recommends the employment of sulphuretted hydrogen for the destruction of the *Phylloxera*. At present all is perplexity.

ROYAL COLLEGE OF SURGEONS.

The annual report of the receipts and disbursements of this institution from Midsummer-day 1868 to Midsummer-day 1869, has just been published, from which we learn that the former amounted to £10,852 14s., and the latter to £10,669 15s. 4d., showing a balance of £182 18s. 8d. in favour of the College.

The fees received on examinations for the diplomas of Fellow, Member, Midwifery and Dental Licentiates amounted to £8506. The rent of chambers produced £929 16s. The fees received on elections to the Fellowship amounted only to £105. The dividends on investment in Government securities were £1194 3s.

In the disbursements the principal amount is for fees to Examiners, Council, etc.—viz., £3818 15s. 6d.; the next largest item is for salaries on account of College, museum, and library departments, amounting to £3136 7s. 4d. Taxes, stamps, and rates absorbed the large sum of £935 6s. 2d. The pensions amount to £498 12s. The lawyers received £117. The trust funds now amount to £10,335 13s. 11d.; this sum includes the liberal endowment by a sum of £5000 for a Professorship of Dermatology by Professor Erasmus Wilson, F.R.S. For prizes, lectures, and oration a sum of £59 5s. 2d. was expended, and for the Hunterian Festival £82 16s. This sum was provided for by the Hunterian Fund; the item "dinners of Council and Court of Examiners" has disappeared from the Collegiate expenditure.

The Council or governing body of the College, which consists of twenty-four members, has held thirteen meetings during the past year, the proceedings of which have been duly reported in the *Medical Times and Gazette*.

The Court of Examiners consists of ten members elected by the Council from the Fellows of the College; but, as is well known, the selection has hitherto been confined to gentlemen who are or have been on the Council. At the present time there are three Members of the Court of Examiners not on the Council—viz., Messrs. Skey, Partridge, and Adams. During the past collegiate year the Court has held five meetings for the examinations for the Fellowship, and forty-five meetings for the primary and pass examinations for Membership.

During the collegiate year 70 candidates for the primary examination for the Fellowship presented themselves. Of this number 58 passed, and 12 were referred to their studies for six months. For the pass examination during the same period there were 33 candidates, 31 of whom passed and 1 was rejected for twelve months; the other was not admitted until qualified in Medicine.

For Membership during the past year there were, for the primary or anatomical and physiological examination, 547 candidates, 437 of whom passed, and 110 were referred to their studies for three months. For the pass or Surgical and Medical examinations there were 322 candidates; of this number 235 passed, and 45 were referred to their studies for six months. Approved in Surgery, but to qualify in Medicine, there were 42. Approved in Surgery and afterwards qualified in Medicine, there were 7. It thus appears that the total number of diplomas granted in the collegiate year for Membership was 242.

The Board of Examiners in Midwifery met four times during the year, and examined 37 candidates, and passed 25. There were five candidates referred for a written examination, and 7 rejected for three months.

The Board of Examiners in Dental Surgery during the past year examined only 4 candidates, of whom 3 passed to the satisfaction of the Board, and one was referred to his Professional studies for six months.

The Fellows of the College, in whom are vested the elections from amongst their own body into the Council, now amount to 1329; of this number there are 210 Honorary Fellows, 389 who have obtained the distinction by examination, and 730 Fellows by election. The latter appear to be decreasing very much in number, as during the past year the fees, at ten guineas each candidate, only amounted to £105.

Professors Hebra and Sigmund.—The Vienna Medical journals, while congratulating their readers that these eminent men have been advanced from extraordinary to ordinary Professorships, make the remarkable statement that they have held the former posts during twenty years without remuneration.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

FRANCE.

(*From our Surgical Correspondent.*)

PARIS, August 23.

FROM a long conversation which I have had with M. Lefort on the subject of Paris prostitution, I have gathered the following facts :—

Prostitution in Paris is of two kinds—the licensed and the clandestine. The first is again divided into two classes—(*a*) houses of tolerance, (*b*) women living single, and provided with cards from the Bureau des Mœurs.

The houses of tolerance—233 in number in 1845, 165 in 1867, a decrease which must be attributed to the increase of clandestine prostitution—are distributed in and around Paris. The inmates of these houses are inspected once a week by a Physician from the Bureau des Mœurs; if any are found diseased, they are instantly sent to St. Lazare, our venereal Hospital for prostitutes, to undergo treatment. The sending to St. Lazare is of but little importance to these women—some of them even look upon this trip as a sort of recreation—consequently it is to them no punishment. The inspections do not suffice. Moreover, we may ask, are these examinations rigorously enforced? Does the Medical man in attendance do so with the necessary care? It is doubtful, and those best informed say no.

But, even as it is, venereal diseases come least from the licensed houses, and this can be easily understood; any disease from them is immediately shipped to the Hospital, whereas, if occurring in those not at all examined—clandestine prostitution—it is allowed to spread indefinitely.

The houses of tolerance situated in the faubourgs of Paris, divided again into those of the *petite* and *grande banlieue*, are not, like those in the centre of the city, visited by the Physician, but their inmates are brought to the Bureau for examination once a week in an omnibus.

The second class of licensed prostitutes, larger in number—there are about 6000 in the city—and daily increasing, are also more dangerous to the community and the public health than the first class. They are provided with cards from the Bureau des Mœurs, where they are inscribed. They live singly, and only have to report themselves at the Bureau once every two weeks for inspection. They are permitted, from sundown until 11 o'clock at night, to frequent any of the streets of the city excepting the boulevards and the Champs-Elysées.

This class is gathered from the so-called clandestine prostitutes. These, whenever they become too flagrant, are arrested and brought before the Bureau for examination. In case they can show no honest means of support they are inscribed, provided with cards, and made subject to the rules and regulations of carded women above-mentioned. If they are found diseased, —which has been the case in one out of three every time such arrests have been made—they go at once to St. Lazare. Unfortunately, it is very difficult to make these arrests, and, as M. Lefort justly remarked, it is hard to say where libertinism ceases, and where prostitution begins. The police of the Bureau employed for this purpose are not in uniform; consequently their opportunities for espionage are very extensive, and it very often happens that proof is not wanting. But even then the case is not lost; the parents, if the culprit is less than 21 years of age, which is nearly always the case, call for their child, and claim her under the law of minors. Thus out of 13,000 arrests made in the last five years, only 1200 subjects could be held and put upon the register.

As some few mistakes have happened in these arrests—at least, there was no clear proof—the agents have to be extremely cautious. It sometimes occurs, though seldom, that a call is made at the Bureau for a card. In these cases, after the unfortunate tells her story of being alone, abandoned, without money, and no support, the Bureau—be it said in its praise—generally uses the best efforts to procure employment, and means and money are often furnished. In this manner, though the cases are very rare, an occasional soul is saved.

As to the police rules laid down for a woman put upon the register, we wish to say nothing; the only point of interest to us, for the moment, is the measures which are taken to prevent disease. As I have said before, the examinations are not made at the place of residence; the women report themselves every two weeks at the Bureau. One out of every seven is found diseased, which alone proves that the time which is allowed to elapse between each inspection is entirely too long. There are many, however, who do not report themselves, especially if diseased, for fear of being sent to St. Lazare; thus many escape inspection for a long time, but their commerce continues and infection spreads. If the inspections were made twice a week and rigorously, instead of every two weeks, which is merely absurd, venereal disease would be materially lessened among this class of women, and what the Bureau would lose pecuniarily in calling a few more Physicians in aid, would be gained in lessening the St. Lazare expenses and in protecting the public health, which ought to be the aim.

The last and worst class of prostitutes—the clandestine—remains to be considered. They are on the increase; their number for the city of Paris is valued at 40,000. The greatest ratio of syphilis has its source here. As before said, one out of every three arrested was found diseased; and of 4070 male patients treated by M. Lefort at the Midi, 2302 had contracted the disease from private women. But this is not all. The larger class of the public—those who have any means at all—do not consult the Midi Surgeons at their Hospital. If we could gather a similar statistic from M. Ricord and many others whose clients come from the wealthier portion of the community, we should be sure to find by far the largest amount of disease coming from *bonnes fortunes*.

The efforts of the Bureau des Mœurs in attempting to remedy this great evil are paralysed as long as the father has the right to claim his child. In nine cases out of ten this is merely done to protect them in their shameful commerce. Only for those who have passed the age of 21 can inscription be enforced. If, says M. Lefort, the father could be held responsible for his child by making him pay a penalty, or, in case of a second offence, the Bureau could have the right to cause an arrest to be made, so as to permit inspection and register, much good might be expected.

As it is, syphilis is increasing in Paris; but not only because of the increase of clandestine prostitution, but also because the examinations of the *filles publiques* do not answer their end.

BIRMINGHAM.

SEPTEMBER 16.

I AM loth to record the fact that there has been a little unpleasantness amongst the Council and Professors of Queen's College concerning the delivery of the inaugural address in October next. This is much to be deplored, because up to the present time it really appeared as if the machinery of the College was perfect in all its parts, and that the utmost harmony, so different from the state of things which existed under the old *régime*, and which was considered as the harbinger of the future stability and prosperity of the institution; but, when doctors disagree, who shall decide? The gist of the subject-matter of dispute is as follows:—The Council of the College thought fit to appoint one of its own members—a Physician of some celebrity, and admirably qualified for the task—to deliver the opening address. This selection was distasteful to a section of the Professors, who considered, upon just or false grounds, I will not pretend to say, that one of themselves, who also holds a high position as a teacher of Medicine and Practitioner, should have been chosen to perform that distinguished duty. The result has been that the gentleman who was chosen by the Council, and whose name has been handled rather unkindly by some of the correspondents of your contemporaries, has refused the proffered compliment, and now there is a probability that the School will be opened without the usual celebration of an elaborate and well-prepared oration, to the great loss of the students and the public at large. It is a pity that petty jealousies should crop up in such learned assemblies; they are as hateful as pernicious in their tendency.

The Medical literature of our town has lately been enriched by a pamphlet written by Dr. Heslop, entitled the "Realities of Medical Attendance on the Sick Poor of Large Towns." Dr. Heslop has the happy knack of marshalling facts, which he is at great pains to accumulate, and he is possessed of prodigious patience in mastering every subject which he takes in hand—the founding of the Children's Hospital to wit—and in this essay both attributes are strikingly conspicuous. The only exception that can be taken to it, and it is one which every well-constituted mind will at once admit, is, that there is no occasion for him to fling dirt in the faces of his unoffending and over-worked *confrères*, the Poor-law Medical officers. This he does with a too lavish hand—a hand which ought rather to have been raised to uphold them in the exercise of

their painful and toilsome duties. What steps the parish Doctors here will take to resent the aspersions which he has so wantonly thrown upon their characters I am not informed; but that they do intend, in a signal way, to mark their sense of righteous indignation at his calumniations is, I understand, their determination. The guardians of the poor also come in for a share of the lash, whom he designates as "small shopkeepers," "tavern landlords," and the "noisiest of town councillors." By the use of these elegant expressions is it likely that the remuneration or the treatment of his poorer brethren, the Poor-law Medical officers, will be improved, the attainment of which Dr. Heslop pretends to have so much at heart? So far as I can gather, the opinion of the Profession is that the essay is written in bad taste, with worse judgment, and with such Professional acrimony as ill becomes one of the *élite* of a learned Profession. As Dr. Heslop has thought fit to adorn his pamphlet with a quotation from Horace, another which just occurs to my mind, *per contra*, may not be inappropriate. Horace, in his epistle to the Pisos, says:—

"Scribendi recte sapere est et principium et fons."

However, as we have before stated, Dr. Heslop is very felicitous in arranging and making the most of figures; but when he attempts more, to quote again—

"Parturiunt montes, nascetur ridiculus mus."

In conclusion, we would just point out one more well-known sentence from his favourite poet, which he will do well to ponder over when he next contemplates rushing into print:—

"Sumite materiam vestris, qui scribitis, aequam
Viribus; et versate diu, quid ferre recusent,
Quid valeant humeri. Cui lecta potenter erit res,
Nec facundia deseret hunc, nec lucidus ordo."

The following letter has been sent by the Poor-law Medical officers of Birmingham to the board of guardians:—

"Birmingham, September 20, 1869.

"Gentlemen,—We, the Medical officers of the parish of Birmingham, beg to call your attention to strictures passed upon us, as part of the Poor-law Medical staff of the kingdom, in a pamphlet noticed by your board at their last meeting. We fully feel with you that the remarks therein contained are quite unworthy of notice; but at the same time, holding as we do prominent positions before the public, we think it due, not only to our feelings, but also with regard to our efficiency as your Medical officers, that some recognition of your continued confidence in us should be expressed by you. We shall therefore be glad if you will honour us with a distinct mark of your approval, so that we shall have the good personal ground for denying in the most unequivocal manner the libellous remarks contained in the scurrilous effusion to which we refer.

"We have the hour to be, Gentlemen,

"Your obedient servants,

"Charles R. Suffield,
"J. Jackson,
"Frowd Jones,
"C. B. Suckling,
"John Darwen."

GENERAL CORRESPONDENCE.

SHAM DRUGS AT ST. BARTHOLOMEW'S HOSPITAL.

[To the Editor of the Medical Times and Gazette.]

Sir,—In the evidence given before the "Committee appointed to inquire into the Venereal Disease," Mr. Holmes Coote, the able Surgeon to St. Bartholomew's Hospital, is asked and answers as follows:—

"Q. 4221. What treatment would you adopt in that anæmic condition which you have just mentioned? I should recommend rest and moderately good diet, and mercury in very small doses, and sarsaparilla.

"4222. Do you believe that sarsaparilla has any beneficial effect?—I have no doubt of it, if properly administered. If you give sarsaparilla to a person who is drinking half a bottle of port wine a day, it does no good; but if you put him on light diet and then give him sarsaparilla, it will produce an effect which is good. We give a very concentrated essence of sarsaparilla at the Hospital.

"4223. Is it what is called the fluid extract?—Yes; we have our own preparation at the Hospital.

"4224. In private practice what do you use?—The concentrated decoction as prepared by good chemists.

"4225. Is it a decoction, or that of which you put a spoonful into a quantity of water?—It is the latter. I should give it about five or six times as strong as it is ordinarily given."

The statements in this examination are clear and precise. Mr. Holmes Coote believes in the virtues of sarsaparilla; he prescribes a great deal of it; he thinks that most people do not give enough of it. In private practice he prescribes what is prepared by good chemists; at the Hospital he gives a preparation of their own, a very concentrated essence, which we may suppose to be at least as good as that prepared by good chemists, if not better.

But it is a singular fact that the St. Bartholomew's Pharmacopœia, as abstracted in Squire's Hospital Pharmacopœias, actually substitutes the hemidesmus for sarsaparilla. The hemidesmus is a drug of low price, which was once tried as a substitute, and is now condemned as worthless, being used only at times, so Mr. Squire says, as a flavouring matter. Anyhow, hemidesmus is not sarsaparilla, and Mr. Coote believes, as he tells us, in sarsaparilla, and not in hemidesmus.

How can this anomaly be explained? Does the cheap sham drug really do as well as the costly sarsaparilla? If so, Mr. Coote ought to tell the world so, and ought not to tax his private patients by making them get the sarsaparilla as prepared by good chemists. Are we to believe that good chemists use hemidesmus, and charge fraudulently for sarsaparilla? Or are we to believe that, with all the pomp of an ancient endowment, and with the *éclat* of occasional Royal visits, the patients of St. Bartholomew's are not supplied with what one of the Surgeons believes to be a valuable remedy for a dangerous disease, because of its cost? Anyhow, there is a contradiction somewhere, which ought to be cleared up. I am, &c.

London, September 20. Phylax.

DR. BARNES'S WATER-BAGS.

Letter from Dr. W. S. Playfair.

[To the Editor of the Medical Times and Gazette.]

Sir,—I am tempted to beg of Dr. Barnes, through your columns, some information as to his experience with regard to what seems to me to be a serious drawback to his method of inducing premature labour by his well-known water-bags. I am the more anxious to do this, as I believe this method of operating to be unquestionably superior to all others, not only for the ease with which it can be applied, but also for the rapidity and certainty with which it generally brings on labour. My experience of the plan, however, leads me to fear that the pressure of the bags on the presenting part is apt to displace it, and so to bring about a mal-presentation which may seriously imperil the safety of the child, if not of the mother.

I have lately induced labour in four cases by this means, and in all of them I have strictly carried out Dr. Barnes's directions.

In the first of these, a case of pelvic deformity in which I had previously performed craniotomy, everything passed off satisfactorily. The bags were introduced without difficulty, pains soon came on, and the mother was safely delivered of a living child.

In the other three I was less fortunate. One was a case of puerperal convulsions which were rapidly getting worse, and in which it was considered advisable to empty the uterus. The bags answered admirably the purpose of dilating the cervix and bringing on pains, but the shoulder presented, and version was necessary.

The second was also a case of pelvic deformity. In this instance the cervix was very high up, and great difficulty was experienced in passing the bags. When the os was dilated, and the pains began, it was found that the cord had come down by the side of the head.

In the third case, I induced labour at the eighth month in a patient who had had several dead children at the full time from placental degeneration. In this case, as Dr. Barnes recommends, I passed a catheter for some distance between the membranes and the uterine walls; but it had no effect in inducing contractions. Next day I gradually dilated the cervix with the three sizes of bags, and after the largest-sized bag had been in position for some hours, and had fully opened up the os, pains being still absent, I ruptured the membranes. Curiously enough, however, upwards of thirty hours elapsed before labour began, and when the head passed into the pelvis, I found there was a brow presentation, and eventually delivered by the forceps. The child was unfortunately dead—a result which may have been partially due to the length of time elapsing since the rupture of the membranes, but to which the

impaction of the head, in consequence of the malposition, no doubt contributed.

I should be glad to think that this succession of mishaps was merely accidental, but I fear this is scarcely likely, and it is not difficult to understand how the pressure of the distended bag can readily displace whatever part of the fœtus may be in contact with it.

Dr. Barnes's experience will no doubt throw considerable light on this doubtful point, and I am sure he will excuse me for directing attention to it, since I feel convinced that, in all other respects, his method of operating is infinitely superior to every other that has been recommended. I am, &c.

W. S. Playfair, M.D.

5, Curzon-street, Mayfair, W., September 10.

HOSPITALS FOR SICK CHILDREN.

Letter from Dr. R. P. B. Taaffe.

[To the Editor of the Medical Times and Gazette.]

Sir,—Dr. Heslop, of Birmingham, has just published a pamphlet in which he with great ability shows how badly provided are the sick children of the poor in large towns with Medical attendance. Of 383 cases attended by him at the Birmingham Hospital for Children, 154 (or two-fifths of the whole) had applied to a druggist alone, 33 (or one-twelfth) only had been under the exclusive care of a qualified Practitioner; 187 (or more than one-half) had been without any Medical aid whatever; 163 had employed both Surgeon and druggist. Here we have a very terrible state of things existing in a large town well supplied with general Hospitals; and yet we are sometimes told by, I am sorry to say, self-interested and very jealous people, that Children's Hospitals are not required. Perhaps, after reading Dr. Heslop's pamphlet, these same people may have the uncomfortable reflection that the deaths of not a few children may lie indirectly at their doors.

The thanks of the Profession and the public are due to Dr. Heslop for bringing this subject forward with all the weight of his great authority, and I trust that in the Hospitals for sick children now existing, and in those to come, his example will be followed, and a regular account taken (for publication) of the proportion of these little patients who have received proper Medical treatment previously to applying at the Hospitals.

Dr. Heslop recommends the general diffusion of Hospitals for sick children. As an illustration of the usefulness of these Hospitals, I may mention the Brighton Hospital for Sick Children, which was opened for out-patients at the end of August, 1868, and for in-patients in February, 1869. Up to the present date the large number (for so short a period) of 549 children have received Medical treatment—namely, 510 out-patients, and 39 in-patients. The number of in-patients might have been quadrupled had we possessed adequate funds and a sufficient number of beds, of which there are only nine, and one of these is kept for accidents; we have generally several cases waiting for admission. There is every prospect of our being able soon to increase the number of beds. I shall feel obliged if you will insert these few remarks.

I am, &c. R. P. B. Taaffe, M.D., M.S. Lond.

Brighton, September 20.

CAUTION IN PURCHASE OF A PRACTICE.

[To the Editor of the Medical Times and Gazette.]

Sir,—As you have given a few words of counsel and advice to students entering upon their career, I think a little advice to young Practitioners as to the care to be exercised in purchasing a practice or partnership would not be amiss, and with your permission will give my experience, trusting it may put others on their guard.

Upwards of a year ago I purchased a practice which was advertised in very glowing terms, and the agent through whom it was sold stated that he believed it to be sound and genuine.

The vendor alleged that he was leaving for family reasons, and stated that the receipts amounted to upwards of £600 in the previous year, and offered the practice for £500.

After taking possession, I soon discovered that the vendor's family reasons for leaving were drunkenness and debauchery, and that the practice was not worth nearly as much as had been represented.

At the expiration of a year, having paid £300, I refused to pay more, as the practice was not worth it, and because the vendor, being almost always intoxicated, failed to introduce me to more than one-third of his patients, though he had covenanted to do so to all of them. Two arbitrators were appointed to decide the matter, but they could not agree, and it was referred to a third party, who argued that the premium for the purchase of a practice was always based on what was booked, and, as I had booked £334, condemned me to pay £34 more, making altogether £334 for a practice not worth more than £275, and made no allowance for bad debts or the breach of contract. In conclusion I would strongly advise any young Practitioner who intends purchasing a practice, to be careful lest he fall into the hands of some drunken and unprincipled scoundrel; and no agent ought to state that a practice is sound and genuine (not knowing whether it is or not) for the sake of closing a transaction and putting a fee in his pocket.

September 21. I am, &c. L. P.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, June 22, 1869.

George Burrows, M.D., F.R.S., President, in the chair.

Dr. Hilton Fagge read a paper on a case of

DISSECTING ANEURISM OF THE AORTA.

The main subject of this short paper is the case of a gentleman, aged 71, who died, as was supposed, of cardiac disease, but in whose body the whole length of the aorta was found to be the seat of a dissecting aneurism. About an inch above the aortic valves the inner coats were divided in the whole circumference of the vessel, and between the edge thus formed and the continuation of the arch above there was a gap, measuring vertically from an inch to an inch and a half, bridged over only by the aneurismal sac. Beyond the origin of the left subclavian artery there was a similar division of the coats of the aorta in their whole circumference, with a broad gap between the segments. The aneurismal channel lay behind the canal of the aortic arch, and the upper parts of the former exceeded the latter so greatly in size, that the arch appeared to lie, as it were, embedded in the anterior wall of the sac. The double channel was continued throughout the whole length of the thoracic and the abdominal aorta, and terminated on one side just below the commencement, on the other side at the bifurcation, of the common iliac artery. At each of these points there was an aperture leading from the aneurism into the arterial channel. The adventitious tube was not only lined by a smooth membrane, but had a yellow coat of its own, which was evidently a new formation, for it passed continuously round the whole canal of the aneurism. The history of the case—elicited in part after the post-mortem examination—is that the gentleman had been seized about six years before with intense pain in the heart, pallor and blueness of countenance; and the commencement of the aneurism is believed to have occurred at this time, although the attack was of no very great duration, and subsided so as to allow him to walk home the same evening—a distance of a mile or a mile and a half. However, he long afterwards remained apparently healthy, and was able to ride, and to hunt, and generally to lead an active life for a man of his years. Only a few months before his death did severe symptoms manifest themselves. The case is next compared with those of similar affections collected by Dr. Peacock, and is shown not only to be an example of the rarest form of dissecting aneurism, but to be in some respects unique. In no previous instance have the aortic coats been cut across in their whole circumference, and the segments separated by a wide gap. In none has the patient been known to have regained so good a state of health after the commencement of the disease. Special consideration is then devoted to this last circumstance, and to the short duration of the attack which is believed to have marked the first rupture of the aortic coats. It is endeavoured to be shown that these features of the case depend upon a common cause—the fact that a second laceration of the coats existed, through which the blood could at once return into the aorta. It is assumed that the original tear was at first quite small, and that the appearances found post mortem were produced only by slow and imperceptible degrees. The hypothesis above stated is shown to be consistent with, and confirmed by, an analysis of previously recorded cases. The remainder of the paper refers chiefly to the bearings of observations as to

the structure of the sac in dissecting aneurisms upon certain questions which have been raised as to the formation of aneurisms in general.

Dr. Greenhow had a case like this under his care, and Dr. Stewart had promised to publish it. There were only three cases like Fagge's as to duration. In his the symptoms began seven years before death. It was not diagnosed. There were two rents in the inner coat of the aorta; one led to the carotids, the other to the iliacs. These were only behind, not in all the circumference. Some of the arteries were fed from the aorta, some from the sac. So with the renals.

Dr. Fagge said that if arteries arose from the aneurism then their coats must have been torn away, so that a double opening would exist. This was especially so in the lumbars in his case.

Dr. W. H. Dickinson read a paper

ON THE ENLARGEMENTS OF THE VISCERA WHICH OCCUR IN RICKETS.

Certain organs of rickety children, particularly the liver, spleen, and absorbent glands, are apt to become altered in a manner somewhat analogous to the change which occurs in the bones. The liver increases in size so as to project palpably below the ribs. It becomes dense, elastic, and pale. The most striking change in its structure is a morbid development of the portal fibrous tissue, which is often evident to the naked eye, circumscribing each lobule. The spleen undergoes in some cases an enormous increase, forming a hard tumour under the walls of the belly, which may reach from the diaphragm to the pelvis. It becomes hard and dense, and has a purple colour, sometimes mottled with buff, on which the white Malpighian corpuscles conspicuously show. These changes are due partly to a swelling of the delicate reticulum in which the splenic pulp is immediately contained, and partly to an increase in the cellular and corpuscular contents of the meshes. The latter change, however, is not always present, since the corpuscles in some cases become atrophied, the spleen then being hard, but not necessarily increased in bulk. The absorbent glands are often considerably enlarged, owing to an increase in their cellular and corpuscular contents. The kidneys become large and pale, owing to an increase of the epithelium in their convoluted tubes. None of the organs affected as described give any reaction with iodine. The change in the viscera is due not to the presence of any formation foreign to their structure, but to an irregular hypertrophy which alters the natural proportion of their tissues. The epithelial and corpuscular element is generally increased, while in the liver the capsule of Glisson, and in the spleen the trabecular tissue, are abnormally developed. It appears (so far as an analysis of the spleen can be taken as a guide to the general condition) that in the viscera, as in bones, there is a deficiency of earthy salts. The condition of viscera which has been described belongs especially to the first four years of life. It usually occurs in connexion with the external signs of rickets, though sometimes the visceral precede the osseous changes; and it not seldom happens that the visceral change may be extreme when the modification in the skeleton is but slight. The rickety state of the viscera, like the alteration in the texture of the bones, is transient in its nature. Under favourable circumstances the affected organs have a strong tendency to recovery, and, even when swollen to the utmost, will occasionally return to their natural dimensions. The change in the viscera appears to interfere comparatively little with their functions. The swelling of the spleen, indeed, when considerable, is often accompanied by much anæmia, but the change in the liver is unaccompanied either by ascites or jaundice, and though the kidneys may be decidedly enlarged the urine remains free from albumen. When the visceral change has taken place to a considerable extent, the child is usually emaciated and anæmic, and is especially liable to be attacked by the diarrhœa, bronchitis, or pneumonia to which rickety children are prone. These affections constitute the chief danger to which it is exposed. The treatment found to be beneficial is that ordinarily called for in cases of rickets. The diet should be nutritious and carefully adjusted, consisting of milk, beef-tea, meat, and wine, according to the age and state of the patient, while medicinally cod-liver oil is a prime necessity, and iron and quinine seldom fail to be advantageous. The rickety change which has been described differs both pathologically and clinically from the lardaceous or amyloid change on the one hand, and on the other from the enlargement of the spleen and absorbent glands which has been associated with the name of Hodgkin.

Dr. Bastian asked if Dr. Dickinson had seen the albuminoid infiltration spoken of by Jenner.

Dr. Dickinson said the enlargement was due partly to fibrous tissue, partly to the liver cells. This state was probably the same as Jenner's albuminoid infiltration.

Dr. John Harley read a second paper on

THE ENDEMIC HÆMATURIA OF THE CAPE OF GOOD HOPE AND NATAL.

More than five years have elapsed since the author called attention to the above-mentioned affection, and proved it to be due to a nematoid worm, a species of Bilharzia. During this time he has obtained further information respecting the disease. Through his friend Mr. Dunsterville, of Port Elizabeth, he has had opportunities of examining the urinary secretions of three other patients suffering from the disease. In all the ova of Bilharzia were readily detected. In one case the parasite extended to the kidney, and renal calculi were occasionally passed. Other Medical men of the Cape Colony have sought to increase our knowledge of the prevalence of the disease and its mode of communication. Dr. Spranger, of Alice, in a letter to Mr. Henry Lee, relates a case which occurred in that locality. Dr. Rubidge, of Port Elizabeth, in a letter to the author, concludes, after extensive inquiries, that the parasite gains access to the body in the act of bathing in the rivers. But the chief interest which attaches to the present communication consists in the demonstration of the disease in Natal, and in more than one locality. A resident of the colony is under Dr. Harley's care at the present time, and is daily passing hundreds of the characteristic ova. The gentleman who is the subject of the disease states that he is personally acquainted with five Europeans resident in the county of Victoria, all of whom are affected in various degrees with the characteristic hæmaturia. The coolies imported by him from Madras and Bombay become affected after a residence of five or six months in the colony, and in such numbers that it is not uncommon for three or four of them together to present themselves to him complaining of inability to work, and bearing on castor-oil leaves the characteristic strings of blood-stained mucus, in which the eggs of the parasite are embedded, as a proof of their malaise. The native Kaffirs in his employ are quite free from the disease. As in the Cape, the disease appears to be confined to certain localities, and these are situated near the coast. Of the two known habitats of the parasite one is the Sterk Spruit, a tributary of the Umlazi, situated about twenty miles from the sea; the other the Umhlanga, a tributary of the Umgeni, distant about ten miles from the coast. How far the contamination of these two principal rivers of Natal extends inland remains to be determined; but the more elevated regions of the interior appear to be free from the parasite. One gentleman, aged 28, who is now a great sufferer from the disease, was entirely free from it until quite lately, when, leaving the interior, where he had dwelt all his lifetime, he came down to the coast, near Verulam, and contracted the hæmaturia. The symptoms of the disease and the condition of the urine in all the cases referred to are identical with those described by Dr. Harley in his first paper. With regard to treatment, Dr. Harley believes that we are restricted to the use of those remedies which, being eliminated by the kidneys, pass out unchanged in the urine. Of these he thinks that belladonna and hyoscyamus may exercise an injurious influence on the parasite, and, by stunting its growth in time, overcome it. Henbane has, so far, proved beneficial in the present case. Dr. Harley appeals to our colleagues at the Cape and Natal for help in the elucidation of the mode of propagation of a disease which is in its nature so thoroughly preventible.

A paper by the late Dr. Hillier gave the completion of the

CASE OF CONGENITAL HYDRONEPHROSIS

in a boy repeatedly tapped, reported in the 48th volume of the *Society's Transactions*. The history in the previous report was carried on till the patient had reached the age of five years. When eight years and five months old he was attacked by acute tuberculosis, and died with cerebral symptoms after three weeks' illness. The abdomen remained till the last much distended and fluctuating. On post-mortem examination, the right kidney was found converted into an enormous cyst twenty-seven inches in circumference, which contained eighty-three fluid ounces of very dilute urinous fluid. The right ureter was found to be abnormally constricted, especially near its vesical extremity, so that fluid did not escape from the cyst into the bladder until a fine probe had been passed through it. The pelvis of the left kidney contained some uric acid deposit and was dilated; the ureter on this side was also distended at its upper portion by an accumulation of sandy matter, which was adherent to its walls, but not very firmly. The spleen,

liver, diaphragm, and lungs contained miliary tubercles. The central portions of the brain were softened, the lateral ventricles were distended with fluid, there was lymph on the upper surface of the cerebrum, and near the olfactory nerves and the optic commissures.

WESTERN MEDICAL AND SURGICAL SOCIETY.

FRIDAY, JUNE 4.

J. R. LANE, Esq., President, in the Chair.

THE following officers were elected for the ensuing session:—President: Mr. J. R. Lane. Vice-Presidents: Dr. Anstie, Mr. C. Hunter, Mr. T. Holmes, and Mr. Rouse. Council: Mr. Edgcumbe Venning, Dr. Graily Hewitt, Mr. J. Colebrooke, Dr. Webb, Mr. G. Pollock, Mr. St. John, Dr. Hugh Mackintosh, Staff Surgeon Elkington, Mr. Hatchard, Dr. Egan, Dr. T. Godrich, and Dr. Martyn. Treasurer: Dr. Baines. Honorary Librarian: Dr. Godwin. Honorary Secretaries: Mr. Milner and Dr. Fyfe. Auditors: Dr. B. Painter and Dr. Daniell.

Mr. LANE then read a case of excision of the clavicle. Henry Holloway, aged 52, an Irish labourer, was admitted into St. Mary's Hospital, March 29, with a tumour occupying the inner three-fourths of the left clavicle. It was solid and firm, giving the idea of a fibrous or enchondromatous mass growing in or from the bone itself. It was about the size and form of a large lemon. There was no pain in it. It had been growing six months, he said, and that he was swinging from one of his hands when he felt something give way which compelled him to cease working at that time. He complained of headache, and was drowsy and stupid, and his face and neck were congested. His health was bad; therefore he was kept with good diet, etc., for a fortnight, when the author removed the tumour together with the clavicle. This was sawn through about an inch from its acromial end, and disarticulated at the sterno-clavicular joint. The author then related minutely the whole steps of the operation, the result being the successful removal of the tumour with the clavicle as above mentioned. When the tumour had been removed, the deep cervical fascia was seen to be uninjured, and consequently neither the subclavian nor carotid vessels were directly exposed to view. The attachment of the fascia had not been interfered with, but close to the median line the division of the fibres of the sterno-hyoid muscles rendered it impossible to preserve this membrane intact, and consequently at this point the loose areolar tissue between the sternum and the trachea, communicating with that of the anterior mediastinum, was unavoidably opened into—a circumstance which probably contributed materially to the unfavourable termination of the case. The patient went on well for the first two or three days, and then, without any definite symptom, gradually became weaker, and died on the seventh day of operation. Diffuse suppuration was found in the mediastinum, and effusion of lymph on right pleura, and none on the left. Small masses like medullary cancer were found in the right lung, also in the pleura; and a mass in the posterior lobes of the brain, also in the middle lobe, were found, evidently of a malignant nature. The tumour presented the same malignant aspect.

Dr. WAY exhibited a fœtus of two months' growth which had been apparently decapitated within the uterus. The author found the fœtus without the head in the clots, the result of a miscarriage, the head being discovered afterwards.

OBITUARY.

DR. ROGET, F.R.S.

DURING the past week the deaths of three very distinguished members of the Medical Profession took place—viz., Dr. Roget, late Secretary to the Royal Society, Professor Graham, Master of the Mint, and the Rev. Dr. Clark, M.D., of Cambridge, a trustee of the Hunterian collection.

The subject of this notice, Dr. Peter Mark Roget, was born in London on January 18, 1779; his father, the Rev. John Roget, was a descendant of a Swiss family, and, coming to this country as minister of one of the Swiss churches, had amongst his congregation the family of Mr. Peter Romilly, the father of the late Sir Samuel, whose sister he married.

Dr. Roget showed when very young a decided partiality for mathematical studies; and, without any instruction from others, or even encouragement to persevere, had made considerable proficiency in all the elementary branches of these sciences by his own unaided exertions; and having chosen Medicine as his profession, he went to Edinburgh when its university was in the meridian of its fame. After completing the usual course of academical studies at the university, he took the degree of Doctor of Medicine in June, 1798, before he was twenty years of age, the subject of his thesis being "De Chemicæ Affinitatis Legibus." At this time he had a severe attack of typhus fever, which nearly proved fatal; he therefore required some relaxation, and made the tour of the English Lakes. His strength returned; he came to London and attended the Medical Schools as a pupil of Dr. Willan, and followed the teachings of Drs. Baillie and Heberden and Messrs. Cruikshank, Wilson, Abernethy, and Sir Everard Home.

When the continent became open to English travellers by the conclusion of the peace of Amiens, Dr. Roget, in company with two friends, spent nearly two years in Paris and Geneva; he was in the latter place when, on the abrupt resumption of hostilities between France and England, Buonaparte suddenly resorted to the unjustifiable measure of seizing on all Englishmen who happened to be in the French territory. Dr. Roget was among the number of the *detenus*, and, after being detained a prisoner for two months, was fortunate enough to obtain his liberty by means of a passport granted to him in virtue of the privileges belonging to him as the son of a citizen of Geneva, and entitling him to exemption from the French authorities. After travelling through Switzerland, Germany, and Denmark, he landed safely in England, and soon after repaired to Harrogate and Bath, where he acted as Medical attendant on the old Marquis of Lansdowne.

On the death of Dr. Percival, of Manchester, Dr. Roget was induced to establish himself in practice there, and was soon appointed Physician to the Infirmary. In conjunction with Messrs. Gibson and Hutchinson he laid the foundation of the Medical school of that town; and during the four years he resided there he took an active part in the proceedings of the Philosophical and Literary Society.

At the earnest wish of his relations and friends, Dr. Roget quitted Manchester in 1808 for this metropolis, and established himself in Russell-square, having previously been admitted a Licentiate of the Royal College of Physicians in 1809. He delivered a popular course of lectures on anatomy and physiology at the Russell Institution. In 1810 he was elected Physician to the Northern Dispensary, and in the autumn of the same year he was appointed, with Dr. Cooke, Lecturer on the Practice of Physic at the Windmill-street School. In 1811 Roget was appointed one of the Secretaries of the Medical and Chirurgical Society, of which institution he had been one of the earliest members and promoters. In conjunction with his friends Drs. Marcet and Yelloly, for twelve years he conducted the laborious task of editing the *Transactions* of the Society, and in 1829-30 filled the President's chair.

On the occasion of a severe epidemic of scurvy and dysentery which broke out in the General Penitentiary at Milbank, he was appointed by Government, in conjunction with Dr. Latham, to take charge of the Medical treatment of the prisoners. In 1824, Dr. Roget married Miss Hobson, only daughter of a wealthy merchant of Liverpool. By this lady, who died eight years after, he had a son and daughter, who survive.

Dr. Roget had been a valuable contributor to Medical literature; his celebrated Bridgewater Treatise on Animal and Vegetable Physiology, published in 1834, added greatly to his reputation. The Edinburgh reviewers justly said, "It will bear a comparison with any of the Bridgewater Treatises which we have perused, whether in reference to the science and learning displayed, or to the acuteness and sobriety of their argument, or to the tone of piety and religious feeling in which they are composed." Dr. Roget contributed many valuable articles to the "Encyclopædia Britannica." Of him a contemporary observes, he may be ranked among the most eminently scientific Physicians of the day. His whole life has been devoted to the acquisition of useful knowledge. We hardly know which most to admire, his highly accomplished and courtierlike manner, or his richly cultivated understanding. Dr. Roget died at West Malvern, on the 12th inst., after only a few days' illness, in the 91st year of his age.

DR. A. D. BRANDS, M.R.C.S. Eng.,

DIED at Forres, N. B., on the 4th inst. He was for nearly fifty years in practice in that town, and was most respected both as a Physician and a man. He died at the age of 78. He was intimately acquainted with classical literature, cultivated a taste for poetry, and was a proficient in painting.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, September 2, 1869 :—

Gibbings, Alfred Thomas, Chichester.
McClosky, James Hugh, Labuan, Borneo.

Also on September 16 :—

Betts, John, London-road, Brighton.
Lett, Francis, Woolwich.

The following gentlemen passed their First Professional Examination on September 2 :—

Blaker, Walter Campbell, Guy's Hospital.
Galpin, Richard, Guy's Hospital.
Palmer, William James, University College.
Sherratt, James Swindells, University College.
Wilks, Charles Benjamin, St. Bartholomew's Hospital.

Also on September 16 :—

Marshall, John, Guy's Hospital.

As an Assistant in compounding and dispensing medicines :—

Grainger, Robert Reed, Sunderland.

APPOINTMENT.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

PHILLIPS, J. J., M.D.—Physician to the Royal Maternity Charity, vice Robert Barnes, M.D., resigned.

NAVAL AND MILITARY APPOINTMENTS.

ADMIRALTY.—The following appointments have been made :—Michael F. Moylan, Acting Assistant-Surgeon, to the *Flora;* Dr. John Pringle and James F. Parr, Assistant-Surgeons, to the *Tamar;* and Dr. W. E. Coleman, Assistant-Surgeon, to the *Serapis.*

Her Majesty has been pleased to approve the following admissions to her Majesty's Indian Medical Service :—

BENGAL.—To be Assistant-Surgeons : Christopher William Calthrop; Alexander Wood, M.B.; Richard Careless Sanders, M.B.; Edwin Sanders; Benjamin Franklin; Frederic Pooley Edis, M.B.; Robert Temple Wright, M.D.; George M'Bride Davis, M.D.; Kali Pada Gupta, M.B.; Henry James Linton.

MADRAS.—To be Assistant-Surgeons : Michael Edward Murphy, M.D.; William Price, M.D.; Samuel Matthias Tyrrell; William Hope Boalth; Joseph Backhouse.

BOMBAY.—To be Assistant-Surgeons : John Alexander Howell; Charles Thomas Peters, M.B.; Henry Prescott Roberts, M.B.; Edward Colson, M.B.; Colin William Mac Rury.

BIRTHS.

BLASSON.—On September 15, at Heckington, the wife of George Blasson, M.R.C.S., of a son.

CHARLTON.—On September 14, at 7, Eldon-square, Newcastle-on-Tyne, the wife of Edward Charlton, M.D., of a son.

DIVER.—On September 16, at Caterham, Surrey, the wife of Dr. E. Diver, of a daughter.

EASTON.—On September 18, at 20, Connaught-square, Hyde-park, W., the wife of John Easton, M.D., of a son.

OGILVIE.—On September 9, at 10, Church-terrace, Lee, S.E., the wife of Surgeon Charles Frederick Ogilvie, M.D., her Majesty's Bombay Army, of a daughter.

STILWELL.—On September 20, at Beckenham, Kent, the wife of R. R. Stilwell, M.D., of a daughter.

WEBB.—On September 18, at 22, Woburn-place, the wife of Francis C. Webb, M.D., of twin daughters.

MARRIAGES.

ALDRIDGE—KEMP-WELCH.—On September 1, at Downton, Wilts, Henry Mooring, second son of the late Henry Mooring Aldridge, Esq., of Poole, to Mary Grace, youngest daughter of the late E. A. Kemp-Welch, M.D., of Downton.

ALLBUTT—ENGLAND.—On September 15, at Weeton Church, Yorkshire, Thomas Clifford Allbutt, M.A., M.D. Cantab., of Leeds, to Susan, only daughter of Thomas England, Esq., of Weeton House.

DEIGHTON—MATHER.—On September 14, at Clapham Parish Church, Christopher Deighton, M.D., Clapham, Yorkshire, to Ann, only daughter of the late Richard Mather, Esq., of Litton.

GLOVER—MULLER.—On September 16, at the Old Gravel-pit Chapel, Hackney, James Grey Glover, M.D., of Compton-terrace, Islington, son of Terrot Glover, Esq., of South Shields, to Mary, daughter of William Muller, Esq., of Clapton, Middlesex.

GRIESS—MASON.—In London, on September 22, John Peter Griess, F.R.S., to Louisa Anne, only daughter of the late William Mason, M.R.C.S., &c., of Burton-on-Trent.

HARRISON—TOWNSEND.—On September 13, at Queenstown Church, Pemberton Harrison, Royal Artillery, second son of the late George Harrison, Esq., of 65, Grosvenor-street, Grosvenor-square, to Mary, daughter of E. R. Townsend, M.D., of Morrison's-quay, Cork, and The Cottage, Queenstown, Ireland.

WATSON—TRUSTRAM.—On September 15, at Christ Church, Tunbridge Wells, George Samuel Watson, M.R.C.S., of Thaxted, Essex, to Ellen, youngest daughter of Charles Trustram, M.R.C.S., of Tunbridge Wells.

DEATHS.

AVERILL, GERTRUDE ELEANOR, only child of Alfred Averill, Surgeon, Tetbury, Gloucestershire, on September 17, aged 3 years and 2 months.

BURKE, JULIANA, the wife of Joseph Burke, Deputy Inspector-General of Hospitals, on August 21, at 21, Hermitage-villas, Richmond, Surrey.

CLARK, Rev. WILLIAM, M.D., F.R.S., etc., late Fellow of Trinity College, Cambridge, and Professor of Anatomy, at Cambridge, on September 15, in his 82nd year.

DICKSON, EDWARD THOMPSON, M.R.C.S.E., formerly Surgeon in the Royal Navy, and for upwards of fifty years a Medical Practitioner in Jersey, at St. Heliers, Jersey, on September 15, in his 77th year.

DICKSON, MARY PIERCE WHITE, the beloved wife of Joseph Dickson, M.D., at South View, Jersey, on September 20, in her 43rd year.

EWEN, HENRY, F.R.C.S., at Long Sutton, Lincolnshire, aged 65.

FOX, HENRY ERASMUS, Surgeon, eldest son of the late Robt. Fox, Surgeon, of Godmanchester, on board the *Orwell*, off Madeira, on August 16, in the 43rd year of his age.

ROGET, PETER MARK, M.D., F.R.S., at Malvern, after a few days' illness, on September 12, in his 91st year.

TAUCH, WILLIAM A., M.R.C.S., of Davies-street, Berkeley-square, at Boulogne, on his way home from Switzerland, on September 18, in his 57th year.

WRIGHT, JOHN JAMES, M.D., at Campfield House, Malton, Yorkshire, on September 21, aged 52.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

CHARING-CROSS HOSPITAL.—Physician for the treatment of Diseases of the Skin; must have a degree from one of the Universities recognised by the General Medical Council, and be F. or M.R.C.P.L. Applications and testimonials to the Secretary on or before September 28, at 2 o'clock p.m.

CHICHESTER INFIRMARY.—House-Surgeon. Candidates are required to be articled pupils of qualified Medical Practitioners. Applications and testimonials to E. Barton, House-Surgeon. The duties will commence early in October.

GREAT YARMOUTH HOSPITAL.—Resident Medical Officer; must be L.S.A., and be unmarried. Applications and testimonials to the Hospital committee, Great Yarmouth, on or before September 27.

GENERAL INFIRMARY, LEEDS.—Resident Medical Officer; must be M.R.C.S.E. Applications and testimonials to the Resident Medical Officer on or before October 4, on which day candidates must attend personally.

GLOUCESTER INFIRMARY.—Assistant-Physician; must have a Medical qualification. Applications and testimonials to the Committee, under cover to the Secretary, on or before September 30. Further information may be obtained of the Secretary.

HULL GENERAL INFIRMARY.—Resident House-Surgeon; must be M.R.C.S., and unmarried. Applications and testimonials to Henry Gibson, Esq., on or before October 18.

ROYAL ISLE OF WIGHT INFIRMARY.—House-Surgeon. Applications and testimonials to the Secretary on or before October 5. The duties will commence after November 3.

ROYAL SOUTH LONDON DISPENSARY.—Honorary District Surgeon. For further particulars apply to Mr. Heutsch.

ROYAL SURREY COUNTY HOSPITAL.—House-Surgeon; must have both Medical and Surgical qualifications. Applications and testimonials to the Assistant-Secretary, Guildford, on or before October 5. Duties to commence on October 20.

SPALDING UNION.—Resident Medical Officer for the Gosberton District. Candidates must have the qualifications required by the Poor-law Board, and be registered under the Medical Act, 1858. Applications and testimonials to A. Maples, Clerk to the Guardians, Spalding, on or before the 27th inst. Election the same day.

SWANSEA NEW HOSPITAL.—House-Surgeon; must be legally qualified. Applications and testimonials to the Secretary, 23, Gower-street, Swansea, on or before November 24. Election December 1.

WORKSOP DISPENSARY.—House-Surgeon; must have both Medical and Surgical qualifications, and be unmarried. Applications and testimonials to the Committee, Dispensary, Worksop, Nottinghamshire. The duties will commence on November 1.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Chorlton Union.—Mr. George Greaves, Consulting Medical Officer for the Workhouse, is dead; salary £100 per annum.

Dolgelley Union.—The Barmouth District is vacant; area 24,459; population 2791; salary £34 10s. per annum.

Thorne Union.—Mr. Joseph J. Littlewood has resigned the Workhouse; salary £25 per annum.

APPOINTMENTS.

Croydon Union.—Henry T. Scott, L.R.C.P., L.F.P. and S. Glas., L.S.A., to the Third District.

Welwyn Union.—Robert Warrener, L.F.P. and S. Glas., L.S.A., to the Welwyn District and the Workhouse.

Whitby Union.—Robert Wyllie, L.R.C.P. Edin., L.S.A., L.F.P. and S. Glas., to the Fylingdales District.

York Union.—Daniel Widds, L.F.P. and S. Glas., L.S.A., L.R.C.P. Edin., to the Seventh District.

THE Council of the Royal Hospital for Diseases of the Chest, City-road, acknowledge the receipt of the liberal donation of £1000 which has been deposited to the credit of the Hospital with Messrs. Glyn, Mills, and Co. The donation is given under the initials "W. P. D."

We hear that Dr. Cayley, Lecturer on Pathology at the Middlesex Hospital, has been appointed Physician to the North-Eastern Hospital for Diseases of Children. Dr. Cayley has resigned the post of Physician to the St. Marylebone General Dispensary.

Presentation.—Dr. W. H. Stone, of St. Thomas's and the Brompton Hospital for Consumption, was presented, on the 16th inst., with an inlaid liqueur case and a porcelain *déjeuner* service, by a few friends, "in appreciation of his Professional service to them during the last seven years."

General Hospital, Birmingham.—The ninth annual report just issued states that the system of training nurses has been inaugurated, that there are now six probationers being trained in the wards under competent nurses. The system has been in partial operation for only a few months, but, so far, its working has proved satisfactory. The Weekly Board have also placed at the disposal of the Medical Board two house-pupilships, to be awarded from time to time to the most worthy pupils and dressers.

Death of Professor Ludwig Boehm.—The death of this distinguished Professor of Surgery and ophthalmology in the Berlin Faculty, 58 years of age, has caused much grief in that city. From the commencement his career has been one of remarkable activity and distinction. His inaugural dissertation, "De Glandularum intestinalium Structura," contains perhaps the best description extant of these various glands, and at its disputation John Müller declared that certain hitherto unknown glands in the colon of the hare described by him should be henceforth called "glandulæ Boehmianæ." After studying under Schönlein at Zurich and Ricord at Paris, we find him, in 1837, placed by Romberg at the head of a cholera Hospital. This appointment gave rise to an important publication, "Die kranke Darmschleimhaut in der asiatischen Cholera," his description of the anatomical changes in cholera remaining classic to the present day. Officiating for a long time as assistant to Dieffenbach, he gained great familiarity with the operation of strabismus, and published important works upon it and other ophthalmological subjects; and the importance of his researches on the accommodation of the eye are fully acknowledged by Donders. Henceforth he chiefly devoted himself to ophthalmology, and attained a large practice in that department. His activity, both as a teacher and practitioner, was extraordinary, and may have contributed to his death, inasmuch as he neglected attending to an injury he received. This was a dissection wound received on July 19, but which until the 21st was only attended with slight local irritation. On that day, however, he had shivering and delirium, which proved to be the precursors of septicæmia, without any apparent localisation in any of the internal organs. He died on August 1.

The Prudhoe Convalescent Home at Whitby was opened on the 14th inst. by the Duchess of Northumberland, in the presence of a numerous and influential assemblage. It is a noble institution, and had its origin in the munificence of the late Duke of Northumberland, whose name is associated so honourably with many works of charity and beneficence in his own county and elsewhere. The building, which directly faces the sea, is designed after the pavilion plan, which has prevailed in France and Germany for a number of years, and which Miss Nightingale and the Crimean Commissioners so strongly recommend. The length of the frontage is 220 feet, and the various offices extend to the depth of 190 feet backwards. The structure is built entirely of stone, and the style of architecture adopted is Gothic, of a simple and plain character, adapted to the purposes of the building, except the central portion, in which some architectural embellishment is displayed in recognition of the munificence of the late Algernon, fourth Duke of Northumberland. The site is advantageously placed for dryness and drainage. Accommodation is provided for between fifty and sixty patients, but the building is designed to accommodate ultimately a hundred inmates. A central tower graces the design, about the middle of which is proposed to be erected, on a projecting pedestal and under a finely carved canopy, a statue of the late lamented Duke. The architect is Thomas Oliver, Esq., F.R.P.B., under whose superintendence the building has been carried out. Mr. Joseph Kyle is the contractor for the whole of the works, and Messrs. Walker and Emely for the engineering department. Mr. John Adams is the clerk of the works. Though the weather was not propitious, the proceedings were of the most gratifying kind, and many speeches were made. Luncheon was afterwards served in the dining-hall of the home.

The common practice in the vindication of honour and honesty is to chop off one or more fingers. Many such cases came to the Hospital. On May 25 notice was sent to the Hospital that a man disembowelled, was lying on the public street. I proceeded at once to the spot, and found him as had been described. He was a Shansi huckster, by name An, 25 years of age, and was accused of stealing. For several days he carried about with him a razor, prepared to prove his accusers false. Any villain might part with a finger in this way. To prove his innocence, therefore, beyond doubt, he stripped himself in the presence of his accusers, and plunged the short, sharp instrument into his abdomen, asking the bystanders to examine his heart for the theft. He was astonished, after inflicting the wound, to find his entrails gush out, and in great fear he lay down and tried to return them. This he found impossible. When he returned them at the lower edge they rushed out at the upper, and *vice versâ*. His jacket, which had been thrown down in the dust, was carelessly thrown over the parts, and a small mat thrown over all to protect him from the blazing sun. I saw him at midday, two hours after the accident, quite sensible, and with no bad symptom. I found it impossible to attend to him on the public thoroughfare, and as his case was hopeless if he continued to lie there, I gave orders to have him conveyed to the Hospital without delay. At 7 p.m., he had not arrived, and I sent to inquire the cause. Of course the Chinese reason was—no one dare touch him; the neighbours and police were alike liable by such an act to be involved. At 9 o'clock I went and remonstrated, the patient beseeching me to save him. The police promised to bring him, and I left, leaving an assistant in charge. At 10 o'clock an answer came that the police dare not move the person from the spot until an official examination had taken place. Seeing that my attempt to save his life would be frustrated by the etiquette and stupidity of Chinese law and officialism, I determined to take the responsibility of removal upon myself, owing to the interest attaching to the case, and the probability of saving his life; I hired bearers, and at 11 p.m. had him lodged in the Hospital. With great difficulty his dirty jacket was separated from the bowels, the dust was carefully washed off the parts, the intestines returned, and the large wound 9½ inches in length was stitched. At the lower part and between the sutures, the omentum protruded a little, and this was allowed to remain so, to provide an easy exit for the discharge of pus from the injured omentum, peritoneum, and transverse colon, which latter was nearly perforated. The cut stretched from a little above the ensiform cartilage of the sternum in an oblique line to a few lines below the level of the umbilicus, and one inch to the right of it. After dressing the part and applying a large bandage to support the abdomen and relieve the pressure upon the stitches, he had 5 grains of opium administered in two doses, and during the next six days the same quantity in twenty four hours, and thereafter 2 grains daily. He was an opium smoker, and on this account, as well as on account of his non-stimulating diet and spare habit, no inflammation ensued, and a speedy and successful cure was the result. On June 2 his bowels were opened naturally for the first time. He lived upon rice. On the 3rd and 4th his bowels were again opened naturally without any trace of blood or matter. On the morning of the 6th he left the Hospital early, ostensibly to procure a light for his pipe at the opposite tea shop. He there met a friend, who supposed he had been dead; he gave him 500 cash and told him to return speedily to the Hospital. He left cured on June 20. He called at the Hospital a month after, quite well and most thankful.—*The Sixth Annual Report of the Peking Hospital, by Dr. Dudgeon.*

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Mr. Spencer Wells's paper on Hydrate of Chloral will be concluded next week.

Studens comes under the *new* regulations.

R. N. must pass the preliminary examination.

An Indian Medical Officer, Bombay Service, A. B., and others who have addressed us on the late monstrous furlough rules, will find the subject treated of in the present number of our journal.

Reader.—Wardrop was a good judge of pictures. He was in the habit for several years of attending the well-known sale rooms of the Messrs. Bonham, of Leinster-street. He would sometimes purchase a picture the merits of which he alone at the time seemed to appreciate. "But," said Mr. Bonham, "we invariably found that he was correct in his judgment."

The papers by Dr. Ross are in the hands of the printer, and shall appear in due course.

Jersey.—There is no charge for inserting communications such as forwarded to us by our correspondent.

The Puff Indirect.—It is known that Sheridan was wont to style puffing as of three kinds: the puff direct, the puff oblique, and the puff by implication. The following curious specimen may perhaps be called the puff indirect. However that may be, it is a novel example of the art of puffing. What the St. Martin's Dispensary was, or who were its "active unpaid Surgeons," we did not know previous to the appearance of the paragraph in a local paper.

In that sadly neglected district of St. Giles's an earnest and merciful work was commenced in 1867 for the relief of the poor suffering from fistula and other diseases of the rectum. The report issued this year evinces how good the work and how economically conducted, but the funds of the "St. Martin's Dispensary for Fistula and other Diseases of the Rectum" sadly want replenishing, and the committee feel that the great desideratum is the establishment of an indoor system where the poverty-stricken can be better treated and yet be near their homes and the few human hearts that care for them. The treasurer is Mr. Mathieson, the banker, of 77, Lombard-street, and the "active unpaid" Surgeons are Doctor William Pirrie and Dr. Heath Strange, and the home of the Dispensary is at 106, Long-acre.

Intoxication by Powder that is given off from Household Drainage Pipes composed of Microscopic Fungi.—In the *Gaceta Medica de Granada* Dr. Duarte has brought before our notice an instance of this kind, observed in all the members of a family that were exposed to the exhalations of dry drainage pipes, as used for common excretions. The symptoms are thus described—œdema of the face, cephalalgia, a sense of being stunned, deafness, sometimes extinction of the voice, enfeeblement, a mild character of delirium, semi-comatose condition, loss of appetite, difficult deglutition, explained by a submucous œdema of the tongue which in like degree explained the deafness, epigastric anxiety, and vomiting. In some cases, three or four days after the attack, there was erysipelatous tumefaction, with pruritus, of the external genital organs. All distress began to decline from the seventh day. Dr. Duarte is inclined to think that these fungi were the *Uredo liniario* or the *Puccinia graminis* of Pers, the spores of which escape in form of powder. An explanation of the symptoms in the family alluded to throws light on analogous symptoms observed in a small dog of the house a short time previously. Lastly, a Spanish Physician informs us that this affection is well known to scavengers, though as yet undescribed, and that they are accustomed to demand extra allowance for cleaning out dry pipes in household use.

COMMUNICATIONS have been received from—

Mr. A. A. Mullin; Dr. Heslop; Dr. J. A. Ross; Mr. E. Wynne Thomas; Mr. Gaskoin; Dr. C. N. Robinson; Mr. E. J. Percy; Mr. R. M. Stuart; Dr. Taaffe; Mr. Javakar; Mr. John Macoonald; Mr. Henry Arnott; Mr. C. L. Kemp; Mr. Henry Pitman; Mr. W. Little; Mr. Lawson Tait; Mr. Spencer Wells; Dr. B. W. Richardson; Dr. Blanc; Dr. W. S. Playfair.

BOOKS RECEIVED—

City of Glasgow Fever Hospital Report—British Journal of Dental Science, June—Transactions of the Epidemiological Society—Journal of Cutaneous Medicine, October—Essay to a Theory of the Flight of Birds, Bats, and Insects—New York Medical Journal, September—Marcet on Diseases of the Larynx—California Medical Gazette, September—Reade's Prism for Microscopic Illumination. By Samuel Highley—Duncan on Mind and Brain.

NEWSPAPERS RECEIVED—

Chester Courant—Birmingham Daily Gazette—Medical Press and Circular—Anti-Vaccinator.

VITAL STATISTICS OF LONDON.

Week ending Saturday, September 18, 1869.

BIRTHS.

Births of Boys, 957; Girls, 987; Total, 1941.
Average of 10 corresponding weeks, 1859-68, 1898·0.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	706	703	1409
Average of the ten years 1858-67	611·2	576·6	1187·8
Average corrected to increased population	...	...	1306
Deaths of people above 90	...	...	...

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-cough.	Typhus.	Diarrhœa.	Cholera.
West	463388	...	2	11	2	11	7	17	...
North	618210	3	5	32	2	17	5	14	...
Central	378058	...	...	21	3	7	5	9	...
East	571158	2	6	65	5	19	7	43	...
South	773175	1	8	49	1	10	15	56	...
Total	2803989	6	21	178	13	64	39	139	...

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·443 in.
Mean temperature	58·1
Highest point of thermometer	68·8
Lowest point of thermometer	52·0
Mean dew-point temperature	52·5
General direction of wind	S.W. & W.S.W.
Whole amount of rain in the week	1·85

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, September 18, 1869, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the year 1869.	Persons to an Acre. (1869.)	Births Registered during the week ending Sept. 18.	Deaths. Corrected Average Weekly Number.	Deaths. Registered during the week ending Sept. 18.	Temperature of Air (Fahr.) Highest during the Week.	Temperature of Air (Fahr.) Lowest during the Week.	Temperature of Air (Fahr.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3170754	40·7	1944	1462	1409	68·8	52·0	58·1	1·85	187
Bristol (City)	169423	36·1	139	76	*94	69·6	48·1	57·7	1·74	176
Birmingham (Boro')	360846	46·1	289	175	162	71·0	49·4	57·3	2·53	256
Liverpool (Boro')	509052	99·7	313	295	293	67·9	48·4	55·7	1·03	104
Manchester (City)	370892	82·7	286	210	*198	72·0	48·0	55·6	2·38	240
Salford (Borough)	119350	23·1	84	60	49	70·7	47·6	54·8	2·11	213
Sheffield (Borough)	239752	10·5	181	126	118	72·0	47·0	54·6	1·57	159
Bradford (Borough)	138522	21·0	96	71	81	66·4	49·0	54·6	1·42	143
Leeds (Borough)	253110	11·7	252	129	130	71·0	49·0	56·8	1·79	181
Hull (Borough)	126682	35·6	73	59	51	...	...	...	...	...
Nwestl-on-Tyne, do.	130503	24·5	76	69	69	...	...	...	...	...
Edinburgh (City)	178002	40·2	140	86	85	62·7	40·0	53·3	2·50	253
Glasgow (City)	458937	90·6	317	268	216	62·5	40·9	53·8	1·08	170
Dublin (City, etc.†)	320762	32·9	134	158	154	69·5	42·6	56·8	1·44	145
Total of 14 large Towns	6546587	35·5	4324	3244	3109	72·0	40·0	55·8	1·84	185
Paris (City)	1889842	...	...	...	836 Week ending Sept. 11.	...	...	...	...	...
Vienna (City)	(1863) 560000	...	...	...	286 Week ending Sept. 11.	...	...	63·3	...	...

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·443 in. The barometrical reading increased from 28·58 in. on Sunday, September 12, to 29·72 in. on Tuesday, September 14. The general direction of the wind was S.W. and W.S.W.

Note.—The population of Cities and Boroughs in 1869 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous.

* The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.
† Inclusive of some suburbs.

APPOINTMENTS FOR THE WEEK.

September 25. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m. King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 1½ p.m.

27. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 1½ p.m.; St. Peter's Hospital for Stone, 2½ p.m.

28. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.

29. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.

30. *Thursday.*

Operations at St. George's, 1 p.m. Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

October 1. *Friday.*

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

OPENING OF THE LONDON MEDICAL SCHOOLS.

KING'S COLLEGE.

The Introductory Lecture was delivered by Dr. George Johnson, Professor of Medicine and Physician to the Hospital.

Mr. Principal and Gentlemen,—In selecting a subject upon which to address you to-day I have been influenced by the consideration that my audience, as is usual upon these occasions, would be a mixed assembly, composed of learned Professors and Practitioners of Medicine, of students of Medicine in various stages of culture, of pupils who are just entering upon the study of Medicine, and lastly of gentlemen of various professions and pursuits who take an interest in our proceedings, and who do us the honour to be present at the opening of our Medical Session. Obviously it is the duty of a lecturer to endeavour so to frame his discourse that it shall be neither unsuited nor uninteresting to any considerable portion of his audience.

Now, believing as I do that the science of Medicine has reached that stage of progress and development at which it is possible, and indeed not difficult, to render its leading principles intelligible and interesting to those who have no special knowledge of our art—believing, too, that the public have an interest in obtaining such a knowledge of the principles by which we are guided as will enable them to distinguish between the legitimate claims of Medical science and the impudent demands of pretentious quackery—I have determined upon the present occasion to attempt such an exposition of the aims and methods of our science and art as shall interest those who have little or no Medical learning, while I endeavour to avoid being tedious to those who have much. If in this latter part of my design I fail, as I fear that I shall in some degree, I crave the indulgence of all whom it may concern.

Before passing on, let me for a moment refer to some changes which have recently occurred in the staff of the College and the Hospital. First, then, we have to regret Dr. Beale's resignation of the Chair of Physiology. Dr. Beale has obtained a more than European reputation by his researches in minute anatomy. His teaching was highly valued by his pupils, and it was difficult to fill the vacancy occasioned by his resignation. This difficulty, however, has been very happily surmounted by the appointment of Dr. Rutherford. Dr. Rutherford has already obtained great distinction as an original observer, a skilful experimenter, and a successful teacher in the University of Edinburgh, and we now offer him a most cordial welcome within the walls of King's College. Happily, while securing the services of Dr. Rutherford, we do not lose those of Dr. Beale, who has accepted the chair of Pathological Anatomy, which was offered to him by the Council, and who retains his position at the Hospital. When, a few months since, Dr. Tonge resigned the office of Assistant-Physician to enter upon a new field of duty, the authorities determined not merely to fill the vacancy thus occasioned, but also to appoint an additional Assistant-Physician. In accordance with this resolution, Dr. Yeo and Dr. Kelly have been appointed Assistant-Physicians of the Hospital. These gentlemen are both well known as very distinguished pupils of the College, and they are not unknown beyond the College walls. The honours obtained by Dr. Kelly at the University of London have excited the admiration, if not the envy, of many. From both of our new Assistant-Physicians much is expected, and we are confident that we shall not be disappointed in our hopes of them.

And now to return to the main purpose of my discourse. The science of Medicine has for its object to promote the physical well-being of mankind, to prevent and to remove disease, to mitigate human suffering, to prolong human life. Comparatively few amongst those who are born into this world, reaching the full period of life allotted to man, die of old age and natural decay. The great majority of mankind have their days shortened by some of the numerous diseases and accidents to which all are liable. Without attempting a precise scientific definition of disease, it is sufficient for our present purpose to say that disease is an abnormal condition of the body. Disease is not, as is often supposed, a separate entity. It has no existence apart from the body. It is of primary importance to distinguish between a disease and its cause. As the clearness of our perception of disease is impaired by thinking of it as an entity apart from the diseased body, so our views are equally, although in a different way, obscured if we confound the cause of a disease with the disease itself. We get an idea of small-pox from the observation of an individual suffering from that disease. The cause of small-pox is a subtle morbid poison which may mingle with the air or be carried on the point of a lancet, whence it may gain an entrance into the system of a healthy individual and there reproduce the disease with a millionfold multiplication of the poison. The cause of small-pox, then, is a morbid poison, while the disease which we call small-pox is a patient under the influence of the variolous poison.

It may seem a truism to remark that every change of texture and every functional disturbance within the body have a cause, whether we can discover it or not.

It is not quite so obvious, though it is equally true, that in the great majority of instances the primary cause of disease is external to the body, which it enters or otherwise acts upon, generally through the lungs, or the alimentary canal, or the skin. The air that we breathe, the food that we consume, and the water that we drink may contain the germs of disease, and thus may set up a train of symptoms involving much suffering and ultimately death.

Here I would remark that it is one of the especial merits of modern Medicine that it has devoted, and is still devoting, much labour and research to the investigation of the causes of disease. The pathologist and the Practitioner of the present day are aware that their labours are not at an end when they have succeeded in giving a disease a name. It is not enough to be able to speak of an inflammation of the lung, or the kidney, or the skin. The investigation, to be practically useful, must be carried further, with a view to ascertain the cause of the malady and its mode of action upon the vital functions and tissues. Without this knowledge, treatment will often be unsuccessful, and any prediction as to the result of the disease doubtful and untrustworthy.

Some of the greatest triumphs of Medical research have been those which have thrown light upon the causes of disease, and consequently upon the means of prevention and of cure. The discovery that that once terrible scourge, the sea scurvy, is the result of a diet deficient in fresh vegetables was a grand step in Medical science. It has been the means of saving innumerable lives and of preventing incalculable suffering. Success of the same kind has attended the investigation of the symptoms of chronic poisoning by lead, and the various modes in which that metal gains entrance into the system—sometimes through the stomach with Devonshire cider or West Indian rum, or soft drinking water that has passed through leaden pipes or been kept in leaden cisterns, sometimes through the skin or the lungs, in the case of painters and others whose occupations expose them to the noxious influence of the metal.

Another instance of the successful investigation of the cause of disease is afforded by the tracing of ague and some allied forms of disease to the influence of malarious exhalations from undrained marshes.

Within the last few years the important discovery has gradually been made that in a large proportion of cases of cholera and of typhoid fever water is the vehicle of the poison by which these diseases are communicated. The investigation of these formidable and fatal diseases has served to bring prominently into notice one of the great defects in our sanitary arrangements. It was for a long time the custom, especially in towns, to place cesspools and wells for the supply of drinking water in such close proximity that a mutual interchange of their contents was of frequent occurrence. Within the last few years cesspools and wells in towns have been very generally and simultaneously abolished, and now the excreta are poured into those very rivers from which our supply of drinking water is mainly derived. Thus, with a blind perversity which to a more enlightened posterity will appear scarcely credible, we have acted as if with a determination to inflict upon ourselves all the loathsome abominations involved in the curse of Rabshakeh. The result has been a terrible amount of preventible sickness, misery, and mortality. One of the most important practical problems of the present day is to discover the most effectual means by which the sewage matters which now poison our rivers and contaminate even the sea-shore may be made to fertilise the soil, and thus increase the supply of food.

The discovery that impure water—water contaminated by sewage—is the vehicle by which mainly, though not entirely, cholera and enteric fever are communicated has helped to throw light upon the nature, or, as we call it, the pathology of those diseases; and, in particular, it has rendered it more certain, at least in the case of cholera, that the discharges from the alimentary canal, which are known to contain the specific poison of the disease, are the result of a salutary effort to eject the poison from the system. The physiology of the process appears to be sufficiently simple. Certain effete and noxious materials which have once been thrown off from the system, having been rendered additionally noxious by the presence of a specific poison, are reintroduced through the agency of drinking water. Then, after being absorbed and undergoing a rapid process of multiplication, they are again expelled through the natural outlets of the body.

Now let us, for a moment, consider the influence of theory upon practice. Before we can hope to treat a disease with success, we must endeavour to learn something of the natural course of the disease, and the relation of the symptoms to each other and to their exciting cause. In other words, we must obtain an insight into what is commonly called the natural history, but what is better termed the physiology of disease. Without this knowledge we are in continual danger of directing our curative efforts in opposition to those of nature. I will give a very simple and obvious illustration of this principle.

In a case of small-pox, the eruption on the skin, which forms the most painful and loathsome feature of the disease, is an essential part of the process by which the system, infected by the variolous poison, is restored to a state of health. No sufferer from small-pox ever recovered from the disease without the occurrence of the characteristic eruption, and to drive in the rash is to kill the patient. Not long since I witnessed the result of such an experiment. A young lady had what, at the commencement, appeared to be a mild attack of small-pox. Soon after the eruption appeared the child's mother, without the sanction or knowledge of the Medical attendant, kept her enveloped in a cold wet sheet, without an outer covering of blankets, during the greater part of one day. The result was that the rash was driven in, and when I saw the child about the fifth day of the disease, so completely had the eruption been repressed, that, from the appearance of the skin alone, I could not have learned the nature of the disease. She was then dying, and did rapidly die, with symptoms of blood-decomposition, bleeding from most of the mucous membranes, and hæmorrhagic spots beneath the skin. This unfortunate case may serve to illustrate the danger of flying in the face of nature, the mischievous effect of a treatment in opposition to the natural process of cure.

It is painful to reflect upon the numerous illustrations which the history of Medicine contains of the unhappy influence of erroneous theories upon the treatment of disease. Small-pox, again, affords one memorable example. The cotemporaries of Sydenham, about 200 years ago, had a theory that the maturation of the pustules of that disease requires a high temperature for its completion. This they endeavoured to secure by closing the doors and windows, and by an abundance of bed-clothing. The result was that, the air of the room being charged with the noxious emanations from the patient's body, the poison continually re-entered the system through the lungs, and the mortality was excessive. Sydenham ventured to change all this. He kept his patients cool—not, however, chilling them with a wet sheet—and he ventilated the sick room. This practice, being in opposition to a fashionable theory, was denounced as a dangerous innovation, but, being in accordance with nature and with common sense, it was successful in saving life, and it ultimately became the general practice.

And now to come much nearer to our own time. Probably no theory of disease has ever led to so great a sacrifice of human life as that which, attributing the collapse stage of cholera to the drain of fluid from the blood through the alimentary canal, suggests a treatment whose main object is to arrest the discharges by astringents and especially by opiates. This theory has now few defenders, and having been virtually abandoned, it scarcely needs further refutation. The theory is obviously inconsistent with the undoubted facts of the disease. There is no such direct relation between the degree of collapse and the amount of liquid discharged, as there must be if the theory had a basis of truth. And again, there is the still more significant fact that recovery from collapse is invariably associated with a continuance of those discharges which this theory assumes to be the cause of that condition. So that while death may occur rapidly without discharges, like death from malignant small-pox before the appearance of the eruption, the intestinal discharges are as essential a condition of recovery from collapse as the development of the cutaneous rash in the case of small-pox. The analogy between the intestinal discharges of cholera and the cutaneous eruption of small-pox appears to be complete, and the arrest of the choleraic discharges by opiates is as fatal a mistake as the repression of the variolous eruption by a cold wet sheet.

It is remarkable, and indeed surprising, that this erroneous theory of cholera should so long have maintained its ground, notwithstanding the acknowledged failure of the astringent treatment, with which it is inseparably associated. It would seem reasonable and right that when the practical application of a theory is found to be disastrous, the theory itself should be carefully re-examined, with a view to ascertain the source of fallacy.

The history of this theory affords a remarkable confirmation of the doctrine propounded by Buckle,(a) who says, "There is no well-attested case on record of any theory having been abandoned because it produced injurious results. As long as a theory is believed, men will ascribe its evil consequences to any cause except the right one; and a theory which is once established will always be believed until there is some change of knowledge which shakes its foundation. Every practical change may, by careful analysis, be shown to depend in the first instance on some change of speculative opinion."

It can scarcely be doubted that a change of theoretical views as to the nature of cholera has contributed much to bring about the modified treatment of that disease which is now very generally adopted.

The construction of Medical theories is a difficult and a perilous undertaking, and it behoves all who apply theories to practice to take heed that their light be not darkness.

The main purpose of Medical science and art is practical. Our continual endeavour is to obtain the knowledge and the skill which will enable us to prevent, to remove, or to mitigate disease. Now, it should be distinctly understood that no general theory of therapeutics has the slightest claim to be accepted as true or trustworthy. The dogma that "like cures like," or *similia similibus curantur*, is certainly not a legitimate induction from the ascertained facts of disease. Equally incomplete and unsatisfactory is a theory which in various forms has often cropped out, and which was advocated in a recent number of the *Quarterly Review*. I mean the theory that all disease is caused by, or at any rate associated with, a deficiency of vital force, and therefore all remedial treatment should be restorative, with a view to increase vital power.

Without stopping to discuss the question whether our knowledge of the nature of the so-called vital force renders it possible to estimate its amount in health and in disease, we may unhesitatingly declare that the phenomena of disease and the various modes of recovery and of cure are too complex and diverse to be included within the terms of this inadequate theory.

The most general and comprehensive statement with regard to the cure of disease that can safely and confidently be made is this—Most of those diseases that are curable by any means are curable by the unaided powers of Nature; and the chief art of the Physician, as of the Surgeon, consists in regulating and directing those natural forces which will cure a fever or an inflamed lung as surely and as completely as they will heal a wound or mend a broken bone. This proposition may perhaps startle those who have been educated in the belief that for every disease—nay, for almost every symptom of disease—there is to be found a specific remedy in an infinitely small dose of the appropriate drug. There is much truth in the statement that superstition is an ally of infidelity, and it may be admitted as a fact that the extreme and childish credulity of Hahnemann and his disciples in the efficacy of infinitesimal doses has tended to increase the scepticism of those who see in the reputed cures by such doses only the work of the *vis medicatrix naturæ*, aided perhaps by the faith and hope which rarely fail to exert a beneficial influence upon the sick.

The most careful and competent observers agree in opinion that the specific remedies, remedies having a peculiar curative action in special forms of disease, are unhappily very few in number. Quinine may be considered a specific cure for ague. Mercury and iodide of potassium are specially curative in certain forms of specific disease, and bromide of potassium has almost earned for itself the title of a specific remedy for some of the worst forms of epilepsy.

Now, our experience of these remedies is in direct opposition

(a) "History of Civilisation," vol. ii. p. 545.

to the strange theory which attributes a marvellous efficacy to infinitesimal doses. For it is a well-ascertained fact that, within certain limits, the curative influence of the remedies which I have mentioned, and of others to which I have not referred, bears a direct relation to the dose of the drug. To insure the curative effect the remedy must be given in full doses, the influence of small doses being quite inappreciable.

Physicians of the present day are sometimes charged with a want of faith in their power to cure disease. To this charge we plead "Not guilty." It is quite true that with an increased knowledge of the nature of disease we have learned that the use of drugs is more limited than we had formerly supposed; yet we have an increased confidence in our power of dealing with disease, both in the way of prevention and of cure, and a firm conviction that we have acquired, and are continually acquiring, greater skill and success in the administration of particular remedies. In the treatment of a case of fever, we believe that good nursing and judicious feeding are of more importance than the employment of so-called febrifuge medicines, yet we carefully watch the symptoms, and we do not neglect to give such remedies as may appear to be required. So, in the management of many chronic diseases, we know that the secret of success consists in the discovery and removal of the cause, and not in the blind administration of drugs, yet, the cause having ceased to operate, special remedies may sometimes assist the cure.

In our more precise modern methods of exploring disease we have a great advantage over our predecessors. The stethoscope, the microscope, the ophthalmoscope, the laryngoscope, the sphygmograph, and the thermometer have contributed much to accuracy of diagnosis, and thus have indirectly advanced our knowledge of the real influence of remedies. So long as the nature of a disease is unknown or doubtful, treatment must be uncertain and the results often delusive, for we know not what we have been treating. Before the laryngoscope came into use the nature of disease within the larynx was often extremely doubtful. Hence it must have happened frequently that a patient with a wart on one of his vocal cords has been fruitlessly and injuriously dosed with mercury and other drugs. Now, by the aid of the mirror, we not only see the nature of the disease, but we easily remove such a growth by safe and simple mechanical means. The most brilliant result of modern therapeutical research is to be seen in the discovery and the gradual improvement of the means of annihilating pain by general and local anæsthesia. But here, again, it is to be observed that some of the greatest improvements in the art of healing have been accomplished, not by the discovery of new remedies, or by the acquirement of increased skill in the use of old ones, but by entirely different methods. An illustration of this statement is afforded by the discovery of vaccination and by the introduction of the non-restraint system of treating the insane.

Unquestionably vaccination is the most splendid instance of successful preventive medicine that the human intellect has ever yet arrived at. The success of vaccination has been so nearly complete that the present generation, knowing little of the horrors of small-pox, can scarcely appreciate the immense benefit conferred upon mankind by Jenner's discovery. That vaccination has not as yet been entirely successful in annihilating small-pox is mainly due to the fact that it has hitherto been impossible to insure the efficient vaccination of every infant. The carelessness or the unskilfulness of some operators, and the negligence or unreasonable prejudices of a comparatively small number of parents, who, in spite of the law, refuse to have their children vaccinated, are the chief hindrances in the way of the complete extermination of one of the most terrible and fatal of all diseases.

The release of the insane from the misery and degradation of chains and fetters, and the substitution of the non-restraint system of treatment, afford a memorable illustration of the triumph of common sense and Christian charity over ignorance and prejudice. To Dr. Conolly the world is mainly indebted for the establishment of the grand principle that in the treatment of the insane the non-restraint system is both practicable and safe. Dr. Conolly, it is true, was not the first to release the poor lunatic from the galling misery of mechanical restraint. This had been done to a great extent by Dr. Charlesworth and Mr. Gardiner Hill in the Lincoln Asylum, and still earlier, towards the end of the last century, by William Tuke, in the "Retreat," near York, established by the Society of Friends, and about the same time by Pinel in the Bicêtre Asylum in Paris. It was in the year 1793 that Pinel, after some delay and difficulty, obtained permission from the French Government to release some of his maniacal patients. The first man on whom the experiment was tried was an English captain who had been in chains for forty years. He was thought to be one of the most dangerous inmates of the asylum, and with good reason, for he had killed one of his keepers by a blow with his manacles. He was released under a promise that he would behave well and injure no one. Having obtained his liberty, he walked about during the whole day uttering exclamations of delight. In the evening he returned to his cell of his own accord, and slept tranquilly. During the two succeeding years while he remained in the asylum he had no return of his violent paroxysms, and he even rendered himself useful by exercising a kind of authority over the other patients, whom he ruled in his own peculiar way. In the course of a few days Pinel released fifty-three maniacs from their chains. The result was beyond his hopes: tranquillity and harmony succeeded to tumult and disorder; kindness and gentleness had the most favourable effect, and the most furious maniacs were rendered tractable. Such a marvellous change from violence to tranquillity surely had some relationship to a work of healing which occurred nearly 1800 years before. We read of a man who had his dwelling among the tombs, who had often broken the fetters and chains with which he had been bound, neither could any man tame him, yet this outcast was found, clothed and in his right mind, sitting at the feet of Him who had healed him by a word. Surely, too, Pinel's active beneficence forms a pleasing contrast to the unpractical mocking infidelity of the philosophers, and the sanguinary violence of the politicians of his age and country.

Notwithstanding the favourable experience of the non-restraint treatment in the Bicêtre, in the Retreat at York, and in the Lincoln Asylum, the barbarous system of restraint was still in very general use when Dr. Conolly was appointed Resident Physician of Hanwell in 1839. Hanwell at that time contained 800 patients, more than 40 of whom were found under restraint. Dr. Conolly gradually abolished all mechanical restraint, and in his successive annual reports he demonstrated the complete success of the system, and its happy influence not only upon the poor patients, but also upon the character of the attendants. The publication of these reports excited great interest and some controversy, but the result was that within a few years the non-restraint system of treatment was adopted in every asylum throughout the country.(b)

For some years Dr. Conolly gave clinical lectures at Hanwell during the summer months, and I had the privilege of forming one of the first batch of students who were sent down from each of the London schools. We were allowed to visit the wards with Dr. Conolly, and we afterwards listened to his most interesting and instructive clinical remarks on the cases we had seen.

It is much to be regretted that the abundant materials for clinical instruction in the great asylums throughout the country are so little utilised as they are at the present time. A knowledge of insanity is of great importance—nay, it is essential to every Practitioner of Medicine.

There are obvious reasons why cases of confirmed insanity should, as a rule, be treated by a special class of Physicians; but it is equally obvious that mental unsoundness in its beginning and early stages must come under the care of the ordinary Medical attendant. For these reasons the public interest demands that the opportunities afforded to the general body of Medical students for obtaining a familiarity with the various forms and phases of mental disease, should be greater than they are at the present time. I would strongly urge upon all students to whom any such opportunity offers to avail themselves of it to the fullest possible extent. They will find the subject full of interest, an interest, too, which grows with the increase of observation and knowledge; they will also find it abounding in difficulties. It could scarcely be otherwise, since the study of insanity involves the consideration of the mysterious connexion between mind and matter, and their mutual action and reaction upon each other.

In the investigation of mental diseases, two distinct classes of phenomena present themselves for examination. First there is to be noted the influence of purely physical changes upon the mental condition. The brain requires for the discharge of its functions a due supply of freely moving normal blood. Impede the movement of the blood through the brain, or deprive it of its oxygen, or permit it to be contaminated by alcohol, by chloroform, by the products of undigested food, by retained excreta, or by certain morbid poisons, and symptoms

(b) See Sir James Clark's interesting memoir of Dr. Conolly.

of mental disturbance, varying according to the nature and the intensity of the exciting cause, will be the result. Here we have an example of a purely physical change causing a mental disorder.

On the other hand, the influence of mental emotion upon the circulation and the cerebral functions is not less certain and obvious. Fear and anger and grief, through their influence upon the heart and upon the minute arteries, change the colour of the face, and doubtless disturb also the cerebral circulation in a moment, and this disturbance, when very intense, or much prolonged, or recurring often, may result in a more or less durable mental derangement. Thus we see that a mental delusion—a supposed ghost—may be only, as Scrooge in the Christmas carol suggests, "an undigested bit of beef, a crumb of cheese, or a fragment of an underdone potato," while, on the other hand, a blood-stained dagger in the air may be the outcome of a mental conflict between the conscience and a strong temptation. And, again, sudden terror or intense grief may result in a lifelong insanity or epilepsy.

The physical and the mental phenomena are quite distinct, yet closely correlated, and mutually interdependent. How close is the relationship between the mind and the body is shown by the consideration that such phenomena as fear, or grief, or anger, which we think of as being purely mental, are usually the result of impressions conveyed to the mind through the sense of either sight or hearing. In short, it is apparent that all impressions conveyed to the mind from without, and all outward manifestations of the mind's internal operations, are effected by material agents. Are we therefore driven to the conclusion that the mind itself is material—the product of a highly organised "protoplasm?" We think not. For we see that many of the mental functions—the phenomena of the reason, the conscience, and the will—are so entirely different from any of the known properties of matter, however highly organised, that we cannot conceive of the one being a product of the other. Surely something more than organised protoplasm or "quintessence of dust" has been concerned in the authorship of Hamlet, in the discovery of the laws of gravitation, in the invention of the steam-engine or the electric telegraph, and in the spectrum analysis of the sun and the stars. We believe that the cerebral organisation, wonderful as it is, is as distinct from the mind in its essence as the battery and the wire which convey a telegraphic message are distinct from the mind which frames and sends the message and from the mind which receives and reads it.

In the study of psychology we shall do well to bear in mind Lord Bacon's doctrine that "no perfect discovery can be made upon a flat or level. Neither is it possible to discover the more remote and deeper parts of any science if you stand but upon the level of the same science and ascend not to a higher science." Happily, with respect to the difficult and deeply interesting subject which we have just now been considering, we are not left without higher sources of knowledge. It has been revealed to us that there is within each human being a spirit capable of holding communion with the divine spirit, and destined for an immortal life beyond the grave. This revelation, whilst it far transcends in its clearness and completeness the result of any merely human inquiry, is yet in strict accordance with all that by other methods we can most surely learn of our present condition, our actual needs, our intellectual cravings, and our highest spiritual aspirations.

It surely will not be denied that, amongst the subjects whose investigation may the better enable us to promote even the physical welfare of mankind, the metaphysical question to which I have referred finds its appropriate place. Indeed, the student of nature in his progress onwards and upwards can hardly avoid the contemplation of this subject. The minute observation of the mechanical arrangement of the particles of matter leads on to the investigation of those subtler powers by whose influence magnetic action and chemical affinities are developed. Beyond these, again, there lies the greater mystery of vital powers. Trace that to its utmost extent, and we have but reached the first limits of those higher faculties of reason, conscience and will, of which we feel within ourselves the living action. And here, where the darkness presses most heavily upon us—here in our search for the great First Cause of all created being—we most need that illumination from above which alone can satisfy man's inquiring spirit. Here, too, we may reverently adopt Lord Bacon's profession—"Thy creatures have been my books, but Thy scriptures much more. I have sought Thee in the courts, fields, and gardens, but I have found Thee in Thy temples."

And now, before I conclude, let me address a few words specially to those amongst you who are about to commence the study of Medicine, as well as to those who have already made some progress in that study. Your main object during the earlier part of your student course is to make yourselves physiologists. Your first business is to study the structure and working of that wonderful machine—something more than "the cunningest of nature's clocks"—whose derangements it will be the work of your future life to correct. In the study of physiology you will need all the aid and the light to be derived from anatomy, from chemistry, and from physics. Physiology as a science may be said to date from Harvey's great discovery of the circulation of the blood, rather more than 200 years ago. Before that discovery a science of physiology was as impossible of attainment as a science of astronomy before the discoveries of Copernicus, of Galileo, and of Newton.

During the present century physiology has made great progress, and within the last twenty-five years its rate of advance, owing to improved methods of research, has been more rapid than at any former period.

It is not long since we have learned that Harvey's discovery, complete and accurate as it was so far as it went, was yet not quite complete. For many years after the time of Harvey it was believed that the heart alone is concerned not only in the propulsion of the blood through the arteries, but also in regulating the supply of blood to different parts of the body. Some time since the late Dr. Alison and others suggested that the irregular distribution of blood to various tissues and organs in certain diseases is the result of an influence exerted by the small vessels upon the circulation. Then microscopic research discovered that the smallest arteries in all the tissues have muscular walls, with a contractile power which enables them to regulate the size of their canals, and thus to control the stream of blood. Lastly, Bernard and others demonstrated that the contraction of these arterial canals is under the influence of certain nerves called *vaso-motor* nerves. Paralysis of the vaso-motor nerves is followed by extreme dilatation of the minute arteries. On the contrary, stimulation of the nerves by galvanism excites contraction of these vessels to such a degree as, for a time, to close these canals. In this action of the minute arteries we find the explanation of the sudden changes in the colour of the face which occur under the influence of mental emotion. The pallor of fear or anger and the flush of shame receive here their physiological explanation. Again, the discovery of this regulating influence of the minute arteries has led to the right interpretation of some pathological phenomena which had before been unexplained. It will suffice to mention three diseases upon which the recognition of this stop-cock action of the small arteries has helped to throw a new light. These are—a fit of epilepsy, the collapse of cholera, and the hypertrophy of the heart, which is usually associated with chronic Bright's disease of the kidney.

When you pass on to the study of disease, you will find that you are, in fact, entering upon another department of physiology. Pathology, the science of disease, is but another name for the physiology of disease. The processes and the products of disease result from the action of the normal mechanism and forces, only modified by morbid conditions. Many morbid processes obviously have a beneficial design and tendency with reference to some antecedent injury or derangement. They are the result of an effort to repair or to compensate for an injury or to correct a disorder, and so to restore the injured organ or the system at large to its normal condition.

Again, none but a physiologist can rightly interpret or fully comprehend the various modes in which disease of one organ may excite functional disturbance and even structural change in another with which it is correlated. It rarely happens that disease of an important organ remains long uncomplicated with disorder in other parts, and the tracing of the physiological relationship between two or more coexisting diseases constitutes one of the most interesting practical problems in the every-day work of the well-educated Practitioner. Be assured that even in the midst of morbid processes apparently the most disorderly and chaotic there is a true *cosmos*, if only we can find the right key for their interpretation.

Enough, I think, has been said to convince you that physiology forms the only basis for scientific pathology, and I trust that the result of this conviction will be that you will all become zealous students of physiology.

When you come to the subject of therapeutics, the final and supreme stage of your Medical studies, you will learn that although, as I have before intimated, the administration of medicines forms but one element in the treatment of disease, yet it constitutes an important part of the art of healing. We do possess remedial agents of un-

doubted power and of inestimable value, and we may reasonably hope that further research will add to the number and the efficiency of our remedies. In estimating the influence of treatment you will do well to avoid the extreme of weak credulity on the one hand, and of obstinate scepticism on the other. The operation of some of our most trustworthy remedies is mysterious and unexplained, if not inexplicable. If, therefore, you find, after careful inquiry, that a remedy or a method of treatment has a favourable influence upon a disease, do not reject it because it is opposed to some preconceived opinion, or because you cannot satisfactorily explain its curative action. Finally, gentlemen, in the study of therapeutics, as in every other field of research, remember that your main object is not your own exaltation or selfish advancement, but *truth*—truth to be employed for "the glory of the Creator and the relief of man's estate." Let this, then, be your leading maxim—"Prove all things, hold fast that which is good."

ST. GEORGE'S HOSPITAL.

The Introductory Lecture was delivered by Dr. Wadham. After briefly greeting the visitors present, the lecturer, addressing the students, said:—"To you also, gentlemen, my colleagues, equally with myself, are anxious to offer the warmest and most friendly welcome, to encourage you to look upon us not only as lecturers who have undertaken to deliver to you, in as condensed and palatable a form as possible, the latest facts and newest views respecting the subjects to which our names are respectively attached, but as teachers anxious to impart to you all of the science of Medicine and Surgery which we know, and so much of its art as is capable of transmission; as men aware that instruction—'that mysterious communing of wisdom with ignorance'—is an indefinably tentative process, which cannot be conducted in the gross, or carried out with mechanical precision by aid of fixed and universal rules, indiscriminately applied to intellects and dispositions varying in capacity and kind, but one requiring a study of individual aptitude, and a perpetual variation of means and methods in order to attain and accomplish its ends; that the slothful amongst you have to be stimulated, the diligent encouraged, those who are slow of understanding more particularly and patiently informed, and those of brilliant and quick parts restrained from deviating from the simple paths of nature, and wandering too far into the labyrinths of speculative hypotheses. To effect these objects requires, as we know, time, and labour, and application on our part; but all this we are willing to give, provided you, on your side, will show some of that desire for instruction, some of that thirst for information, and a little of that appreciation of the efforts made on your behalf, which, I regret to say, are not such distinguishing characteristics of Medical students—at all events, at the outset of their career—as they would be did they but know the magnitude of the task before them, and the amount of knowledge necessary in the present day, not only to satisfy the requirements of the different examining bodies, but to enable them to practise with credit to themselves, with advantage to their patients, and, above all, with satisfaction to their own consciences, that Profession which they are here professedly to study."

The lecturer then described the nature and responsibilities of the Profession, and the prospects it offered to those who thoroughly qualified themselves for its practice, adding—"But even when you have made yourself a good Physician or skilful Surgeon you must not imagine that with industry and rectitude your success is certain, the utmost you can do being to deserve it; for although it rarely happens that in the higher branches of the Profession any man obtains the general confidence of the public, and certainly never that and the confidence of the Profession without deserving it, it often does occur that those whom the Profession respect the public ignore, and that the secondary and more numerous prizes are awarded to assertion and assurance, and not to modesty and merit—the public in this resembling the unjust judge in its nature, and those who obtain its ear and patronage having in theirs much of that irrepressible disposition which distinguished the importunate widow, those lines being, perhaps, more applicable to the Medical than any other profession which say—

> "'How rarely, friend, an honest man inherits
> Honours and wealth with all his toil and pains!
> It sounds like language from the land of spirits
> If any man obtain that which he merits,
> Or any merit that which he obtains.'"

The necessity of studying anatomy, natural philosophy, and chemistry as stepping-stones to the comprehension of physiology and the science of the Profession was then explained to the younger students, and the utility of lectures in the following words:—"You must not, however, think that by impressing upon you the importance of anatomy, and warning you how greatly you have to acquire it for yourselves, I encourage you to neglect the systematic lectures given upon it, or any of those prescribed in your curriculum of study; for not only do I believe that the principles of Medicine and Surgery, and many other subjects of which you require a knowledge, are more easily learned from lectures than from any other source, but that the essential parts of such extensive subjects as chemistry and physiology have of late become would be, to the generality of students, impossible of attainment without the guide which lectures afford as to the direction in which their studies should be pursued. For in this intensely scientific age, when, as in other subjects so in Medicine, faith is the exception and Pyrrhonism the rule, when writing is the only accepted test of merit, and publication and publicity the recognised medium of success—when we have weekly, and monthly, and quarterly to consider not only the fervid, but often unripe, lucubrations of the young and enthusiastic of the Profession, but the contributions of those to whom the sarcasm of Otway upon the authors of his own day, 'that every dunce who starved presumed to write,' might not unfairly be applied—when the so-called fact of to-day becomes the exploded and abandoned fallacy of to-morrow—it is necessary to know what not to learn and what to forget fully as much as what to learn; and on this point the lecturer who necessarily keeps in advance of the text-books, and whose duty it is to winnow and separate the little corn from amongst the mass of chaff, is able to give you authoritative information." Addressing next those students who, having passed their examination in anatomy and physiology, were about to commence that portion of their studies intended to qualify them for the practical exercise of their art, the lecturer continued—"I am anxious to impress upon you the imperative importance of constant and diligent attendance on the wards of the Hospital and in the deadhouse, to urge you to bear in mind that however much you may learn from books or lectures of the science of Medicine or Surgery, of the speculations of physiology, of pathological facts, and of post-mortem appearances, it is only by earnest and constant observation of the sick, and subsequent examination of the dead, that a knowledge of disease can be acquired—that whatever you may read or hear respecting the influences or otherwise of so-called therapeutic agents, it is only by the evidence of your own senses you should be guided as to their employment or not, and this in total disregard of the crusade at present waged against some of them, and of your inability to give a scientific explanation of their probable mode of action; for, humiliating as the confession sounds, it nevertheless is true that science—that is, science as represented by vital chemistry and vital physiology for reasons to which, 'such as they appear to me,' I will presently allude, has contributed but little towards the detection of the ultimate causes of disease, and added less to our knowledge of therapeutics and the explanation of their undoubted influences, so that, as regards these latter, our knowledge continues almost entirely empirical, the result of accidental observation and subsequent experience; and Medicine, so far as it is a science, continues in all its branches one entirely of observation, as is easy to prove to those who consider the nature of the recent great advances which have been made in it, and the means by which they have been obtained. Thus, if we look to the latter first, of what in reality do they consist? Of instruments which, like the microscope, ophthalmoscope, and laryngoscope, are so many aids to our eyesight; of the pleximeter and the stethoscope, which simply enable us to advantageously employ our hearing; of the thermometer and sphygmograph, which fairly represent an increased delicacy of touch; and lastly, of chemical reagents, which, by slightly straining the simile, we may say replace and supplement our senses of taste and smell. So also with regard to the advances which have of late been made in our Profession as a practical art, whether they have relation to the prevention of disease, to its prognosis, diagnosis, or treatment, they are all of them the result of diligent observation, of the educated use of our senses, and of laws and rules which, by an inductive process of reasoning, have been discovered from the facts and effects observed." The lecturer then enumerated, under their different heads, some of these advances, ending the list by saying that observation alone, chiefly forced upon us by the ridiculous assertions regarding the efficacy of homœopathic remedies, had also led to the recognition that not only many specific diseases

and many uncomplicated inflammatory affections run a definite course over which therapeutic agents have no control, and have, when not carried to such an extent as to cause irreparable destruction of the tissues, a tendency to end in resolution, but that even in chronic affections, and notably in those affecting nerve tissues, after a lapse of time and in the absence of all remedies, though probably under the influence of hygienic means, the nature of which may have escaped detection, an impulse towards a return to the natural function of the tissues occurs and continues uninterruptedly until its perfect restoration is established, in a manner similar to that which many of his audience might have witnessed when watching the gradual disappearance of syphilitic nodes or cutaneous eruptions after the venereal poison has been destroyed, and after the exhibition of all remedies had ceased—facts which should teach us that in specific affections, such as fever, although we cannot cure the disease, we may palliate and relieve many of its effects; that if in acute inflammatory diseases there is a period for active interference, it is of short and fleeting duration; and that, if lost, the disease must run its course, but that upon its subsidence the assimilative functions with which each of our tissues is endowed recovering their normal action, will often suffice to remove that over which therapeutics have no influence, and that the functions of the Physician and Surgeon are often best performed by simply watching and directing the action of these vital forces, supporting the system, and relieving symptoms by the employment of those means of which experience has proved the value." Such (he continued) are a few of the advances which have, as the result of clinical observation and pathological study, been made in Medicine as a practical art, and in which the speculations of science have had no share. If, however, we considered the subject of therapeutics, we shall find that our general knowledge of them and of their mode of action had made but little progress; that disbelief regarding their benefit was a common feeling; and that we were in danger of being argued into the abandonment of some, upon the questioned utility of which it would be a portion of the students' duty to form an independent opinion of their own, remembering that experience on this point had always been in advance of knowledge, and that to accident and observation, more than to any chemical or physiological reasoning as to their probable action, we owed the possession of almost every therapeutic agent we employed —statements which he illustrated by giving the history of several medicines, and amongst others that of Peruvian bark, the effect of which was an accidental discovery of the Jesuits, and which was known as a cure for ague, and given for the relief of many pathological conditions long before any chemist had discovered in the tissues an opalescent substance resembling quinine in many of its chemical reactions, but, fortunately for those who live on meat, differing from it in the grosser test of taste, and before the theory had been proposed that the rapid removal of this substance from the tissues by the action of marsh miasma was the cause of ague, and its supply its cure; before vaso-motor nerves were discovered or any physiologist had suggested that the influence of quinine was partly due to its effect through these upon the arterial circulation, and before its power in inflammation of impairing the vital properties and hindering the generation of white corpuscles had been experimentally proved. Even the newest and most fashionable remedy — bromide of potassium—he said, which, in addition to its decided effect over certain affections of the nervous centres, or perhaps on account of it, seemed destined in some degree to realise Mr. Lecky's aspiration "that Medical science may soon help morals by helping us to physical methods of self-control," had an action equally impossible to deny as it is to explain. He then alluded to the germ-theory of putrefaction, and to the depurative theory of amyloid degeneration, and the influence which, if true, they would have upon the employment of many local applications, and also to the opinions recently expressed regarding the uselessness of these; to the theoretical proposal made to destroy cancerous growths by the injection of an agent the effects of which had only been watched upon dead cancerous cells under a microscope; to the expectant treatment of syphilis and its consequences; to the almost general dictum against bleeding, and to the conclusions drawn respecting the action of calomel, podophylline, and taraxacum, from experiments made upon dogs, remarking that arguments against the reception of such conclusions might be found in the facts that many animals can consume with impunity things fatal to man, that dogs (who could take 240 grains of taraxacum as a dose without its affecting them, and who require from one to three drachms of aloes to purge them) are essentially dogs, and not men, and that, when submitted to experiment, they were not in that pathological condition which even in man may be an essential condition for producing the specific effect of the drugs; and, lastly, that those who opposed many of these crudely formed opinions were men who, although willing to profit by the advantages of modern science, declined at the voice of every juvenile aspirant for notoriety to ignore that practical knowledge of their art which it had taken them years of study and observation to acquire.

In conclusion the lecturer said—"If I have detained you so long simply to show that the great advances which have of late occurred in Medicine are due to scientific observation, and not to chemical or physiological speculations, and that these have added but little to our knowledge and comprehension of therapeutics, it is not that I wish to decry these sciences or deny the assistance they have rendered Medicine, but only to put them before you in their proper place as her servants, and not as they arrogate to themselves to be her masters. It is because I wish to convince you that Medical art is not the application of an abstract demonstrable science in which certain results may be infallibly drawn from certain data, or in which the disturbing forces may be calculated with scientific exactness; that the symptoms of disease can never be treated as so many factors, to be placed in a reasoning mill, and ground out by aid of a mathematical calculus into their true and unvarying products, but must be considered in connexion with the constitution of the individual, and the circumstances under which they arise; that you have to study not only disease in the abstract, but disease in the individual, and even in his organs and tissues such as they have been transmitted to him by his gouty forefathers, his syphilitic or scrofulous or cancerous parents, or as their vitality happens to be modified by the life he has led, the climates he has visited, or the physical or moral circumstances by which he is surrounded; that you must see with your own eyes, feel with your own fingers, listen with your own ears, and reason with your own brains; and that your opportunity for doing all this is now, now that you have open to you without limit or restriction the enormous field of study and investigation which this Hospital and its pathological museum afford. It is because I would warn you against seductive theories, against chasing shadows, and against that *deductive* process of reasoning which starts by establishing imaginary laws and causes, and twists facts and effects to fit them—reasonings which encourage some to give quinine, carbolic acid, sulphides, and other septic agents to destroy in fever a poison which, if it does exist, has already commenced its specific action; to see in the purging of cholera a curative effort, and in aiding this its proper treatment, and which lately led an eminent physiologist to state that the presence of opalescent phosphatic urine, so common after injuries of the spine, was the result of certain organic germs introduced into the bladder by catheters, and to be cured by the use of other catheters smeared with carbolic acid.

"If, too, I have seemed to question the ability of chemists and physiologists to interpret facts which I know must depend upon fixed and certain causes, and which it would be of infinite service to Medicine to have explained, it is because I regard man's body as something more than a crucible, vitality as something more than chemical action, the variations of oxidation and nutrition which occur in each particle of the body in disease as its effect and not its cause, and therapeutics as something more than agents which promote or retard oxidation. Because even the physical philosopher's comparison of man to a steam engine consuming fuel and generating force to be afterwards correlated to his various physical and intellectual actions, leaves unexplained the mystery of the engine's creation, development, and repair whilst acting. Because both vital chemistry and vital physiology are based upon the unproved and, 'I say it with all humility,' to my mind improbable assumption that the same laws which prevail, and the same forces which operate upon inorganic matter external to the body, prevail and operate in a precisely similar manner upon the living organism within it, taking no notice of that formative power inherent in living matter, or that power of selection with which living tissues are endowed, which together seem the essence of vitality—powers of which we have the earliest evidence in the processes which take place in the seed of the plant and the impregnated ovum, both of which, submitted to the proper conditions, undergo a rearrangement of their elements, resulting in the production of the plant from the one and the development of the embryo from the other—a chemical rearrangement if you will, but one governed by selection and evincing a formative power, differing in its nature and obedient to other laws than those which would operate upon the same

sed if from any cause its vitality had been destroyed, or upon the ovum in its unimpregnated condition, and differing vastly and wi lely from those which govern inorganic matter—powers the continuance of which may be traced in the growth of the plant, and the formation of its textures from materials selected from the earth and air in which it lives and in the animal from the blood which circulates within its body, to the operation of which the lily must owe its scent, the rose its hue, and the Arabian tree its medicinal gum, which in animal life must regulate the development of every organ and the secretion of every gland, supplying to each creature its means of subsistence and its weapon of defence, to the lion its muscles, the stag its horns, the badger its stink, and the snake its venom, giving the beaver its constructive and the bee its geometrical instinct, assuming in man its highest expression and possibly influencing his ability for intellectual work—powers which cease with the cessation of vitality, which depart with life, and which, being lost, leave our bodies like the dust from which they sprang and to which they are about to be again returned, once more subject to the chemical laws which govern inorganic matter; and, finally, because I doubt whether the veil of Isis will ever be so far raised that man shall stand face to face with truth, and his finite mind fully comprehend these infinite mysteries of creation, and because I recognise a sphere above and beyond the reach of human science.

THE MIDDLESEX HOSPITAL.

The Introductory Address was delivered by Dr. Robert Liveing, who, after some prefatory remarks, discussed the subject of preliminary education, and alluded to the new regulations by which students may now become members of the University of Cambridge without belonging to any particular college, and thus avoid many of the expenses incidental to college membership. In referring to the subjects of the Professional curriculum, he called attention to the fact that sufficient time was not allotted to the study of chemistry, and that it would be a great gain if part of that now spent on anatomy, both human and comparative, and the whole of that devoted to botany, could be employed in studying chemical science. He pointed out that natural sciences should be studied with one object in view—namely, as a preparation for carrying out the ultimate purposes of the Medical Profession—the treatment and prevention of disease. He remarked that, in any reformed curriculum, hygiene must be introduced as an essential element, and continued:—

"Before concluding this part of my lecture, I am especially anxious to direct your attention to the subject of sanitary science, and that for two reasons: in the first place because it forms no compulsory part of the Medical curriculum—a fact much to be regretted; and, in the second place, because I know no subject of equal importance, except the clinical study and direct treatment of disease. A perfect system of hygiene is the nearest approach to that 'elixir of life' which was so vainly sought for by the alchemists of old. In attempting to cure disease, we daily feel the limit of our power. A barrier seems to cross our path and stop further progress; but there is no limit to the good that may be effected by preventive medicine, and, though that science is still in its infancy, our knowlegde is far, very far, ahead of our practice. It is startling to consider the appalling waste of health and life, moral as well as physical, existing in the civilised world, which might be avoided by a carefully organised system of hygiene. We have as yet no idea what beneficial effects would result to civilised races by placing them, even for a few generations, under the most favourable sanitary conditions, and under wise restrictive laws with regard to marriage. By way of illustration of the importance of sanitary science I will direct your attention to one or two facts in connexion with it.

"There is nothing more certain than that the air we breathe, the soil on which we live, and the water we drink, have a marked influence on health. For example, all localised outbreaks of typhoid fever are entirely due to the introduction of poison by water. If proofs were wanted of this, the outbreaks that occurred at Guildford and Terling in 1867 fully and terribly supplied it. In both instances the origin of the epidemic was clearly traced to the impure water supply, and in Guildford the fever was confined to a certain well-defined district, receiving water from a new well that was situated in porous chalk, within a few feet of various leaking sewers, and surrounded by soil so filthy that it produced vomiting in those employed to remove it. At Terling, out of 900 inhabitants, 300 were attacked with typhoid fever, and, as Mr. Simon says, "the one preventible disease killed in two months a larger proportion of the inhabitants than all causes of death put together ought to have killed there in two years. The conditions which rendered possible this most calamitous visitation of disease were, as in all our other experiences, conditions of local filth.' The fact that some 12,000 persons die annually in England and Wales from this 'preventible fever' is sufficient alone to bear out my statement that we do not act up to our knowledge. Diarrhœa and cholera, like typhoid fever, are chiefly propagated by drinking water, and although peculiar atmospheric conditions may play an important part in their development, yet it is more than probable that, in this country at least, cholera is a preventible disease. Let us take another example. One-eighth part of the whole mortality in England is due to phthisis; here, therefore, the acquisition of any knowledge that will increase our powers of prevention is of the greatest value. Now, there are three well-known causes, more or less removable, which directly tend to the development of phthisis. First, the disease is produced by 'unwholesome conditions of indoor industry,' and in the manufacturing districts this cause, which is partly preventible by law, produces a marked effect upon the death-rate from consumption. Secondly, it is a well-established fact that dampness of soil is a common cause of phthisis to the population living upon it. The death-rate by this disease in ten towns fell on an average 35 per cent. after improved land drainage. Lastly, phthisis is more or less hereditary, and is especially apt to appear in children born of parents suffering at the time from tubercle. Here then there is a third preventible cause of the disease. It would no doubt be impossible in the present state of public feeling to legislate with a view to prevent the marriage of tuberculous persons, but we cannot deny that there is a moral obligation upon every one so circumstanced not to marry. These few examples will serve to impress upon you the importance of directing your attention to the study of preventive as well as curative medicine. I cannot, however, dismiss this subject without referring to a question which has been raised and ably discussed by a distinguished member of our Profession, Dr. Bridges. He says: 'That many thousands of lives during the last twenty years, or even tens of thousands of lives, have been saved by sanitary measures, is very certain. Meantime the terrible question recurs, are the lives saved vigorous lives or feeble? . . . . . Is not the tremendous mortality of infants in overcrowded towns Nature's process for ridding us of the sickly lives, and sparing those only that are strong?' The question is an important one, and fully deserves our attention. Now, without pretending to answer it, I would simply remark that defective sanitary conditions, although they tend to destroy the weak, probably at the same time undermine the health of the strong, so that we may still have in the main a sickly population. We can understand that the Roman plan of not allowing sickly infants to live answered its purpose in improving the physical powers of the race, but can we believe that bad food, bad housing, and bad clothing will produce a similar and equally satisfactory result? The educated non-professional public are profoundly ignorant of everything connected with the nature and origin of disease. They have nearly as much faith in nostrums and specifics as their forefathers, while the poorer classes are not only equally ignorant, but habitually neglect the ordinary essentials for preserving health; and, as they believe in the ready curability of almost all diseases, so they take little care to guard against those external agencies and unnatural habits of life which produce them. With these two classes—the educated and the uneducated—you will hereafter be brought into daily communication, and it will be your duty to infuse amongst them sounder principles on such important subjects as the preservation of health and life."

On the subject of reform, the lecturer said: "In professions, as in states, changes and reforms are talked of and criticised long before they are carried out, and of late we have heard much of two proposed changes, which, like coming events, have cast their shadows before. I mean the reform of our licensing system and the admission of women to Medical studies and practice. Now, it cannot be denied that there is a growing feeling in the Profession that our present system of regulations connected with the different forms of licence to practise is far from satisfactory, and that "one uniform standard of examination and one legal qualification" should take the place of what I would call the divided responsibility which at present exists. There are, as you know, in the United Kingdom, no less than eighteen or nineteen corporations that have the power of granting a licence to practise. Now, the existence of many different licensing bodies would be a matter of small import-

ance if the same preliminary requirements and an equally high standard of examination were adopted by all. But this is not the case. For example, to obtain the only licence to practise Surgery that is granted by the University of Cambridge, you must pass six examinations extended over a period of some six or seven years, and including in their range written, *viva voce*, and practical tests in no less than fifteen medico-scientific subjects. For the M.R.C.S. four years' study and a knowledge of some four Professional subjects is all that is required. In the present day we should not think of performing a Surgical operation or treating a local disease until we had ascertained the constitutional state of our patient; is it, then, too much to expect that a Surgeon should be acquainted with Medical Pathology and Clinical Medicine as well as Surgery, before he receives a diploma to practise? About the middle of last session public attention was called to the fact that many Surgeons, candidates for Army Medical appointments, were ignorant and unskilled in the practical work of the art they professed. Now, however startling this announcement may have been to the public, it could scarcely have surprised those who are acquainted with the final examination for the diploma of the College of Surgeons, to obtain which a man must have studied a text-book on Surgery and acquired the art of bandaging a sound limb or reducing an imaginary dislocation, but not of treating Surgical cases or diagnosing actual disease. Now should we think of testing a sculptor's practical skill simply by a verbal examination into the history and technicalities of his art, or of ordering a picture from an artist who, however learned he might be in the theory of painting, had never tried his hand on canvas? Yet we act as if the lives and limbs of men were of less value than works of human art. I will leave you, gentlemen, to draw your own conclusions, and to say whether we ought not to apply to our Professional examinations what was objected to in the case of the Irish Church—I mean a system of 'levelling up.'

"With regard to the other reform to which I alluded, there can be no doubt that women will ere long be admitted to Medical degrees in England, as they are in many other countries of Europe and in America. Already a majority of the Senate of the University of Edinburgh has decided to admit ladies, under certain restrictions, to the study of Medicine. Now, instead of hastily condemning this innovation as a necessary evil, I would ask you to bear in mind, what no one will venture to deny, the existence of a very great and daily increasing number of well-educated women who can barely earn a subsistence by teaching, needlework, and other like occupations, and of a still larger class who are dependent through life upon the charity of friends and relations. Now, if superfluous energy and wasted talent can be turned to good account, there is something gained, and the throwing open any new and legitimate sphere of employment for educated women will be an undoubted advantage to themselves, and possibly to society at large. Thus far you will agree with me. Then comes the question, whether the practice of Medicine is or is not a suitable occupation for women. This time alone will show. At present we have not had sufficient experience to guide us to a conclusion, and to make positive statements regarding it is to prejudge the question. I would only remark that neither the Profession nor the public are justified in refusing to give the experiment a fair trial. There is one practical point connected with this subject that it would be well to bear in mind—viz., that it is essential to the success of the scheme that, if women are to be admitted to practice, they should first receive a sound education in all the branches of our Profession, and fulfil all the requirements and pass the same examinations as are deemed necessary for men."

In conclusion, the lecturer said: "You are doubtless satisfied that in choosing Medicine you have chosen an honourable and noble Profession—the best and wisest have ever so regarded it—but remember that with each of you rests the responsibility of upholding it in that light. Men will interpret the view you entertain of it through the medium of your own conduct. It is certainly easier to grow rich by adopting a system of humbug than by leading a life of strict integrity and industry. You will, therefore, often be tempted to swerve from the straight road of Professional rectitude into some bypath to gain and fame; but remember again that no success in life will compensate you for the loss of self-respect.

"'Honour and shame from no condition rise;
Act well your part, there all the honour lies.'

Foreseeing, then, the dangers and difficulties that will beset your path through life, strive by your wisdom to earn for yourselves an unsullied name—strive to uphold the social position and honour of your Profession, and, above all things, seek to make it "a rich storehouse for the glory of the Creator and the relief of man's estate."

GUY'S HOSPITAL.

The Introductory Address was delivered by Dr. C. Hilton Fagge, in the presence of the Right Hon. Sir Lawrence Peel, late President of the Hospital, Mr. J. Gurney Hoare, the President, Mr. T. Turner, the Treasurer, the Medical and Surgical Staff, and a large concourse of students.

After a few prefatory remarks, in the course of which the Lecturer gave to the students a hearty welcome in the name of the authorities and staff of the Hospital, he passed on to offer some advice to the new men. They should be very slow and careful, he told them, in forming acquaintances, for the character of these might probably affect their whole future career. The first year's men at a Medical school are at first a fortuitous concourse of atoms; but they quickly develope into an organised community, having each year a sort of "epidemic constitution" of its own. The student should bear in mind that his teachers are constantly estimating his powers, just as he himself cannot help forming an opinion as to the character of every one with whom he is thrown into contact. Moreover, actual records are kept of the work done by each pupil in the dissecting-room, the out-patients' departments, and the wards. It is by these records that the Medical Council are guided in selecting from among the candidates, and recommending to the Treasurer, those most fitted for the various clinical appointments. At Guy's these offices are very numerous, every part of the Hospital practice being systematically served by dressers or clerks, all of whom are chosen by merit and without payment. Moreover, the Hospital staff has for years been recruited from the Medical school, and a position on the staff is within the reach of every man who can show that he deserves it. Each of Napoleon's soldiers was said to carry a marshal's bâton in his knapsack, and something similar might perhaps, without falsity, be said of the students at Guy's.

Dr. Fagge then proceeded to make some observations as to the way in which Medicine should be studied, insisting on the great importance of clinical observation, both in diagnosis and treatment. To recognise a disease which is discoverable by sight, or touch, or hearing, a Medical man must have previously seen, or handled, or listened to, cases more or less similar. If he does not get through his period of probation within the walls of the Hospital at which he is a student, his own patients subsequently will be the raw material for his studies. In these, too, he will find great difficulty, for all the senses have to be sharpened, until changes can be appreciated which were before imperceptible. Even in a large Hospital, the opportunities of watching patients suffering from any one disease are so irregular and fragmentary that a considerable time necessarily elapses before the student acquires a grasp of and mastery over his cases.

With regard to the question whether first year's men should attend in the wards, the lecturer admitted that it is in part one of time and money. But he urged that time is found for cricket, boating, and football, and he thought that each student should resolve to do some clinical work every day, or every other day. Indeed, although the power of concentrating the mind on one subject is a very valuable one, its indulgence creates a dangerous habit; and, however early the observation of disease be commenced, the student's experience can never be complete—

"Death hath ten thousand several doors
For men to take their exit."

One of the highest attractions of Medicine is that its subject-matter is inexhaustible.

The importance of dissecting and of practical morbid anatomy was next insisted on, and the lecturer proceeded to make some remarks concerning lectures, quoting Dr. Johnson to the effect that they are most valuable when experiments can be shown, as, for instance, in "chemistry and the making of shoes." His hearers were then warned against an undue reliance on books, and against the bookworm spirit, and still more against the habit of desultory reading, now so prevalent. It would be well for a man to resolve that he would never read anything without deliberately judging for himself as to the validity of the conclusions arrived at.

Dr. Fagge afterwards gave some advice to students on the question whether they should aim at the degrees of the University of London. If they were ambitious and had time, he strongly

recommended them to do so; but, under the opposite conditions, he urged them to weigh the matter long and carefully before entering on a career which would delay their proper Medical studies to an extent that might be disastrous. The proportion of undergraduates who fail to obtain even the degree of M.B. is large, and a student stands but a poor chance if he is hampered by money difficulties or by multitudinous calls on his time. It must not be overlooked, however, that the University of London is now the only British source from which a metropolitan student can obtain a Medical degree without residence elsewhere. It is surprising that the London Medical schools have made no effort to remedy a state of things which is very prejudicial to their interests, for the regulations of the University of London are so far prohibitive that only about ten Doctors of Medicine annually take a degree there from all the schools put together.

The next matter discussed was the proposal of Mr. Simon and others that examinations should be made the sole check on the admissions to the licence to practise the Medical art. The lecturer was adverse to this suggestion. Fairly good examination papers may, he remarked, be written by men who have no real knowledge of the subject, and, in his opinion, clinical examinations are not capable of effecting so much as has been supposed. The examiners can seldom have that detailed knowledge of the cases which is essential, since the question to be determined is whether the candidate can observe with accuracy and precision.

Dr. Fagge then made some remarks as to the position and prospects of therapeutics. His view was, on the whole, encouraging. For the first time in the history of Medicine, drugs and methods of treatment have within the last few years been submitted to that which is the only real test of their value. Formerly a Medical man asked, "Is my patient better than he was a week ago, before he began to take my physic?" Now the question runs: "Is he better than he would have been if he had had no physic?" And, broadly speaking, the result of these inquiries is that the more active remedies are believed to possess most of the powers formerly accredited to them. There are, indeed, still a large number of fatal diseases; for, as Sir J. Forbes urged, men must die. Even in functional complaints treatment sometimes fails, but then Dr. Fagge recommended his hearers to conclude, not that the pain or other disorder is irremovable, but that they do not know how to remove it. For a certain number of cases an expectant or negative treatment is the right treatment; but Medical men should aim at limiting these year by year. Worse still than "expectation" is either "indifferentism," or even a feeling of doubt as to the efficacy of drugs, as if it were not worth while to make energetic use of them.

> "Our doubts are traitors,
> And make us lose the good we oft might win
> By fearing to attempt."

In conclusion, the lecturer appealed to his audience to weigh well the responsibilities of their calling; and reminded them that only on this condition could they touch the real rewards of the Physician—the loving gratitude of their patients, the admiration of their friends, and the approval of their own consciences.

At the termination of the Address the late President of the Hospital, the Right Hon. Sir Lawrence Peel, presented the Treasurer's Gold Medals, and the various prizes, certificates, etc., for the Session 1868-9, the successful candidates being introduced by the Senior Physician, Dr. G. Owen Rees, F.R.S.

The Treasurer's Gold Medal for Clinical Medicine.—George Abbott, Nottingham.

The Treasurer's Gold Medal for Clinical Surgery.—George Abbott, Nottingham.

PRIZES.

Third Year's Students.—W. F. R. Burgess, Bethnal-green, London, first prize, £40; George Abbott, Nottingham, second prize, £35; Arthur Wm. Smith, Halifax, honorary certificate; Richard Wood, Malden-road, London, honorary certificate; John Jolliffe, Shepherd's-bush, honorary certificate.

Second Year's Students.—George Davidson Deeping, Castle-terrace, Newark, first prize, £35; H. Bennett Bailey, Kingston House, Wisbeach, and Arthur Cooper, York (equal), second prize, divided, each £15; William Thos. Law, Holt, Wilts, honorary certificate; A. Kingcomb Newman, Lee, Kent, honorary certificate.

First Year's Students.—C. H. Golding Bird, Brunswick-square, London, first prize, £30; George Turner, Portsea, second prize, £25; B. H. Williams, Haverfordwest, third prize, £10 10s.; J. Clague, Isle of Man, honorary certificate; T. W. Jackson, Leyland, Lancashire, honorary certificate; Walter Edward Hacon, Hackney, honorary certificate.

Entrance Examination in Classics, Mathematics, etc., October, 1868.—George Thomas Bettany, Cornwall, first prize, £25; Thomas Eastes, Folkestone, second prize, £20; Robert Harry Hughes, Putney, third prize, £15; H. S. Branfoot, Cheshire, honorary certificate.

ST. THOMAS'S HOSPITAL.

The Introductory Address at this Hospital, delivered by Dr. W. H. Stone, was devoted to a consideration of the relations between sense and science.

The speaker commenced by saying that an introductory lecture was a lay sermon, and needed a text. He chose the maxim of Protagoras, that "Man is the measure of all things," hoping to deduce from it the proper spirit in which to approach the study of science. He briefly reproduced the circumstances under which the proposition was first discussed, as given in the Theætetus of Plato, and proposed to name his address "Novus Theætetus," in memory and admiration of the great English philosopher, Lord Bacon, who adopted the same course on a larger scale towards the Organon of Aristotle. His object, like that of the Novum Organon, was contrast rather than commentary; for the 2000 years which had rolled by since the inspired dialectics of Socrates were spoken had changed—even inverted—the mutual relation of sense and science, so that what was rank heresy and sophism in the old metaphysician might be a very watchword and symbol to the Physician of to-day.

After disavowing a materialistic interpretation of the axiom, and setting aside the mysteries of revelation as too solemn for such an occasion, he showed that the archetypal man in his highest development must be our standard, and criticised the assumed antagonism between sense and science which ran through the old philosophy. He then proceeded to show how different is our conception of sense from what it was until very recently. The eye of old saw a few miles with difficulty; the ear heard sounds immediately around, and was gladdened by the tibia, the plectrum, and the voice; the fingers touched objects within arm's length only. Our fingers can record their lightest movement thousands of miles away across an ocean and in a land which our forefathers knew only by legend; our ear is tutored to the swell of the full organ, the rhythmic cadence of the fugue, and the measured thunder of the ordnance. Nay, more; it can follow the breathed air as it permeates the lungs, and trace the lifeblood coursing through the heart. Our eyes embrace things infinitely great and small, from infusoria or blood-corpuscles to the huge disc of Saturn, Uranus, or Neptune; nay, more, they can even break up light itself into its elements and measure the retreating speed of Sirius through illimitable space.

Sense, then, has received a new significance and a mathematical precision, by which its proverbial errors are fast disappearing from physics. In this elimination of error—in this conscious and patient struggle after precision—it is essential that we, as men of science, should labour to take our part.

The saying of Protagoras was then applied to physiology, and the paramount importance of studying the healthy organism insisted upon. Paralogisms like that of homœopathy, and many apparent incongruities of therapeutics, might thus be corrected. After some remarks on the study of attitude and expression in sickness as aiding diagnosis, and the value of intelligent nurses in pointing out these significant trifles, the duty of cultivating the senses to their highest accuracy was enforced. It was, indeed, a work of time, but essential to our competence and repose of mind. The cultivation of other senses than sight—namely, touch and hearing—was adverted to. In Medicine it might almost be denied "that seeing is believing," so much does it depend on hearing or auscultation. A department of sense-culture, which might be termed the intercorroboration of one set of impressions by another, or by their correlatives in other men, was indicated as needing development. The astronomer habitually studied it in his tables of "personal errors," and it was combined with the education of the eye in the "judging-distance drill" of the soldier.

Other applications of the maxim to psychology, to statistics and life insurance, and to art, were briefly pointed out; and, lastly, it was applied to the pious commemoration of good and great men, our predecessors, themselves the measure which we should mete ourselves withal.

An old foundation like that of St. Thomas's had something

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which far exceeded pride of birth or dignity of mere genealogy. It represented, not a line of erring men, but a continuity of good works—a steady unbroken pedigree of helpfulness and benevolence.

In reviewing the losses of the last few years, such as Green, Grainger, and Brinton, a tribute was paid to the memory of one who was a thorough son of St. Thomas's. Gilbert Mackmurdo served long and faithfully; he gave his best powers to the Hospital, and was of exceptional kindliness to his younger brethren.

In conclusion, said the speaker, we who remain, the brotherhood of St. Thomas, no less than of St. Luke, should strive earnestly to model ourselves on the virtues of those who have gone before. A few years may scatter us to the four corners of the earth. But it was here that, as in the Lampadephoria of old, the torch of knowledge was handed to us, which we are commissioned to carry bright and shining to the end of our pilgrimage, and then to hand it down undimmed and unblemished by our errors or our indolence.

ORIGINAL COMMUNICATIONS.

ON HYDRATE OF CHLORAL AND ITS USE IN PRACTICE.

By T. SPENCER WELLS, F.R.C.S.,
Surgeon to the Queen's Household and to the Samaritan Hospital.

(*Concluded from page* 347.)

THE third patient for whom I prescribed chloral was a lady whom I saw a year ago with Dr. Fuller suffering from a large fibroid tumour of the uterus. Repeated losses of blood in large quantity, and considerable increase in the size of the tumour since the begining of the year, with a suspicious softening of the lower part of the tumour involving the cervix, led to a consultation with Dr. Oldham, and (after anxious deliberation) to the decision that I should endeavour to remove the whole of the tumour—in other words, the whole of the enlarged uterus—by the abdominal section. I performed the operation on July 17, most kindly assisted by Dr. Oldham, Dr. Bantock, and Professor Voss, of Christiania, Dr. Junker administering bichloride of methylene. The uterus, with the fibroid tumour weighing four pounds, and both ovaries were removed. The patient went on wonderfully well, but required opiates at night, and these led to sickness and headache, so that on July 28 I gave a draught containing thirty grains of chloral at bedtime instead of the opiate, and the report next day was that she had passed the best night since the operation, had neither headache nor sickness, and a good appetite. This lady was taken twenty-four miles in an invalid carriage eighteen days after the operation, and has steadily improved since, not having taken more than two or three doses of chloral after the first.

I prescribed chloral for another patient on July 28—a gentleman whom I have attended occasionally for nearly twenty years past with a very slowly progressive form of locomotor ataxy accompanied by frequent severe neuralgic attacks, for which he has long been in the habit of taking morphia. We arranged that he should make a series of comparative trials with chloral and morphia, endeavouring to ascertain if one has any and what advantage over the other. As this patient has cultivated his powers of observation to a very high degree, and is assisted by my friend Dr. Davidson, who sees him daily, I hope to obtain some very satisfactory reports, but have not as yet received any.

In another case where comparative trials have been made, the results are only partially satisfactory. The patient is a lady whom I have been attending with Sir William Jenner on account of frequent uterine hæmorrhage dependent on epithelioma of the cervix uteri, and who suffers from almost incessant lumbar pains, which are relieved by opium, and still more relieved by a combination of opium and belladonna. But after either of these drugs, headache and loss of appetite are constantly observed; so on August 1 I began to try the chloral. It has been taken pretty constantly since, first in doses of thirty grains, and then of fifteen grains; and for some time one of these doses has been taken on alternate nights, one grain of opium and a quarter of a grain of extract of belladonna being taken on the intermediate nights. We have arrived at a sort of rule that thirty grains of chloral give about as much relief to pain as one grain of opium; that its effects are more immediate; that it is not so certainly followed by sleep, or by sleep of such long duration; but that on the succeeding day no kind of ill effect is observed, while after the opium there is invariably loss of appetite and more or less headache. On two occasions, when the dose of thirty grains was taken after large floodings, considerable excitement, restlessness, and incoherent talking, followed for about two hours; but this has not been observed since the bleeding has become more moderate.

This constitutes the whole of my personal experience of chloral; but I think I have seen enough to justify the hope that it will prove to be of valuable assistance in cases where we wish to obtain rapid relief to pain, and at the same time to lower the temperature of the body, while we are anxious to avoid the headache, sickness or loss of appetite, and the rise of temperature which often counterbalance the good effects of opium.

Since writing the above, I have seen in the Berlin *Klinische Wochenschrift* of August 30 the report of a case where Langenbeck successfully used the chloral, quieting by it delirium following comminuted fracture of the humerus in a woman of intemperate habits. During the night following the injury, the patient became furiously maniacal, and notwithstanding many attempts to fix the limb, the upper fragment of the bone was being constantly forced against the soft parts, so that the whole arm became extensively ecchymosed, probably from rupture of a large vein. There was great reason to fear mortification, if the restlessness could not be subdued. Seven grains of opium, one grain of morphia, and brandy had been given without any result, when at 1.30 p.m. of the day after the injury Langenbeck gave sixty grains of chloral, and followed up the dose by thirty grains in three successive subcutaneous injections. Ten minutes after the first dose, the patient became quieter, although delirium continued. A quarter of an hour afterwards she was fast asleep, and continued to sleep quietly till the next morning, when she awoke free from delirium. Symptoms indicating the probability of relapse recurred in the evening, but thirty grains of chloral taken internally were followed by an excellent night. The patient made a good recovery, mortification of the integument being limited to the portion exposed to the jerking action of the upper fragment of the bone.

Langenbeck dwells particularly on the peaceful normal sleep which under such aggravated circumstances was so quickly induced by the chloral. He has since used it with good effect in subduing tetanic spasms, but the patient was still under treatment at the date of the last report which I have seen.

I have not used chloral by subcutaneous injection, fearing some local irritation; but recent experiments seem to prove that even chloroform is not irritating when injected under the skin, and there would be much less probability of chloral acting as a local irritant.

I have usually prescribed thirty grains of chloral with a drachm of syrup and ten drachms of water. With only an ounce of water the draught is rather too pungent. In Germany this dose is given with equal parts of syrup and water—half an ounce of each.

Chloral is very dear. The Germans say "a sleep costs a dollar." I paid £3 15s. for two ounces; and in July it was not easy to get it even at this price. But Mr. Squire tells me that he can now easily maintain an adequate supply.

Upper Grosvenor-street.

ON ACUTE SEROUS MENINGITIS AND ACUTE CEREBRAL ŒDEMA AFTER SURGICAL OPERATIONS.(a)

By Dr. BILLROTH,
Professor of Surgery in the University of Vienna.

I DO not remember having either read or heard of cases in which patients who had been operated upon, under apparently favourable circumstances, yet within two days after the operation died the subjects of acute meningitis and cerebral œdema. At all events, such a disaster must be of rare occurrence; and, as I am of opinion that between the fatal disease and the operation some relationship must exist, and that it is not a mere accidental sequence of diseased disturbances, but one of reciprocally connected processes, the subject appears to me interesting enough to warrant my relating two cases, and appending to these some observations.

(a) Translated from the *Wiener medicinische Wochenschrift*, 1869, Nos. 1 and 2.

On March 11, 1868, I performed excision of the left knee-joint on a boy 5 years of age. Although in general not a very great admirer of this operation, this case seemed to me especially suitable for its performance. Until within nine months before the boy had been healthy and robust, and a fall on the knee was declared with certainty to have given rise to chronic fungoid suppurating inflammation of the joint. There had been no bursting either of peri- or intra-articular abscesses; but fluctuation was plainly felt, extending to the thigh and occupying the ham. Examined under chloroform, loud crepitation was heard during the movements of the joint and the patella. Although somewhat pale, the boy was not emaciated, his urine was free from albumen, and there was no sign of disease about him. I made a flap, having its base containing the patella upwards; cut through all the ligaments, and, by means of a strong knife, removed all the carious portions of bone, saving the cartilage of the epiphyses of both the femur and tibia. At the upper end of the sac of the abscess, under the tendon of the quadriceps, I made a counter-opening, as also in the ham, passing drainage tubes through both apertures. The fungoid granulations were scraped from the surface of the degenerated synovial membrane by the handle of a scalpel, and the flaps brought together by sutures.

The results of the operation were highly favourable, as sawing had been avoided, the discharge of the matter sufficiently provided for, the bleeding inconsiderable, and the patient, on recovering from the chloroform, seeming scarcely weaker than before. Everything seemed to justify the best hopes. The boy, however, complained exceedingly of pain in the limb, and this was not completely relieved by an injection of one-eighth of a grain of morphia. No hæmorrhage having occurred by 5 p.m., a gypsum bandage with large lateral apertures was applied. In the evening the pulse was 148 and the temperature 39°. The child drank an inordinate quantity of water, and, as he still complained of the severe pain, another eighth of a grain of morphia was injected. His night was tolerably quiet, and next morning the pulse was 152 and the temperature 38·6°, the pain still continuing. At the visits at 12 and 6 the boy presented nothing remarkable, but at 8 (thirty-three hours after the operation), after a state of restlessness and a rise of temperature to 40°, convulsive movements of the lower extremities appeared, accompanied by loud expressions of pain. Some relief was obtained by another injection of morphia, but by 10 the convulsions of the extremities and of the muscles of the trunk became so violent that the patient tossed about the bed, emitting expressions of the severest pain. Some quietude was again procured by means of morphia until about 12, when the convulsions recurred with increased violence. Until then the boy had been able to give intelligent answers to questions, his consciousness seeming tolerably clear, and he continued complaining of the severe pain in the limb, to which now headache was added, the pupils being considerably contracted. About midnight he lost his consciousness and fell into a comatose state, in which he expired at 3 a.m. of March 13.

When on that morning I was made acquainted with the progress and issue of the case, I felt greatly surprised, and for a moment thought that the boy might have been poisoned by the morphia. This idea was at once given up on recollecting that in the forty hours not quite a grain altogether had been applied —a quantity which, if it had been applied all at once, would not have produced death. There remained the supposition of acute meningitis with cerebral œdema, with the possibility that an already existing miliary tuberculosis of the base had, under the influence of febrile action, passed into an acute stage.

The autopsy was performed about thirty hours after death. The skull-cap was thin, compact, and oval. The whole of the sutures, especially the sagittal, which was effaced, were slightly marked. The dura mater was tensely expanded, and its veins were filled with blood. The internal membranes contained a moderate amount of blood. The convolutions were flattened to a remarkable extent, the sulci being effaced. The brain itself was bloodless, very moist, and of a doughy softness. In the ventricles there was about a drachm of clear serum. A careful examination of the spinal cord showed a portion of about three-quarters of an inch in extent, opposite the dorsal vertebræ, where its texture was that of soft white pap; but in the rest of its course the cord was firm. All the other great organs were healthy, but very bloodless. The diagnosis of acute cerebral œdema was thus confirmed, but not a trace of tubercle was found in any part of the body. The softened portion of the cord was quite an unexpected discovery.

The second and entirely similar case was the following:— J. P., aged 16, had suffered during three years from a rapidly increasing bronchocele, occupying both sides of the neck. The left portion, nearly as large as a fist, displaced the larynx somewhat towards the left side, but only to a limited extent, as the gland on that side was as large as a goose's egg. A contraction of the trachea immediately beneath the cricoid cartilage caused great dyspnœa, the patient being able to rest only in the sitting position, and starting up from his sleep in suffocative paroxysms. Quick movements brought these on also during the day. He had a stupid cretinish appearance, and seemed very apathetic, although able to give tolerably intelligent replies.

According to my experience, this was a case in which death from suffocation might certainly be expected at no distant period, while careful examination showed that the large tumour on the left side might be extirpated with a probably favourable result. I performed the operation on July 8, but omit the details, merely observing that it was executed without difficulty, and without considerable hæmorrhage, as all the large vessels had been previously secured. It was a simple case of bronchocele extirpation such as I have repeatedly performed with a successful result; but on visiting the patient half an hour afterwards I was surprised to find him in a collapsed state, with a small pulse, although the chloroform-narcosis had been neither deep nor prolonged, and there had been no bleeding. I ordered him to be closely watched, water to be sprinkled on his face, and some stimuli to be administered until he rallied. This he did in about an hour, and at the evening visit his pulse had become pretty strong, and his temperature had risen. In the middle of the night he was seized with violent convulsions, implicating the whole body, and which were not relieved by the injection of $\frac{1}{4}$ gr. of morphia and the application of ice to the head and mustard to the calves. He was scarcely conscious, and soon fell into a state of coma, and died sixteen hours after the operation. At the autopsy, performed next day, the skull was found thick and *compact*. The right half of the coronal suture was not visible externally, and was represented within by a wavy depression. The right parietal and the right half of the frontal bones were less developed than the left, inducing obliquity of the anterior portion of the cranium. The dura mater was very tense, and the superior falciform sinus contained loose coagula. The internal membranes were moderately injected. The convolutions were so flattened that their boundaries were merely linear. The substance of the organ was moderately injected, moist, and soft, and in its ventricles, the ependyma of which was rather thickened, there was about an ounce of flocculent serum. None of the large vessels or nerves implicated in the operation had been injured. Great stenosis of the trachea and emphysema of the lungs existed.

The fatal symptoms and post-mortem appearances, so far as the brain and abnormal condition of the skull are concerned, present so great an analogy in these two cases as scarcely to leave any doubt regarding the identity of the diseased process, although the convulsions appeared twenty-four hours later in the first case than in the last. It is obvious that an extraordinarily rapid exudation of serous fluid took place from the cerebral vessels, and that this exudation gave rise to symptoms of motory (in the first case also of sensory) excitement, and then to paralysis of cerebral activity. The symptoms arising from augmented intracranial compression have in recent times been the subject of interesting researches and reflections on the part of V. Bruns, Donders, Leyden, Fischer, Niemeyer, and others; and without entering into a special examination of the results of the labours of these inquirers I yet cannot but advert to the anatomical conditions which accompany increased intracranial pressure, as without this I should scarcely be able to offer a probable explanation of the cause and course of the process that was set up in these two cases.

Formerly it was laid down as a rule that in meningitis and so-called active congestion with consecutive exudation, the brain must be in a completely hyperæmic condition, even to its minutest vessels, and it seemed strange that the same symptoms of motory irritation should be observed in this cerebral hyperæmia and in an anæmic condition of the brain; for at the commencement of deep syncope, connected with temporary paralysis of the heart and arrest of its diastole, violent spasmodic convulsions arise, and similar convulsions precede death from hæmorrhage. The same symptoms seemed, therefore, to be present both in anæmia and hyperæmia of the brain, but a more precise consideration of the anatomical conditions teaches us that a hyperæmia of the brain accompanied by rapid exudation must soon so augment the intracranial pressure that the capillaries thence undergo such an amount of compression as to be able to allow of the passage of but a small quantity of blood. Therefore the hyperæmic brain, through the rapid exudation of serum, soon becomes anæmic. The cerebral ganglia suffer from the deficiency of oxygen (in the blood), and

convulsions, apparently through reflex channels, are produced, until at last the ganglion cells, after soaking in the superfluous serum, become unfitted for their functions, and are paralysed. From this intracranial pressure, when it bears especially on the apertures for the exit of the venous trunks (foramina jugularia, emissaria Santonini, etc.), may also arise stasis in the veins of the dura mater and the sinuses, so that there may be congestion in these while the substance of the brain contains too little blood—a condition observed in these two cases.

It follows from the laws of physics that the quantity of the blood in the brain cannot, under normal conditions, undergo any very considerable change within short intervals. Such change would be wellnigh impossible if the almost inelastic substance of the brain, together with its vessels and membranes, really completely filled the cranium. This is known not to be the case, for there are also many cavities, fissures, and perivascular spaces containing the cerebro-spinal fluid. When the mass of the brain is expanded by tumefaction, or a greater quantity of blood is forced into it under augmented pressure, its means of exit remaining the same, the increase of volume of the organ can only be accomplished by the cerebro-spinal fluid being forced out of the cranium. It has been supposed that the fluid passes into the spinal canal, to re-enter the cranium when the volume of the brain has become lessened. But the spinal canal, by reason of the rigidity of the bony column in which it is enclosed, is but very slightly extensible, although, through the interposition of its ligaments, it is somewhat more so than the cranium. Moreover, there is the physiological consideration that the proportionate pressure operating on the entire arterial system is always the same, so that if, by augmented arterial pressure, an excess of serum is forced into the cavity of the cranium, the same occurs in similar proportion in the spinal canal. This, therefore, as a channel for the passage of the cerebro-spinal fluid, is of no account.

In cases in which, either from congenital condition or from the effects of disease, there is a thinning of the walls of the blood vessels, together with hydræmia from exhausting hæmorrhage or disease, when an increased pressure of the aortic system is brought about either from fever or other cause, a fatal issue might be expected. As a matter of experience we find that this is very seldom the case, and we must therefore admit that in otherwise normal organisations the cerebro-spinal fluid easily finds issues from the cranial and spinal cavities, as well as the means of flowing into these cavities from elsewhere. This hypothesis is supported by the researches of His, according to which the perivascular spaces in connexion with the ventricles and cavity of the arachnoid are in direct communication with the lymphatics. Although this communication is not admitted by all anatomists, and the cerebro-spinal fluid, by the absence of albumen, essentially differs from lymph and transudation fluid, yet this hypothesis is the only one to which a high degree of probability attaches. In surgical and obstetrical practice we often meet with cases brought to death's door by great loss of blood, convulsions even being present during the attacks of syncope, and yet in these not only is consciousness soon recovered, but, after large quantities of water have been drunk, the pulse, which could hardly be perceived, recovers a volume which differs very little from that which it had prior to the operation. In such cases the volume of blood is rapidly replaced by an extraordinary quantity of water gaining admission to the almost empty vessels, in part by the stomach and alimentary canal, and in part from the tissues. If in a commencing fever this hydræmic blood becomes forced, under increased pressure, into the vessels, the amount of transudation fluid becomes somewhat greater over the whole body than in the normal condition. This view is supported by the fact that individuals who, immediately after the loss of blood, present all the appearances of a lean corpse—with hollow eyes, the skin tightly stretched over the skull and face—during the stage of febrile reaction convey quite another impression, the face becoming turgescent and the cheeks coloured, so that the patient, as regards his nutrition, presents a much more favourable appearance than he will do some days later when the turgor of the tissues has subsided. It is then that we first see him in his true condition, and can judge how great has been the effect of the operation and traumatic fever upon him. I believe, therefore, that the supposition is not unjustified that, under the circumstances indicated, all the tissues become penetrated with superfluous fluid, and that in their otherwise normal organisation the brain and spinal cord do not suffer from this, because the issue of cerebro-spinal fluid is correspondingly increased and the amount of blood and water in the brain duly regulated.

Returning to the two cases that have been related, if we ask why in them the influence of cerebral pressure proved fatal, the reply does not seem to me to be difficult if we bear in mind the diseased condition of the cranium that pre-existed in both of them. The sutures were abnormally ossified, and the skull-cap was compact, indicating that a denser mass of bone existed in place of the diploe. The brain had therefore long since been subjected to abnormal conditions of pressure and development. In the course of time the consequent disturbance of the circulation might have become tolerably equalised, at least as regards the lad on whom excision had been performed, and in whose psychical condition there was nothing wrong. But in the other case the development of the brain had decidedly suffered from the obliquity of the cranium. As in both the diploe had become more compact by the deposit of bone, the emissaria Santonini had also very probably become contracted. Whether, during the rickety process which had been going on, the basilar portion of the skull had not undergone a corresponding change could nst be ascertained without submitting the skulls to maceration. A contraction of the foramen lacerum, and a corresponding lessened development of the bulbus venæ jugularis, into which the bulk of the cerebral veins are emptied, might not be striking to the eye without a comparison being made with other skulls, and yet might be sufficient, on the occurrence of abnormal compression in the vascular system, to produce a considerable obstruction to the exit of blood. If, under such circumstances, abundant serum were forced into the cerebral cavities, and the venous blood could not flow out to give it place, the quantity of the latter need not be very great in order to exert a considerable intracranial pressure on the substance of the brain. We may apply the same considerations to the means of exit of the cerebro-spinal fluid, as the contraction of these in the rickety skull increased the effects of rapid exudation. Whether this explanation of the fatal issue in these two cases be the correct one will only be shown if, in similar cases, the same conditions of the skull or other obstructions to the issue of the cerebral venous blood (as those existing in the heart or lungs) and cerebro-spinal fluid are found to be present.

Entirely other points—or, at least, other combinations—have to be taken into account if we seek to explain those cases of meningitis, which may come on weeks or months after operations undertaken for caries or necrosis. In these the operation itself is of no account, as we find meningitis attacking similar patients who have undergone no operation. Of the old views, according to which meningitis was regarded in such cases as a true metastatic inflammation, I need take no notice. That children with caries of the joints may die from tubercular basilar meningitis running an acute course is a fact familiar in the practice of most Surgeons, however unable we may be to explain it anatomically. Buhl's views concerning inspissated products of inflammation as a source of miliary tuberculosis have penetrated throughout the whole of modern Medicine and borne much fruit, yet even from the recent able investigations by Cohnheim and Frankel on the communicability of tubercle, it is not clear whether it is a definite substance held in solution which, on admission into the blood, gives rise to an eruption of tubercle on the serous membranes, just as the poison of measles or scarlatina causes the exanthemata of the skin and mucous membranes, or whether the obstructions of the minutest blood- and lymphatic vessels by very minute embolic molecules, which even can traverse filtering paper, do not play their part.

When a child suffering from caries of a joint is attacked with symptoms of subacute meningitis, the diagnosis of tubercular basilar meningitis is easy; but when in adults the symptoms of acute hydrocephalus arise under the same circumstances, we cannot always conclude as to the presence of tubercular meningitis. I have met with two cases that illustrate this. The one related to a woman, nearly 50 years of age, who suffered from caries of the elbow. I performed excision in the Zurich Hospital, but the wound from the operation and the fistulous openings which existed previously required a remarkably long time for their healing. The patient became very low and excessively anæmic, but there was neither deposit in the lungs nor albumen in the urine. About nine months after the operation she was seized with violent pain in the head, convulsions, etc., all the symptoms of acute hydrocephalus being progressively developed. She died fourteen days after these had first commenced, having been comatose during the last eight days. At the autopsy there were found cerebral œdema and great distension of the ventricles, together with white softening and a high degree of anæmia of the brain substance. Not a trace of tubercle existed throughout the body, and the heart and kidneys were healthy. Every organ

was completely bloodless. I met with the other case in Vienna. A woman, aged 27, having infiltration at the apex of the lungs and severe bronchial catarrh, but without albuminuria, suffered from severely painful caries of the right ankle. Principally in order to relieve her from this pain, and having learned from repeated experience how little danger attends an operation in such cases, I performed supra-malleolar amputation. The course of the case continued highly favourable until the wound, at the end of several weeks, was nearly healed. Then symptoms of acute hydrocephalus appeared quite unexpectedly, the patient dying after these had continued nearly three weeks. Seeing that tubercle of the lungs existed in this case, I felt certain that the brain symptoms were due to tubercular basilar meningitis. Yet there was found, as in the other case, only great cerebral œdema and increase of fluid in the ventricles, containing some flocculi, but not a trace of tubercle in the membranes of the brain. In the absence of tubercles the explanation of the occurrence of acute hydrocephalus in these cases is scarcely possible. I will not venture to decide which party is in the right in the dispute concerning the relation of Bright's disease to cardiac hypertrophy, and of this to cerebral œdema and the so-called uræmic symptoms, yet I cannot but point out that in the two cases which I have related the heart and kidneys were quite healthy. The fact that persons reduced by anæmia not unfrequently die from acute hydrocephalus has long been noticed, and is mentioned in all books on diseases of the brain, although, as it seems to me, unaccompanied by any satisfactory explanation.

SCARLET FEVER AND MEASLES OCCURRING CONJOINTLY IN THE SAME PERSON.

By J. ALEXANDER ROSS, M.D.Q.U.I., L.R.C.S.I.,
Late Junior House-Surgeon to the Borough Hospital, Birkenhead; House-Physician to the North Staffordshire Infirmary.

Until the middle of the 17th century very little was known of scarlet fever as a distinct disease. Although Dr. Gee, in his article in Reynolds's "System of Medicine" on scarlet fever, says, "the earliest record which we possess of the existence of scarlet fever bears no more ancient date than A.D. 1556, the year wherein Ingrassias published a description of a malady which had been previously recognised by the common people, and named by them Rossalia," yet Dr. W. F. Montgomery states, in the "Cyclopædia of Practical Medicine," that Sir W. Watson in 1769 confounded measles and scarlet fever, and that rubeola was a term used to signify both. Not only was the Profession of that time unable to recognise the difference between measles and scarlet fever, but we find that measles and small-pox were considered two forms of the same disease, for Sennertus, in the middle of the 17th century, discussed the question "why the disease in some constitutions assumed the form of small-pox, and in others that of measles." Diemerbroeck, also in the same century, considered measles and small-pox as the same disease, but differing in degree.

The earliest descriptions we have of scarlet fever are from Martianus about the middle of the 17th century, Dr. Withering about 1793, and from Dr. Sydenham. The epidemic, however, which Sydenham saw must have been mild indeed, for he says, "This disease, in *name* only, for it is little more, is easily cured without trouble or danger," and he says further on in the same chapter, "he (the patient) frequently falls a victim to the over-officiousness of the Physician."

Now it seems to me that measles and small-pox were confounded from two causes:—

1st. A vesicular (occasionally afterwards becoming pustular) eruption sometimes accompanies measles.

Dr. W. F. Montgomery mentions a case, in his article above alluded to, of measles accompanied by large and small vesicles, some large enough to cause it to be confounded with small-pox; and Dr. McBride has given to one form the term "morbilli variolosi."

2nd. The two diseases may be concurrent. Mr. Russell gives two instances of this, which occurred at Aleppo in 1765.

As regards scarlet fever and measles, the two diseases with which I wish more particularly to deal, I think the same reasons will also account for the fact of their having remained so long unrecognised as distinct diseases. They may assimilate one another very closely, and they may concur.

At first we find that they were confounded with each other; next we are indebted to the labours of Sydenham, Withering, and Martianus, for the earliest accounts of scarlet fever as a distinct disease. After this some Physicians began to believe that a hybrid of these two diseases appeared at times, whilst others denied the existence of such a hybrid. It is the latter point which concerns me. Does a hybrid of measles and scarlet fever ever occur?

This question might be either answered in the affirmative or negative, and numerous authorities brought forward in support.

Copland, in his Dictionary of Medicine, remarks—"More recently still, the differences have been more absolutely believed in than an extended and diversified experience warrants, for the Medical writings of the 17th and 18th centuries contain the histories of epidemics which, according to the descriptions they furnish, present characters which belong both to measles and scarlet fever. The experience of Physicians also, that has been prolonged through a number of years, or been extended to different countries, has furnished instances of either sporadic cases, or of prevailing and malignant epidemics, in which some, if not the majority, of the cases have presented the mixed features of measles and scarlatina." The same writer says, "Richter and Hildenbrand have defined rubeola to be a species between measles and scarlet fever," and, according to him, Hildenbrand states "that some consider it, with Hufeland, Shäffer, Formay, and Heim, as a variety of scarlatina, and that Kapp, Wichmann, and Reil view it rather as allied to measles; whilst Ueberlacher, Jahn, and Fleisch believe that no essential difference exists between measles, rubeola, and scarlet fever."

Dr. Copland, after entering minutely into the close relations between rubeola and measles on the one hand, and scarlet fever on the other, says—"I believe that rubeola is not a disease *sui generis*, nor yet a modification merely of either measles or of scarlet fever, but a hybrid of these two fevers, presenting sometimes a predominance of the symptoms characteristic of the one, at other times of those distinguishing the other, and not infrequently an equal combination of the features of both."

If we answer the question in the negative, we can bring numerous and high authorities, too, who take this side of the question.

Hebra considers rubeola, roseola, and rötheln as synonymous, and says, "It is, in fact, quite unnecessary to describe by the name of roseola or rubeola (rötheln) a special exanthematic eruption."

Now, Hebra, in the foregoing passage taken from his chapter on roseola, uses rubeola, roseola, and rötheln as synonymous terms, whereas, in the chapter on measles, by Dr. Franz Mayr, as revised by him, morbilli, rubeola, masern, and rougeole are used as synonyms. In this last chapter he says, when speaking of "morbilli conferti seu confluentes:" "In this variety of the eruption, the maculæ are crowded together or even confluent. This is, of course, the result of the formation of maculæ or papules in such large numbers that the intervals between them are reduced to nothing, or exist only when the rash first comes out. In fact, there subsequently appear continuous red patches of considerable extent, but strictly circumscribed, and with deeply indented margins. These patches are observed chiefly on the face, back, and upper and lower limbs. . . . To this form of morbilli is probably to be ascribed the '*exanthema hybridum*' described by Schönlein, and named by him rubeola. It is stated that in this disease a scarlatinal rash is associated with the concomitant symptoms of measles." Further on in the same chapter Hebra remarks: "As for the combination of morbilli with the other exanthemata, variola and scarlatina, I have never had the good fortune to see two of these diseases *simultaneously* in the same patient. . . . The supposed combination of scarlatina and morbilli was probably very similar in appearance to the *scarlatina variegata*."

Trousseau considers that rubeola and roseola form one and the same disease, but that they differ from measles; that rubeola bears the same relation to measles which chicken-pox bears to small-pox, and that it is not accompanied by catarrh of the mucous membrane.

We cannot fail to observe that there is the greatest diversity of opinion with regard to rubeola. Hebra and Trousseau use rubeola and roseola as synonymous terms, but Hebra also uses rubeola, morbilli, and rötheln as words of the same import. Copland, on the other hand, recognises in rubeola a combination of measles and scarlet fever. Drs. Sydney Ringer and Mayne use rubeola and morbilli as synonyms, and Dr. Ringer (in a footnote to his article in Reynolds's "System of Medicine" on Measles) says: "It is stated that the two fevers (measles

and scarlet fever) may co-exist, and these rashes may be mixed no such case has come under the author's notice."

I am inclined to take the first view of this question—viz., that measles and scarlet fever do at times co-exist, and that we do see occasionally a hybrid of these diseases; and I am induced to form this opinion after patient and careful observation of a number of cases which came under my notice during last spring when visiting the "home patients" of the Birkenhead Borough Hospital.

Although some cases occurred which, in addition to being well-marked cases of scarlet fever, had also the eruption of measles, yet, as they were "sine catarrho," I do not adduce them in proof.

The first case which attracted my attention was that of a boy aged 4 years. My first visit was on the third day of his illness; then I found that his eyes, from which the tears flowed, were congested, that he sneezed at intervals, that a discharge came from his nose, and that he had a short cough, with expectoration of a viscid mucus, or, to use Trousseau's words, that he was affected with "ocular, nasal, and bronchial catarrh;" in addition to this he had a furred tongue with prominent red papillæ, and the eruption of scarlet fever, especially at the inside of the knee-joints; his throat also was slightly affected. Next day I found that the rash of measles had made its appearance on the face; from this the measles appeared to predominate (but there continued the sorethroat and strawberry tongue) until desquamation commenced, and then I could detect albumen in the urine, the child having at the same time slight but ephemeral œdema of the face. This child made a good recovery.

The next was the case of a little girl, aged 2 years, whom I saw before any eruption made its appearance. She then appeared to suffer from catarrh, with the short troublesome cough and viscid expectoration. Two days afterwards I noticed a general redness over the body, and her throat now became affected; in two days more the eruption of measles became well marked, the eyes lost their redness, but still the coryza and cough continued. When desquamation was going on I found a small quantity of albumen in the urine.

Another well-marked case which I saw was that of a girl 4 years of age. I did not see her until the eruption of measles had made its appearance, but the mother told me that the child at the commencement of the disease sneezed perpetually, that her eyes were red, and that water ran from her eyes and nose. When I saw the child first, I was of opinion that it was a case of measles. There was no sorethroat, and the papillæ of the tongue were not very prominent, but I noticed between the patches of morbillous rash a redness of the skin; there were also little miliary vesicles—the latter, however, occur occasionally in measles. The disease ran a very fair course until desquamation took place, when anasarca came on, and continued for two weeks, there being also albuminuria. This child ultimately recovered.

Many other cases of this kind came under my notice, the youngest child being two months old.

It is true that Dr. Thomas says—"Scarlatina sometimes resembles the measles so exactly as not to be easily distinguishable;" but the same author also says that "scarlet fever is frequently attended with a cough, as also with redness of the eyes; but, on minute examination, it will be generally found that the cough in scarlet fever is short and irritating, without expectoration, that the redness of the eyes is not attended with intolerance of light, that the ciliary glands are not affected, and that, although the eyes appear shining and watery, they never overflow."

I have never succeeded in detecting albumen in the urine of children suffering from measles, and, I believe, the highest authorities bear testimony to the same.

Reviewing, then, these few cases (out of many) which I have brought forward, I think I may fairly say that they were, in truth, instances of the hybrid disease of measles and scarlet fever. There were, on the one hand, ocular, nasal, and bronchial catarrh, and the eruption indicative of measles; and on the other, there were the sorethroat, strawberry tongue, and albuminuria, with dropsy in some cases, the characteristics of scarlatina.

We have much satisfaction in adding our testimony to the comparatively temperate habits of the Chinese people. In no country, perhaps, is wine of a decidedly intoxicating nature so generally and yet so moderately partaken of as in China.—*Report of the Hankow Medical Mission Hospital*, 1868.

REPORTS OF HOSPITAL PRACTICE

IN

MEDICINE AND SURGERY.

KING'S COLLEGE HOSPITAL.

OPERATIONS.

We were present during the operations at this Hospital on Saturday, September 18. There was nothing done of capital magnitude, but some of the cases were of sufficient interest to induce us to lay them before our readers in the order in which they occurred.

REMOVAL OF TUMOUR FROM PAROTID REGION.

(By Mr. H. SMITH.)

This was a case of a firm lobulated swelling the size of a walnut situated in front of the pinna of a woman aged about 30, who had noticed its presence during nine years. Being doubtful of the nature of the swelling, Mr. Smith made an exploratory puncture, when, a couple of drachms of clear yellow fluid escaping, he thought that he had a simple cyst to deal with; on further light dissection, however, a small solid growth was enucleated, and a tough capsule was found to invest this loosely, and was also removed. One small vessel needed a ligature, and the wound was then closed with a pad of lint and strapping. The solid portion of the tumour was the size of a small walnut, firm, opaque yellow-white, lobulated, and having the appearance of the mixed fibrous and glandular growths commonly met with in this neighbourhood. By the courtesy of Mr. Smith we were able to take away the growth for microscopic examination. This confirmed the naked-eye characters, the bulk of the tumour being made up of more or less perfectly developed gland tissue, with much growing connective tissue.

Mr. Smith afterwards remarked upon the advantage of a preliminary incision in such cases, recalling instances of small chronic abscesses which he had known to exist for upwards of four years in this position. He dwelt also upon the careful dissection required for the ablation of tumours from the parotid region, and upon the necessity of always searching for a capsule in such cystic growths, as a portion of this left behind might cancel the benefit of the operation altogether.

REMOVAL OF LARGE NASAL POLYPUS.

(By Mr. H. SMITH.)

This patient had been brought to the theatre on the previous Saturday, but it had not been possible to do very much then, as, owing to the complete blocking of the nostrils and also to a large growth pendnet in the pharynx, the exhibition of chloroform was impossible. The portion projecting into the pharynx was hooked np and the left nostril partly cleared on that occasion, and to-day the man was brought up to have the rest cleared out. The growth was of four or five years' duration, and had attained such a size as to cause very considerable deformity of the face. Chloroform was administered to-day, and the remainder of the growth dragged away with polypus forceps. From the right nostril alone, two masses, each nearly as large as a walnut, were removed. The polypus was of the ordinary pedunculated gelatinous variety, and with the largest portion was taken the bit of spongy bone from which it sprang. The inconvenience of chloroform in these cases was well exemplified by this patient, who struggled, spluttered, and fought against the danger of choking with the energy usually displayed on such occasions, when the nose being blocked and blood streaming down the pharynx and over the lips, every spasmodic attempt to breathe freely carries a rush of blood towards the glottis, and excites the patient accordingly.

Mr. Smith also amputated a working man's forefinger, the end of which had been removed two or three years previously for severe injury, and since then there had been such constant excruciating pain in the finger that there was no alternative but to remove it at the metacarpo-phalangeal articulation, which was done in the usual manner.

OPERATION FOR REMOVAL OF NECROSED BONE FROM POPLITEAL SURFACE OF FEMUR.

(By Mr. WOOD.)

This patient, a young man, had been already the subject of a somewhat similar operation on the other leg by Sir William Fergusson in former years, and had suffered from many strumous symptoms. On the present occasion a deep abscess, pointing

inside the thigh close above the knee, led Mr. Wood to suspect the presence of dead bone—a diagnosis which was verified on opening the abscess and carefully probing. The necrosis was found to be situate towards the outer side of the popliteal surface of the femur. Passing a long probe as far across as possible, therefore, Mr. Wood cut down upon its point, and from this opening endeavoured to get at the dead bone. A few loose splinters were thus removed, but a rough honeycombed condition of the bone's surface was left, which was not capable of removal without the use of larger incisions and greater violence than a Surgeon would care to employ in such a neighbourhood. A strip of oiled lint was therefore passed through the wound across the thigh, and the patient returned to bed. In commenting upon the case, Mr. Wood spoke of the difficulties caused by the close proximity of the popliteal artery, only a little cellular tissue and a few glands intervening between the necrosed bone and the vessel; and mentioned the rules which had guided him in his incisions—viz., to follow carefully the track of the existing sinus; to make the counter-opening as close upon the end of the probe as possible, and, in extending this opening inwards, to keep the edge and point of the knife constantly towards the bone, at the same time being careful not to cut on the bone itself, lest the knife might glance off into the artery. He also said that as the bottom of the abscess was towards the outer side, although pointing inside, it would be, under any circumstances, good practice to make a free counter-opening, and to keep the passage clear with oiled lint or a drainage tube, so that as the man lay in bed there might be a constant drainage of pus from the most dependent opening. In this case he hoped that the dead bone, as it separated, might drift out by the channel so formed.

SECONDARY RHINOPLASTIC OPERATION.

(By Mr. WOOD.)

This case derived great interest from the fact of a former attempt to get a new nose from the forehead having failed from sloughing of the flap, so that the sphere of action was greatly limited. The patient, a stout middle-aged man, was, however, anxious that an attempt should be made, as he considered his present condition, with complete absence of the nose and the centre of the forehead occupied by a large cicatricial surface, could hardly be made worse by the failure of a second operation. Mr. Wood accordingly went to work thus:—First, before the exhibition of chloroform, he fitted into the cavity two bits of gum elastic catheter united by a stout bent wire passing through them, and laid them aside to serve as supports to the future nose. He next sketched out with pen and ink suitable triangular flaps on the cheeks on either side, making these apparently much larger than sufficient to cover the nose, and—warned by the previous operation—leaving good broad pedicles to the flaps above, and also inked out a thick central bit from the upper lip, which happily happened to be unusually full. Then, chloroform being given, the side flaps were dissected up from the bone, one or two spouting vessels being twisted, the central bit from the lip was cut through, and the remainder of the lip brought together by harelip pins and fine sutures. And here a novel feature was introduced, for Mr. Wood made an oblique slit through the thickness of the turned-up bit of lip, and spread it out so that it now reached easily to the forehead, where it was sewed to a raw surface prepared for it. The tubes were then put into the position of the future nostrils, the cheeks outside the lateral flaps freely detached from the bone for some distance, and a long stout wire drawn through from one cheek to the other; this being fastened to bits of bougie at either end, firm traction was exercised upon the cheeks, drawing them towards the middle line. Finally, the side flaps, which, now that the shrinking of their muscular thickness told upon them, were only sufficient to cover the nose fairly, were stitched together by their edges and beneath to the raw surface turned up from the upper lip. By these means a very fair nose seemed to be formed, or at least an excellent foundation laid for future beautifying touches to perfect, only a small gap remaining between the eyes; and this being filled with the raw vascular tip of the lip-flap, Mr. Wood hoped that it would fill up neatly by granulation. It was also deemed advisable to leave the left ala open on its outer side for the present, as the blue look of the scarred edge warned the operator against employing much traction. In his subsequent remarks, Mr. Wood alluded to the novel step he had introduced in this instance, in the slitting of the upper lip-flap, by which he secured, as in his operation for ectopia vesicæ, a double thickness of the resulting nose-covering, and a far greater chance of firm union without sloughing. He alluded to the use of the bit from the upper lip to serve for a septum, by Dieffenbach and many others, and mentioned that he had himself, some years previously, contrived a capital nose in that manner, but he was not aware that other Surgeons had yet slit up this lip-flap so as to furnish a raw surface for the main covering of the nose to rest upon. He also noticed the necessity in these cases of bringing the cheeks towards the middle line after separating them from the bone, so as to prevent the action of the zygomatici from flattening the nose with every smile.

PLASTIC OPERATION FOR EPISPADIAS.

(By Mr. WOOD.)

We may place by the side of the last operation this, which we saw performed on the previous Saturday. The patient was a boy, aged about 7. The epispadiac condition was complete, the corpora cavernosa being separated, so that the open urethra, lying in a gutter which grooved the upper surface of the penis, could be seen to terminate above in the deep red bladder which loomed through a hole at the root of the penis. The pubic symphysis could be felt in its normal state, and there was some power over the sphincter. The steps of the operation consisted of (1) dissecting up flaps from above and on either side; (2) turning these over the open canal; (3) raising from the scrotum below the penis a bridge of skin, the continuity of which at either end was retained; (4) passing this bridge over the penis so as to rest upon the raw surface prepared by the second step, and fastening all together by fine silver sutures; and (5) bringing vertically together the sides of the scrotal wound. By these means Mr. Wood believed that a firm covering of the open canal would result, two layers of skin being placed back to back, so to say, and so offering a strong and efficient substitute for the lacking skin and mucous membrane—a proceeding which had been very successful in his hands in similar cases.

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Medical Times and Gazette.

SATURDAY, OCTOBER 2, 1869.

THE DISINFECTION OF FORMOSA.

There are two or three common-sense principles to be borne in view in dealing with prostitution and its consequences. It is of no use to ignore it, to affect a false delicacy, and to treat it as if it were not a hard fact. Public policy and decency forbid our treating the unhappy prostitutes as dogs, and refusing charitable aid in the diseases which follow upon their sin. Public policy and morality forbid that their trade shall be recognised, fostered, or protected.

It is quite a false principle that the *quantity* of vice is fixed, that there is a certain demand, and that this must be met by a corresponding supply. On the contrary, it is the presence of loose women in streets and places of public resort which acts as the temptation to the unwary. The supply creates the demand. All sound policy requires that the presence of women openly flaunting their iniquity and soliciting passers-by should be put down by the police as far as it can be. Wise parents desire

their sons, after dining out, to come home in a cab. Vice is a habit, and the less it is indulged the less it will be.

Then, women suffering from the consequences of their life ought to be received as kindly as if they were sufferers from any other sin. We would say, too, that any woman taken up and convicted of following her vocation as prostitute in public should be imprisoned, and, if found diseased, should be detained till cured. Meanwhile, every inducement should be offered for a change of life.

But, beyond this, if any one seeks to make prostitution safe by a system of minute regulations, we would ask him just to consider the state of affairs in Paris, as revealed in the letter of our Surgical correspondent last week. Police regulations and periodic examinations are in full force, but the cry is—Syphilis is more rampant than ever! the examinations are not frequent enough! every woman ought to be examined more minutely, twice a week at the least! more examining Physicians are required, and better ones!

But there was one part of our Paris Surgical correspondent's letter which we reserved from motives of delicacy; but we may as well out with it. Hear it, ye ganders! The sauce for the geese must now be served out to you. The examination of women has proved fruitless; now men must be examined; and it is proposed that this duty shall be imposed on the "abbess," or high-priestess of each establishment devoted to the Paphian rite, and that a fine shall be inflicted on her if, through her carelessness, any worshipper brings disease amongst the nymphs of her fold.

As for the examination of soldiers and the shutting up of loose women in garrison towns, those are exceptional duties, imposed by the State for public reasons, which the Medical officers do very much to their disgust, but without degradation. But there is nothing which would tend more to deprive Medicine of the rank of a respectable calling than the fact that Practitioners should be found willing to lend themselves to the dirty work of examining prostitutes in order to enable them to carry on their trade, and even (as has been proposed) instructing them in the art of injecting, etc., so that they may sin with safety. If the heads of the Profession or the Colleges ever desire an opportunity of protecting their members from degradation, here is one.

And the attempt would be as unavailing as it would be disgraceful. Whatever renders vice safe and increases its prevalence must increase disease. Gonorrhœa and soft ulcers require no specific pabulum; they may be created anywhere *de novo* by promiscuous intercourse. The infection of syphilis is so subtle, and lurks where least expected, that it is in vain to attempt to keep it out. Whether this is ever generated anew is questionable, but every Surgeon in good practice knows that many of his worst cases are reported to him to be the fruit of *liaisons* where such a result was least to be expected.

If we are not to treat prostitution by repression, if it is to be fostered and protected at the public expense, then the best plan would be *pecca fortiter!* Make it a department, with an under-secretary of state to manage it; have there an ample staff of well-salaried inspectors; only let the funds come from a tax on the persons who practise prostitution, and those who resort to them. If we have money to spare, let us give it in better dwellings, food, and sick comforts to poor women who earn their living by work, and let Formosa save something for disinfecting purposes out of the ample wages of her debauchery.

THE BRITISH AND FOREIGN SCHOOLS OF MEDICINE.

The efforts of the General Medical Council to improve the system of Professional education will, no doubt, tend to raise the standard of the average Practitioner; but, however desirable progress may be, at present we must regard as exaggerated the opinion of a teacher in a metropolitan Hospital that 30 per cent. of those who obtain licences to practise are unable to diagnose any ordinary visceral lesion, and that 50 per cent. would not know how to set to work to investigate a complex case of disease such as often occurs in actual practice. Such statements must necessarily lower the confidence of the public in our Profession, and reflects a disadvantageous light on teachers and licensing bodies. In comparing Continental Professional education and its results with our own, we have often been led to the conclusion that no other country has understood so well as Great Britain how to educate *Practitioners;* and it is indeed gratifying to see that eminent Continental men, such as Professor Billroth, of Vienna, candidly declare: "Scientifiquement parlant au point de vue de la chirurgie aussi bien que de la médecine, on peut dire que l'Angleterre emporte aujourd'hui sur tous les autres pays." ("Traité de Pathologie Chirurgicale," édit. française.) If we have a fault to find, it is that our Practitioners are too eminently practical, and that perhaps 50 per cent., after having obtained their licences, never think of opening a book, but follow too strictly the *rules* taught at school. Yet, after all, it is an excellent thing to give the young man, at the outset of his career, rules to guide himself through the chaos of the practice into which he is plunged; and if it is in him to advance, he will examine for himself the truth or validity of the principles taught, and modify them according to his judgment and experience. The times are gone by when from far and wide pupils flocked around a master to swallow each word that dropped from his lips, and to impress it indelibly on their minds. Nowadays neither the most talented nor the most modest of any profession hesitates one moment to give publicity to his researches for the sake of the *bonum commune*. Every kind of information can be carried home safely under our arms, and manuals and textbooks supersede schools, where the teaching is reduced to repeat what, in less time and more conveniently, the learner can find elsewhere. That this actually occurs is sufficiently proved by the Medical School of Paris. Long surrounded by the lustre of those pillars of Medical science, Paris has seen every leaf of its laurels wither, and, though the present are scarcely less able than their predecessors, only one of the teaching staff in Paris is able to attract an audience. Amongst a thousand matriculated students there are not ten that regularly attend lectures. During the teaching of the most important subjects—such as, for example, anatomy—we have never been able to observe more than twenty, and, with the sole exception of chemistry, the large amphitheatre is always empty. It is because their teaching is not elementary enough for beginners, and of no interest for the more advanced. The aim of the school is misunderstood, for to it belongs to select, amongst the enormous material, the most essential only, to offer it in a digestible form, and not to overload with hypotheses and high-sounding words the young and inexperienced. It is the duty of the school to teach how to study, how to proceed from the simple to the more complex, and, before all, to keep alive the interest of the learner. The only way to effect this is by showing him that his labour is crowned with success, that he advances in knowledge. Paris teachers and students unanimously agree that there is no necessity for passing through a lecture-room for any of the examinations required for the M.D., and students feel it only too well how much is left to themselves; and whenever opportunity is given to them to supply their private reading by elementary instruction or demonstration, it is impossible to see youths more eager to learn than French students. Nor is it different in regard to clinical instruction. Enough of clinical lectures on all sides; but, to our knowledge, for the whole number of students there is only one Physician and one Surgeon who take the trouble to call forth a student at the bedside and examine him about the case, whilst the others of the clinical Professors, conscious of their name and position, make their visit in deep silence, and if once one word is uttered, it is to criticise the opinion of somebody else.

Not one British school has lost sight of its immediate object; the system of teaching pursued in British schools has been so far successful that it has imparted to every one enough to rely upon in any case of emergency. Improvements are hardly to be expected from changes of the teaching itself, nor will the addition or omission of certain collateral subjects prove adequate to what is expected from it; but let lecturers impress upon the minds of their hearers that the time of their study scarcely suffices to initiate them, and that, before all, Medicine is an applied science and not a lucrative business.

THE WEEK.

TOPICS OF THE DAY.

The melancholy death of the Lord Justice Clerk of Scotland has led to the changes which we last week predicted. Mr. Moncreiff is appointed Lord Justice, and the seat for the Universities of Glasgow and Aberdeen is again vacant. Mr. Gordon, the late Conservative candidate, has already been requested to allow himself to be nominated. No Medical candidate has yet been mentioned, although we believe that a member of the Medical Profession of good standing and not extreme political views would meet with warm support from a large section of the graduates. Report has already assigned to Dr. Lyon Playfair the lucrative and dignified appointment of Master of the Mint. If rumour in this case should prove true, the seat for the Universities of Edinburgh and St. Andrews would be again within the grasp of a Medical candidate who unites a high scientific and social reputation with sound and moderate political opinions.

The judgment published by the Poor-law Board on the conduct of Dr. Harley and the elected guardians of the parish of St. Pancras ought to satisfy both parties concerned in the quarrel, although it will probably fail to obtain the entire approval of either. In the first place, the Poor-law Board acquit the guardians of having unfairly influenced Dr. Harley to diminish the number of patients in the St. Pancras Infirmary, and, although he is held to have used injudicious language, and language which afforded foundation for the charges made, the Board concur with Mr. Bere, the Commissioner, "in acquitting Dr. Harley of having been actuated by improper motives, and consider that the anxiety shown, in the opinion of Mr. Bere, to have been displayed by Dr. Harley to lessen the numbers in the Infirmary was due to the strong opinions which he avowedly held on the subject of Infirmary management, and to his strong, though not corrupt or unworthy, desire to carry his opinions into practice." The latter portion of the judgment deals with the four cases which it is urged that Dr. Harley ill-treated by sending them out of the Infirmary. In the first—that of a woman, named Ann Daley, whom Dr. Markham rightly surmised to be suffering from chronic kidney disease, but who at the same time seems proved to have been a drunken ne'er-do-weel, whose course of life was the main cause of her being an inmate of the Infirmary—the Board cannot comprehend how she should have been discharged by Dr. Harley as "well," but at the same time "they acquit Dr. Harley of having been actuated by improper motives" in the course he took. In reference to the case of a man, Wright, discharged by Dr. Harley on May 20 as "well," but readmitted to the workhouse on the following day, certified to be suffering from consolidation of the right lung, Mr. Bere, the Commissioner, thinks that the balance of evidence proved that the man's disease (whatever it might be) was not in an active state when he left the Infirmary, but that it was probably aggravated by a long walk he took on the day of his dismissal, and they are unable to concur with Dr. Harley's view, "that such cases only ought to be in the Infirmary as would be treated as in-patients in a Hospital, and that the infirm wards should be for patients who would be out-patients in a Hospital;" but they do not state the reasons for which they differ. They assent, however, to Mr. Bere's conclusion, "that he does not think that it was proved before him that Wright was improperly discharged from the Infirmary." Another case was that of a man, Bishop, who is said to have been found seriously ill on the evening on which he was discharged from the Infirmary, although there was great discrepancy in the Medical evidence.

"The Board concur in the opinion of Mr. Bere that 'Dr. Harley discharged Bishop from the Infirmary because he believed that a cure had already been effected;' but they are of opinion that a more careful and skilful examination would have revealed the commencement of the illnesses from which he was ascertained to be suffering on the evening of the day of his discharge.

The last case was that of Mary Allen, the woman who, having died from erysipelas after supposed scarlatina, was made the subject of a coroner's inquiry. The jury, it will be recollected, passed a verdict condemning Dr. Harley, although Dr. Lankester lodged a protest against it. The Board find with Mr. Bere that the attack (of erysipelas) was not traced to be a consequence of a too early dismissal from the Infirmary. But they add that, independently of the attack of erysipelas, they feel bound to record their view that Dr. Harley committed an error of judgment in discharging the woman and her children too soon. This is the pith of the judgment. As it entirely concurs with the view which we have always taken of the matters in evidence, we are glad to see our opinion thus confirmed by the high authority of the Poor-law Board. The fact is that the whole inquiry had been got up in a party spirit and for party purposes. Dr. Harley's discharge of his duties seems to have been narrowly watched in order to detect a flaw, which was immediately seized on by the party opposed to his supporters. We are especially glad to see that the Poor-law Board acquit him of being the mere paid agent and tool of the elected guardians, as this in fact gave a special force to the charges urged against him.

Dr. Briscoe, of the Royal Artillery, who was recently in charge of the Royal Arsenal Surgery, Woolwich, has been appointed by the Home Secretary Medical Inspector of Prisons.

The Poor-law Board have instituted an inquiry into the conduct of Dr. Slater, one of the Medical officers of the Islington Union. Charges had been brought against Dr. Slater of having treated a sprained ankle as a fracture and charged the guardians for it, and of having neglected to come when requested to see a child that was dying. From the report of the proceedings we have seen, it would appear that the supposed fractured leg was treated by the assistant of Dr. Slater, and not by that gentleman himself; and, with regard to the case of the dying child, it does not seem at all clear that the urgent message which the mother of the child said she sent to Dr. Slater was delivered to him. The report, however, of Mr. Longley, the Inspector, and the decision of the Board, will probably put the matter in its true light.

Dr. Richardson's monthly lectures will begin on Tuesday next, October 5, at his residence at 5 p.m. The subject of the first lecture is methylal and chloral.

One Henry Timson, described as a Surgeon, at Woolwich, has been sentenced by Mr. Justice Brett, at the Central Criminal Court, to ten years' penal servitude, for feloniously producing abortion at the eighth month of pregnancy in the case of a girl of 17 years of age. The seducer of the girl, who took her to Timson, was sentenced to seven years' penal servitude. A few such convictions and severe sentences would put a stop to these abominable crimes.

CHOLERA IN BUENOS AYRES.

We find in the *Revista Medico-Quirurgica* of Buenos Ayres, under date July 18, an account of the number of patients treated

for cholera morbus in the General Hospital of that city during the first half of the current year. A report of the Council of Public Health gives 191 as the sum of such patients—that is to say, between January 23 and June 17 inclusive. Of these 191 patients with cholera, classed according to nationality, and among whom the denizens of the soil are by no means largely represented, there are 167 male and 24 female patients. Of the men 100 died, with 67 recoveries, of the women 15 deceased, with 9 recoveries. On the Argentines and people of neighbouring states, the incidence of mortality was proportionately great, but it was more noticeably on the Italians, who form a large portion of the immigrants, that the full force of the pestilence seemed to fall. Of 6 Italian women affected with cholera no fewer than 5 died, and of 65 Italian men no fewer than 41. The North Americans suffered to the same extent; of 6 entries recorded only 1 case survived. The French and Dutch suffered in somewhat less degree, and next in order after them the Germans, something more than the Spaniards, were sufferers. The Portuguese and Swiss came best off, the former with 3 deaths out of 8 cases, the latter with 3 recoveries out of 4 attacked. Of 2 English 1 recovered. One Brazilian and a Norwegian figure in the report, and both of them as fatal cases. Of Argentine women we notice that only 4 were saved out of 12 attacked. We see this Hindoo graft thrive well in the New World.

THE EMPEROR OF THE FRENCH.

Now that the convalescence of the Emperor Napoleon is beyond all doubt, we feel no hesitation in placing before our readers an *authentic* though short history of the case, which we have received from a most trustworthy source. The primary cause of the last attack was a protrusion of a large volume of hæmorrhoids, which became strangulated and dry, and occasioned so much irritation that for two days and nights the Emperor could find rest in no position. To this succeeded spasmodic irritation at the neck of the bladder, and retention. He was thus obliged to submit to two operations—viz., the replacing of the protruded piles, and the passing of a catheter. The latter procedure produced great faintness and constitutional disturbance, and brought on a feverish attack somewhat intermittent in character. Though the Emperor was never in immediate danger, yet pain, want of rest, loss of appetite, etc., brought him to an extreme state of weakness, which gave his Medical attendants some anxiety. His present state is very satisfactory. Our readers will see that his Majesty's illness is one of a class that may affect the most vigorous constitution, that it in no way implies of necessity any tendency to "break down," and that it is not in the least incompatible with prolonged life and vigour. We cannot help thinking that a plainly worded bulletin, describing his Imperial Majesty's real malady, would have had a more soothing effect on the Bourse than the system of concealing the truth, and so giving scope to the wildest flights of imagination.

AUSTRALIAN BOTANY.

We have received a most interesting volume, consisting of papers on various subjects connected with the botany of Australia, by Mr. William Woolls, of Paramatta, New South Wales.(a) The papers are not continuous, but deal with isolated subjects, and are of two kinds, one set dealing with certain divisions of the vegetable kingdom as seen in Australia, the other with the botany of certain districts. Both are interesting. The article on Australian ferns especially is calculated to draw more general attention to this beautiful group of plants, which in Australia exhibit some of their finest forms. A curious paper on poisonous honey contains a good deal of interesting matter. The author shows that in various parts of the world honey has been known to acquire poisonous properties from the nature of the plants on which the bees have fed, just as in other parts the aromatic products of other flowers have given a pleasant flavour to the honey, causing it to be much sought after. Two interesting papers on the woods and medicinal plants of the Paramatta district also occur. The gum trees, as they are called, yield products useful in Medicine, especially as astringents, Australian kino being one of the forms in which these occur. Two species belonging to the gentian family are found in the colony, and are known to possess properties similar to gentian itself. There is a native form of sarsaparilla which is not used. Many other plants are now introduced, and an interesting chapter of the book is devoted to a consideration of the plants thus made known in Australia. Mr. Woolls points out that in certain parts of Australia a species of Melilotus is exceedingly common in wheat, and that sometimes the wheat is so impregnated with it as to acquire in the shape of flour a somewhat medicinal taste. The plant does not possess any bad properties, but its flavour is objectionable, and therefore it should be cleared as speedily as possible from the fields. The last paper we shall notice is a monograph of the genus *Eucalyptus*—one quite characteristic of Australia, and which serves to give some of its most remarkable features to Australian scenery. All the papers are pleasantly written for the general public rather than the purely scientific botanist, and this constitutes their charm. There is no surer way of enlightening the minds of the public as to the flora of a country than by papers such as these, which attract attention to their subject as well as to themselves. In this way Mr. Woolls has done good service, and deserves our thanks.

(a) "A Contribution to the Flora of Australia." By William Woolls, F.L.S. Sydney: F. White. Pp. 255.

ARMY ASSISTANT-SURGEONS.

The younger members of our Profession should learn what they have to expect if they enter the Army Medical Service. Let them examine the following:—

"*A Return of the number of Assistant-Surgeons (excluding Household Regiments) borne on the strength of the British Army on the 19th day of March*, 1867.

"No. 697.

"*A Return of the number of Promotions from the Rank of Assistant-Surgeon to that of Surgeon, from the 1st day of January*, 1857, *to the 1st day of January*, 1867, *distinguishing each Year separately.*

"January 1 to December 31,		1857	40
"	"	1858	40
"	"	1859	12
"	"	1860	12
"	"	1861	4
"	"	1862	21
"	"	1863	16
"	"	1864	25
"	"	1865	29
"	"	1866	25
"Total for 10 years			224

"Average promotions per annum 22, or 31 years' service, *in all climates*, previous to promotion.

To the above may now be added:—

"January 1 to December 31,		1867	65
"	"	1868	24
"	October 1,	1869	2
"Total for 12¾ years			315

"Average promotions per annum, 24. Present strength, 715 = or over 29 years' service, previous to promotion!"

We believe there is no gainsaying these facts. It is true an attempt has been made to show that Assistant-Surgeons are getting their promotion after twelve and a half years' service, but there is more plausibility than truth in the assertion. How different is the rule in the Indian Medical Service!—there promotion follows as a certainty after twelve years' service, but it is in India only. Who can wonder that there still exists in a yet more aggravated degree the cause of regret expressed in the Report of the Commissioners in 1866?

"That practically at the present time the list of candidates at the competitive examination receives but a very scanty addition from the numerous class of English students, and the Medical service of the Army derives but little benefit from the immense field of instruction afforded by the great schools and Hospitals of the Metropolis."

Look at the result. Out of thirty-eight candidates admitted into the Army Medical Service at the last examination, only three received their Medical education in England exclusively—whereas, of those who at the last examination at Netley have qualified for appointments in the Indian Medical Service only three received their Medical education in Ireland exclusively.

FROM ABROAD.—M. DEMARQUAY ON CHLORAL—THE MANIFESTO OF M. NÉLATON—THE FRENCH CENSUS OF 1866.

M. DEMARQUAY, at the last meeting of the Académie des Sciences, made a communication on the properties of chloral, in continuation of the one we recently noticed. On this occasion his researches relate to the human subject, he having administered chloral twenty times, combined with syrup of tolu, a spoonful of syrup containing one gramme of chloral. The quantity administered was from one to five grammes, and the taste was not found disagreeable. Of the twenty experiments, six proved negative as regards the production of sleep, one of these patients, 35 years of age, who had undergone excision of the knee, only obtaining a light sleep of three-quarters of an hour after taking five grammes. On the other hand, a woman, enfeebled by organic disease of the uterus, enjoyed, on two different occasions, a peaceful sleep during the whole afternoon after taking only one gramme. The susceptibility to this agent, and the duration of the sleep produced, have in all cases been found to bear a direct relation to the debility of the subject.

In fourteen cases in which complete sleep was obtained, it generally commenced in from fifteen to thirty minutes after taking the chloral. The sleep so produced is a light one, in no wise resembling that induced by chloroform. The slightest noise awakens the patient, but he instantly goes to sleep again. The slightest prick or gentlest pressure calls forth a moan, and the part of the body touched is drawn away. M. Demarquay cannot venture to say that there is actual hyperæsthesia of the surface, but certainly the sensibility of the skin is entirely preserved, however deep the sleep may be. Thus the employment of chloral in operative surgery would be useless; but it has been found of great service in producing immediate and prolonged sleep after the completion of an operation. But while the sleep induced in several of the patients was calm and tranquil, in others it was restless and disturbed by dreams and hallucinations. This was especially the case in women suffering from painful organic affections of the uterus, accustomed to large doses of opium. In these cases the sleep was prolonged, but agitated, and accompanied with cries, the patients eagerly demanding their usual morphia injections. Next day, these patients seemed unconscious of their restlessness overnight. As in some patients two or three grammes of chloral will give rise to a sleep that is prolonged for hours, it is of importance that food should be given before administering it in such cases. Under the use of chloral given in the doses indicated, neither the pulse, respiration, nor temperature has exhibited much variation. In several cases the amount of secretion of urine has increased, and some patients passed urine involuntarily in bed. M. Demarquay is still pursuing his researches on this substance, and thus far he comes to the following conclusions:—1. Chloral possesses a very marked hypnotic action, especially in weak and debilitated persons. 2. The duration of its action is in direct relation to this feebleness. 3. The sleep produced is in general calm, being only disturbed in those who are the prey of severe suffering. It seems most suitable for affections in which it is especially desired to induce sleep and muscular resolution. 4. It may be given in considerable doses, since from one to five grammes give rise to no ill effects.

We believe that M. Nélaton has never been known to address a communication to any of the French Medical journals—certainly not since he has attained his present celebrity; and great must have been the surprise excited at perusing the other day, amidst the miscellaneous paragraphs of the columns of the daily paper the *Figaro*, the following profession of faith addressed to the editor of that wide-spread journal:—

"You have asked me, Sir, my opinion on the Surgical studies prevalent in France at the present epoch, and it is as follows:—I feel happy in perceiving that the generation which is succeeding us is renouncing that false semblance of an exact and profound science derived almost exclusively from microscopical researches in order to attach itself to the study of Surgery as based upon the grand indications furnished by clinical observation. It is under the inspiration of such principles that the great masters at the commencement of the present century, and especially Dupuytren, the most glorious among them, imparted to the French School of Surgery that legitimate renown which it still enjoys throughout the whole world. "NÉLATON."

We know what would be thought among ourselves of any of our leading Surgeons who thought proper to communicate to the numerous readers of the *Times* or *Telegraph* their views of the position of this branch of the Profession; and we do not doubt that the disapprobation of the channel M. Nélaton has chosen will be equally strong. As to the doctrine he sets forth, his views have found the most appropriate opponent in the person of M. Verneuil, who unites great proficiency in the studies condemned by M. Nélaton with acknowledged Surgical ability. After pointing out the impossibility of pursuing such a discussion in the columns of a newspaper, he, in an article inserted in the *Gazette Hebdomadaire*, denies that the generation now succeeding to the Surgical heritage in France exhibits any sign of diminished appreciation of the value of pathological histology, still regarding it as one of the best auxiliaries of clinical study.

"For my part," he goes on to say, "if any one did me the honour to ask me what are the actual tendencies of the French School of Surgery, I should reply that, in order to compass the very difficult study of clinical research, the present generation first provides itself with all the resources so generously offered it by the accessory sciences; that it stretches its hand to both ancients and moderns, whether English, Germans, or Italians, in order to gain from them either facts or ideas; that it divides its time between the laboratory, the amphitheatre, and the library; and that, in fact, it renounces nothing which may furnish instruction, being neither so foolish nor so vain as to repudiate that which may serve to render science more complete, or practice more efficacious.

"In truth, the more we look for them the less can we penetrate the motives which have impelled M. Nélaton to enter on this campaign. If his object were only to celebrate Dupuytren, the thing was scarcely worth the trouble. We believe that enough has already been said concerning this ambitious despot, who indeed obtained renown, fortune, and honours, but has not merited the true glory reserved, God be praised, for true *savants*. If the object were to demonstrate that, in order to become a Surgeon, patients must be seen and observed, the pen need not have been taken up, for this is a principle which no one contests, and even those who employ the microscope have had to furnish proofs of their clinical capacity as well as an ex-Professor of Clinical Surgery."

The French Government has just published its report on the census of 1866, which contains some figures of interest. From 1861 to 1866 the excess of births over that of deaths amounted to 716,000. The annual increase of population, which was only 0·20 per cent. in 1856, is now 0·36, there being altogether 680,000 souls more than in 1861. The total population in France in 1866 amounted to 38,067,064. The emigration from the rural districts has much engaged attention of late, and it is found that the urban population has increased from 24 to 30 per cent. The Department of the Seine has 190 houses per square kilometre, and 32 individuals per inhabited house—the general mean throughout the empire being 14 houses and 5 inhabitants. One-third of the entire population cannot read. The Department of the Bas-Rhin is the best off in this respect, as there are only 5 per 100 who cannot read, while in the

Haute-Vienne there are 67 per cent. The difference in the number of women is so slight (0·10 per cent.) that it need hardly be taken into account; but the difference in the proportion of widows and widowers is remarkable, there being nearly twice the number of the former. The mean age has advanced six months since 1851, and is now 31 years 5 months—*i.e.*, 31 years 2 months for men, and 31 years 8 months for women.

Lunatics are returned as 50,726, or 133 per 100,000 inhabitants, there being 91 male lunatics to 100 female. Sixty-three per cent. are treated in asylums. In the Department of the Seine the number is 239 instead of 133, and in the Seine-et-Oise, it rises to 299. The *idiots* and *cretins* amounted to 39,953 or 105 per 100,000, there being 132 males to 100 females. The proportion rises to 383 in Savoy, and to 262 in the Hautes-Alpes. Taking lunatics, cretins, and idiots together, there were 92,000 individuals deprived of reason, or 1 per 420 inhabitants. The *goitreux* amounted to 51,000, of which number 7500 had already been enumerated with the cretins. The *blind* are returned as 84 per 100,000 inhabitants, or about 1 in 1200. Of the 84, 15 were blind from birth. There were 93 females to 74 males. The *deaf-dumb* amounted to 21,214—*i. e.*, 56 per 100,000, or about 1 in 1800, three-fourths of the number having been born in this condition. There were 62 males to 49 females, and the 56 per 100,000 rose to 280 in Savoy, and 214 in the Hautes-Alpes.

Relative to the Medical Profession the total numbers returned were 43,188, of which number 14,000 were females. In detail there were 17,000 Physicians and Surgeons, their titles being undistinguished, 3000 *vétérinaires*, 1400 dentists and *pédicures*, 13,000 *sages-femmes*, and rather more than 7000 *pharmaciens* and herbalists. For Paris there were 2016 Physicians and Surgeons, 624 *sages-femmes*, 1322 *pharmaciens* and herbalists, or a total of 4593 persons directly pursuing the profession—*i. e.*, 2½ per 1000 inhabitants. Adding the families, *employés*, and servants, about 16,000 persons obtain their livelihood through the Medical Profession within the limits of the fortification of Paris.

We have just received two volumes which this week we are unable to notice at full length, but which deserve, and shall receive, full consideration hereafter. These are the first volume of Holmes's "System of Surgery," and Dr. Beale's essay on Protoplasm. The new edition of the Surgery is to consist of five volumes, of which the first deals with General Pathology, and is illustrated with engravings and chromo-lithographs. The whole work seems much improved. Dr. Beale's work is intended as a kind of comment on Professor Huxley's notions. Both shall speedily be fully discussed.

Dr. Dudgeon's Report of the Pekin Hospital of the London Missionary Society is, as usual, full of most interesting details. We shall shortly take occasion to bring some of them under the notice of our readers.

ON THE CHOLAGOGUE ACTION OF MERCURY.

Whatever good effects may be obtained by using mercury are still facts which no change of theory can alter. Modern researches only alter our interpretation of the facts, and not the facts themselves; and if mercury does not increase the amount of bile secreted by the liver, as has been hitherto supposed, but, in reality, diminishes the supply, it follows that we must look upon our results from a different point of view, and admit that our knowledge of the action of this drug, as of most others, is simply empirical.

The Edinburgh Committee appointed by the British Medical Association have published an elaborate report on the action of mercury as a cholagogue. The first part is purely historical, and gives an account of the difficulties which experimentalists have found in making accurate observations. The second part contains the researches of the Committee.

After several failures, biliary fistulæ were established in full-grown healthy dogs, and every precaution was taken to prevent any shock from injury to the nerve or escape of bile or blood into the peritoneal cavity. Drs. Rutherford and Gamgee, to whom the success of the experiments seems to have been in a great measure due, devised an apparatus for collecting the bile secreted during twenty-four hours by a dog. In the fistulous opening was placed a Scott's canula, at the external end of which was attached a sponge, so as to collect the bile when it flowed through the canula. The sponge was placed in a tin box, and the latter was secured in its place by a gutta-percha shield, which fitted to the dog's body. A preliminary investigation was made to determine how far dogs are subject to the action of mercury. Overbeck has obtained marked salivation, with spongy gums, by rubbing dogs with mercurial ointment; and Murray, in experimenting with large doses of calomel, produced salivation in a dog. (*Transactions* of Med. and Phys. Society of Bombay, 1841, p. 11.) Dr. Gamgee failed to obtain salivation after rubbing in daily, for several days, mercurial ointment. No marked symptoms were produced, nor was their health impaired, nor was there any trace of mercury in the urine. This method did not prove satisfactory, and Dr. Rutherford found it more convenient to inject a solution of corrosive sublimate instead of using mercurial inunction. Of six dogs so treated five were salivated, and one died thirty-six hours after the first dose. In some the nasal discharge was not great; in others the saliva was secreted in very large quantities. In nearly all there were clay-coloured stools, and in some the fæces were bloody. The amount of the salt injected was large. To two strong dogs as many as nineteen grains were injected before salivation was produced; in the smaller animals from four and a quarter grains to twelve and one-fifth grains sufficed. One-tenth to eight-tenths of a grain was given at a time, and repeated frequently during the day; several days this process was repeated before salivation was produced. On dissection, there was found congestion of the intestinal canal, from the pylorus to the ileo-cæcal valve, and the pancreas, with one exception, was found unusually vascular. In no case did the liver or pancreas present an abnormal appearance.

The Committee consider that these facts show that mercury has the same action on a dog that it has on man. This is an important fact, and it seems to be warranted by the report. Much larger quantities are, no doubt, required to produce effects in a dog similar to those which a small dose exerts on man, but then the difference is one of degree and not of kind. And, further, it is easy to find out the commencement of salivation or of spongy gums in a man, while in dogs you have to continue the administration of the drug until more decided effects are manifested.

The Committee made experiments on nine dogs with pilula hydrargyri, calomel, and corrosive sublimate. In each case they found that whether given in small, large, or gradually increasing doses, mercury did not increase the biliary secretion; so long as neither purgation nor impairment of health was produced, it did not even influence the secretion of bile, but as soon as the dogs began to suffer in health the quantity was diminished. For a full account of the observations made and the careful mode in which they were worked out we must refer our readers to the report itself.

It will be sufficient now to point out a few of the objections which may be brought against the conclusions adopted by the Committee. We have already seen that no valid argument can be raised against observations made upon dogs, inasmuch as the symptoms produced in these animals were very similar to what we meet with in man; "the only difference that there seems to be between the dog and man as regards the action of mercury consists in the fact that in the dog larger doses are generally required to produce the same effects as those observed in man." With many it will be looked upon as an objection that while these results were obtained in healthy dogs, we can

not argue that they would be the same in disease. This is an argument much easier to state than to answer; but the difficulty of replying to it does not strengthen the position of its supporters.

When all the known facts of a case are in favour of one view it may easily be argued that similar results would not be obtained in persons in disease; it is clear, however, that the objectors have the more untenable position, since, although their hypothesis cannot at present be refuted they have actually no facts to warrant them in the assumption; while, on the other hand, careful observations have been made and a theory framed in accordance with the facts. And so it is that as science progresses old views, long cherished, have to make way for the new, so it is that we have to give up what was taught in our youth, to find in our maturer years that our hypotheses are incorrect. But if this is true in the case of mercury what can we say in favour of other drugs? In truth, with all our experience we know but little even yet of therapeutics; hitherto we have made theories and explained away facts in accordance with the notions we held about their action, and those notions were ever changing with the prevailing fashion of the day.

We have by degrees lost that faith in mercury which it was the privilege of our forefathers to possess; it has been shown that inflammations and fever can be cured without it; some even have ascribed many of the dire effects of syphilis to its use. Still there remained a belief with many that it had some influence on the hepatic secretion. Even this last hope seems vanishing, and we may soon come to the conclusion that its only use in doses short of salivating is to purge; for this purpose a more harmless drug may perhaps be substituted.

There is one advantage which comes from the scientific work of the present day. In upsetting old theories, it paves the way for new ones; it does this, too, by more accurately recording facts, and so making the new views more nearly approximate to truth. It is better to have no theories at all than to cherish erroneous ones; it is better still that men should doubt, if in the end they are led from scepticism to belief.

GENERAL CORRESPONDENCE.

THE SUPPLY OF SUBJECTS.

Letter from Dr. J. Burton.

[To the Editor of the Medical Times and Gazette.]

Sir,—In your remarks upon the scarcity of subjects for dissection in your last number, you state "the immediate cause of this scarcity" to be "the apathy of masters of union workhouses." I believe that may be true to some extent, but to a much greater extent I think it is due to the difficulty of the master's position, for he may consider himself as not bound to incur the odium of his board of guardians by pressing upon their attention a subject unpopular and unpleasant to them, to say the least of it.

In the Walsall Union an application was made by Dr. Bell Fletcher, as the head of the Sydenham College at Birmingham, direct to the Walsall Board of Guardians for aid in procuring a sufficient supply of dissecting material. Their consent was easily obtained, and the masters of this workhouse have not since shown themselves to be either "indifferent or obstructive."

I believe that if the anatomical chiefs of the various schools would take the trouble to visit the boards of guardians and explain away as groundless their prejudices and fears of incurring public odium, they would (like the Walsall Board) give their consent, and, if so, I feel very confident that the "masters of workhouses" would show themselves to be neither "indifferent nor obstructive." Given the board of guardians' consent, there would be no trouble to the master in ascertaining that the other requirements of the Act were complied with, as that information is generally in his possession as soon as the subject becomes an inmate of his workhouse, and the Medical officers, by proffering their services to fill up the necessary forms and certificates (which it is to be hoped all of them would readily do), would practically relieve the workhouse masters from any trouble in the matter.

I am, &c. John Burton, M.D.

1, King-street, Walsall, September 27.

CASE OF DELIRIUM TREMENS SUCCESSFULLY TREATED BY HYDRATE OF CHLORAL.

Letter from Mr. Henry T. Chapman.

[To the Editor of the Medical Times and Gazette.]

Sir,—At the present moment, when the value of chloral as a remedial agent is under discussion, and but little evidence of a practical character is yet to be had, a brief narrative of its operation as a narcotic in an aggravated case of delirium tremens, after the complete failure of large doses of morphia, may not be without interest to your readers.

A gentleman about 60, gifted with a constitution so vigorous that twelve or fourteen years of inordinately intemperate habits have but slightly impaired it, was seized with delirium tremens, as a consequence of three weeks of almost continued intoxication, on Friday the 17th instant.

In the course of the last five years I had already attended him in three similar attacks, one of them very severe and obstinate, and was informed that he had twice before suffered under the same malady.

On the three former occasions morphia, persevered in for shorter or longer periods, was successful in overcoming the sleeplessness and restoring his mental balance; and on the outbreak of this recent attack the same result was attained—not, however, until the patient had taken gr. xvj. of the hydrochlorate of morphia, at the rate of gr. ij. every five or six hours.

Delirium had set in on Friday, September 17, and continued through Saturday and Sunday, but tolerably sound sleep having been produced by the morphia on Sunday night, he woke up on the Monday morning calm and free from delusions, although in a state of extreme exhaustion. He had eaten nothing for more than a week, and during some days the stomach had rejected all the various fluids he had poured into it. But he was now able to take and retain a little food, washed down with brandy-and-water, and subsequently drank a couple of glasses of port wine, after which he slept again tranquilly for several hours. When he awoke in the afternoon he felt so much better that he expressed his determination to get up and go ont, and, setting all remonstrance at defiance, he persisted in dressing, sat half an hour out of doors, and smoked a cigar. He then staggered back to his bed, and very soon relapsed into a worse state of delirium than before, struggling feebly to get out of bed, and muttering rapidly and incoherently throughout Monday night and the whole of Tuesday.

The pulse, hurried and irregular when I first saw him after his return to bed, became on Tuesday fluttering and intermittent, and his hands were incessantly pulling at the bedclothes, convulsively plucking at each other, or catching at some imaginary object in the air. Under the influence of the morphia, still continued every five hours, sleep at times overwhelmed him, but was broken in a few seconds by the convulsive twitches.

At 12 on Tuesday night, about five hours after the last ineffectual dose of morphia, having obtained a supply of the hydrate of chloral from Messrs. Squire, of Oxford-street, I gave him gr. xxx. in sweetened water, which was fortunately retained by the stomach. In less than five minutes he was asleep, and slept heavily for nearly an hour, the muttering and convulsive movements ceasing entirely after half an hour. On waking he was quite composed and rational, drank some brandy-and-water, took gr. xx. more of the hydrate, and again fell into a lethargic sleep, which lasted till 8 on Wednesday morning. From that time his health and strength have steadily improved, and he is now (September 27) far advanced towards convalescence.

Few, I think, will be inclined to dispute that, but for the narcotism so rapidly supervening on the administration of the chloral, my patient was fast sinking into a comatose condition, which must have ended in death.

The same good results might very possibly have attended the subcutaneous injection of chloroform or chloral; but I can conceive that it would often prove a difficult matter to carry it into effect in delirium tremens. In the preceding case it would have been simply impossible.

Dr. Richardson's conclusion is, I doubt not, perfectly correct,

that the hydrate of chloral will not "practically supersede opium and similar narcotising agents now in Medical use." But may it not supply us with a valuable substitute for opium when that has failed, or where other conditions are present which militate against its employment?

I am, &c.

HENRY T. CHAPMAN.

21, Lower Seymour-street, Portman-square, Sept. 27.

P.S.—I have omitted to mention that, on the 17th inst., before commencing the morphia, I prescribed gr. xxv. of the bromide of potassium, and repeated the dose five hours afterwards with no appreciable effect.

THE DEVONPORT SURGEONS AND THE CONTAGIOUS DISEASES ACT.

LETTER FROM MR. C. BULTEEL.

[To the Editor of the Medical Times and Gazette.]

SIR,—An article headed "The Contagious Diseases Act at Devonport" appeared in your contemporary the *Lancet's* issue of September 18. It deals principally with three points. 1. The right of the Admiralty to supersede the present honorary staff of the Royal Albert Hospital by the appointment of a paid Medical officer for the Lock wards is supported on the ground of the large sums contributed by the Admiralty to the building and maintenance of the Lock wards. 2. The fallaciousness or otherwise of certain statistics made use of by the Chairman of the Committee of the Royal Albert Hospital is stated to be beside the question as long as any direct imputation on the Professional character of the four Surgeons is withdrawn. 3. The fact that gonorrhœa is on the increase in the Devonport district is stated to be communicated on high and independent authority, and this fact is connected with the opinion said to be held by the Surgeons of the above Hospital with regard to the innocuous character of certain vaginal and uterine discharges, thereby implying clearly that the increase of gonorrhœa was probably due to infection from sources regarded by the Surgeons of the Hospital as innocuous.

On seeing the above article I immediately wrote to the editor of the *Lancet*, replying categorically to each of the above three points, never supposing for a moment that a Medical journalist, having made certain statements of his own, would hesitate to insert a direct reply to those statements from a member of the Medical staff of a public institution, the correctness of whose opinion and action the article referred to implies to be questionable. To my surprise, however, in the notices to correspondents in last week's *Lancet* the editor declines to publish my letter, and couches his refusal in terms which are not complimentary to the Surgeons of the Royal Albert Hospital. Under these circumstances, Sir, I have only to throw myself on your mercy and to ask you, as a favour, to allow me through your columns to reply to the article in the *Lancet* alluded to above.

1. First, then, with regard to the right of the Admiralty to supersede the present honorary staff of the Hospital, I reply that the management of the entire Hospital, both civil and Lock, including the appointment of Medical officers, is vested solely in the Governors and Committee of the Hospital, the Admiralty having the right of inspecting the Lock wards from time to time to see that their management is satisfactorily conducted. With regard to the Medical staff the present Surgeons are elected for life, and as long as the civil and Lock wards are combined, they can only be removed from the charge of the Lock wards by their own voluntary resignation.

What cannot be demanded as a right may, however, be granted of course as a concession, and the four Surgeons (who have "assumed too dictatorial a tone" to please the editor of the *Lancet*) have already intimated their willingness to resign the charge of the Lock wards when a satisfactory arrangement with regard to their future management is arrived at.

2. With regard to the fallaciousness of the statistics referred to above, I reply that this cannot be beside the question, inasmuch as these fallacious statistics themselves, or rather deductions drawn from them, constitute a direct imputation on the Professional character of the four Surgeons.

3. With regard to the increase of gonorrhœa in the Devonport district, I have acknowledged the fact in my letter which has been refused publication; but I have pointed out that this increase has only taken place since midsummer, and therefore since the returns appended to the letter from the Surgeons of the Royal Albert Hospital to the Lords of the Admiralty, which dealt only with complete quarters of the year. It is only since January 1, 1869, that the returns for gonorrhœa have been separated from those for "primary sores" and "other venereal diseases," and the figures, as far as gonorrhœa is concerned, are as follows:—

Annual ratio per cent. of whole strength of Soldiers, Marines, and Seamen who contracted Gonorrhœa in Devonport District.

Quarter ending March 31 . . .	4·572
,, June 30 . . .	4·548
Eleven weeks ending Sept. 11 . .	6·988

The article in the *Lancet* of September 18 implies that this increase may be due to infection from cases considered by the Surgeons of the Hospital innocuous. I reply that no change of opinion or action has taken place in this respect in the above three quarters, and therefore the increase cannot be thus accounted for. But more than this, if the Surgeons are sending out cases from the Lock wards not free from contagious disease, the Visiting-Surgeon's returns ought to show an increase in the percentage of women found diseased on his examination. The fact, however, is the reverse; for while in the first six months of this year about 23 per cent. of cases examined by him were found diseased, during the last eleven weeks only 14·5 per cent. were found diseased. In other words, while gonorrhœa has been increasing, fewer women have been found diseased—a pretty clear proof that the increase of gonorrhœa was not likely to be due to infection from cases discharged from the Hospital as innocuous.

With regard to these cases of vaginal and uterine discharge, Mr. James Lane's opinion, expressed in a letter just published, is worthy of remark: he doubts whether it is worth the time and money to admit them to Hospital at all. With regard to many of the milder cases, the Surgeons of the Royal Albert Hospital hold the same opinion, although, at naval and military stations, it will always be important to remove all probable sources of gonorrhœal contagion. But how, then, is the increase of gonorrhœa explained? I believe it to be due to the increase of clandestine prostitution, many women having left their more public haunts and betaken themselves to private lodgings—a fact referred to by Mr. Sloggett in his evidence before the select committee of the House of Commons. Many of these cases are not yet under the effective surveillance of the police, their staff of five being, in fact, quite inadequate to the wants of the district. Another source of infection consists of the cases of women discharged from Hospital as incurable or pregnant. They are very few in number, but must inevitably be doing an immense amount of mischief. The Contagious Diseases Act distinctly provides for their prosecution; but, as far as I can ascertain, this has not been carried out in a single instance, these women being allowed to remain at large.

Apart from these causes it is curious to note that a similar rise in euthetic disease took place in the corresponding quarter of last year, and, by reference to a return contained in the appendix to the Report of the Select Committee of the House of Commons, it will be seen that this increase was felt not only at Devonport, but also at Portsmouth, Chatham, Sheerness, Woolwich, and Aldershot.

I wish now to bring under the notice of the Profession a fact which, in my opinion, deserves public scrutiny, and which will doubtless commend itself to the attention of the naval and military authorities—namely, the largely disproportionate amount of disease in the army and marines as compared with the seamen of the Royal Navy in the Devonport district. The following figures are carefully calculated from returns furnished by the authorities to the committee of the Royal Albert Hospital.

Return for Twelve Months ending June 30, 1869.

	Total No. diseased.	No. who contracted disease in Devonport district.	Average strength.	Annual percentage of all cases.	Do. of cases contracted in Devonport district.
Army	. 563	440	2432	22·742	18·606
Marines	. 294	223	1502	20·416	14·961
Navy	. 560	361	6855	8·025	5·187

Return for Twelve Weeks ending September 18, 1869.

Army	. 136	123	2226	24·436	23·896
Marines	. 104	77	1603	25·548	19·212
Navy	. 121	84	7100	6·816	4·732

From these returns it will be seen that not only is the disproportion alluded to above immense, but that during the last few weeks, while there has been a considerable increase of disease in the army and marines, the figures relating to the navy, though showing an increase over the previous three months, are still below the average of the previous twelve months. It is probable that the disproportion alluded to is partly owing to two causes—first, that, living on board ship,

the seamen have not so free an access to sources of infection; second, that the boys of the fleet are perhaps included in the returns of total strength. But these causes cannot be sufficient to explain so large a disproportion as one to four, which has been reached in the last twelve weeks. One fact, however, appears certain, that whereas in February, 1864, Sir Morton Peto stated in the House of Commons that on the evidence of the Deputy Inspector-General of Hospitals 44 per cent. per annum of the British navy suffered from enthetic disease, the number of seamen so suffering in the Devonport district during the last twelve months was only 8 per cent., and that of these only 5·1 per cent. contracted disease within the district. The result is most satisfactory as far as the navy is concerned, but with regard to the army and marines it is quite clear that much remains to be accomplished.

Thanking you for your courtesy in giving me space denied me by your contemporary, I am, &c.

CHRISTOPHER BULTEEL, F.R.C.S.,
Surgeon to the Royal Albert Hospital, Devonport.

Stonehouse, Plymouth, September 28.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, September 23, 1869:—

Andrews, Arthur, Colney Hatch.
Harris, Andrew, Manchester.
McGill, Arthur Fergusson, King's College Hospital.
Palmer, William James, Great Yarmouth.
Sherratt, James Swindells, Granby-street, N.W.
Wilke, Oscar Adolph Gotthilf, Winchester-street, Pimlico.

The following gentlemen, also, on the same day, passed their First Professional Examination:—

Bailey, Henry Bennett, Guy's Hospital.
Clarke, Frederick Howard, Guy's Hospital.
Deeping George Davidson, Guy's Hospital.
Thornton, Philip, London Hospital.

At the Preliminary Examination in Arts, held on September 24 and 25, 114 candidates presented themselves, of whom 41 were rejected, and the following 73 passed, and received Certificates of proficiency in General Education. In the First Class in order of merit:—

James Hewett Paley, Caleb William Bowles, and William Edward Tofts; James E. H. Mackinlay and William Hugh Beresford; Varley George Fay and M. A. Messiter; George Hawson Keyworth; Thomas Buckle.

In the Second Class, in alphabetical order:—

Alderton, Thomas Gunton
Allen, John Edward
Allen, Sidney
Alsop, Thomas O. F.
Andrews, Samuel
Arrowsmith, G. P.
Baker, Benjamin R.
Baker, George William
Bevan, Adolphus
Boulting, William
Bradford, Peter
Bray, Edmond Selwyn
Brayn, Richard
Burton, John R.
Caswell, George William
Champneys, Henry L.
Dalton, Charles B.
Don, Arthur G.
Ellis, Herbert M.
Farfan, Joseph V.
Fay, Francis M.
Fenton, George F.
Fry, John F.
Godfrey, Benjamin G.
Gresham, Frederick C.
Hayward, W. T.
Helby, Alfred J. H.
Hutchinson, Walter
Joynes, F. J.
Kavanaugh, E. R.
Kelly, Robert V.
Kesteven, Leighton
Kitchen, Charles F. H.
Lang, William
Lautour, Harry A. De
Lilley, George Herbert
Maclean, Allan
Midwinter, E. J. H.
Ogle, John Reynold
Oldroyd, J. H.
Philps, Vincent
Pollard, George Edward
Pook, William John
Scott, Alexander T.
Scott, W. E.
Sellers, John William
Simpson, Walter S.
Smith, Gilbert T.
Smith, Sydney Lloyd
Stelfox, J. B.
Stericker, William
Stewart, William R. H.
Strickland, A. W.
Sutcliffe, Eli C.
Talbot, Russell M.
Treves, Frederic
Upton, Alfred
Venn, Albert John
Verdon, Walter
Verrall, Thomas Jenner
Webb, Charles Lewis
Wherry, George Edward
Whitehead, John William
Williams, Thos. Edward Henry

NAVAL AND MILITARY APPOINTMENTS.

ADMIRALTY.—The following appointments have been made:—George Kell, Assistant-Surgeon, to the *Duke of Wellington*; and A. Scott, Assistant-Surgeon, to the *Impregnable* for service in the *Squirrel*.

WAR OFFICE.—The following appointments have been made:—Medical Department: Assistant-Surgeon William Graves, from Royal Artillery, to be Staff Assistant-Surgeon, *vice* John Norman Davis, placed on half-pay; Colour-Sergeant William Amphlett Moss, Army Hospital Corps, to be Apothecary to the Forces, *vice* William James Barber, placed on half-pay.

ROYAL HORSE GUARDS.—Assistant-Surgeon John A. Bloxam has been permitted to resign his commission.

BENGAL ARMY.—Medical Officers to be Surgeons-Major: Surgeons Frederick Freeman Allen; Arthur James Payne, M.D. To be Surgeons: Assistant-Surgeons John Charles Morice; Thomas Edmonston Charles, M.D.; William Roche Rice, M.D.; Richard Theophilus Abbott, M.D.; Henry Cayley; Alexander Vans Best, M.D.; James Champion Penny: Archibald Hamilton Hilson, M.D.; William Caldwell Smith, M.D.; Charles Edwin Raddock.

MADRAS STAFF CORPS.—Medical Officers to be Surgeons-Major: Surgeons James Donaldson, M.D.; and Charles James Rogers. To be Surgeons: Assistant-Surgeons James Ross; Samuel Thomas Heard, M.D.; William Arnold Smith, M.D.; William Frederick de Tabeck; George Edward Whitton, M.B., B.A.; and Thomas Beaumont M.D.

BIRTHS.

COLLET.—On September 21, at Grafton-road, Worthing, the wife of A. H. Collet, B.A., M.R.C.S., of a daughter.

WEBER.—On September 24, at 10, Grosvenor-street, W., the wife of Hermann Weber, M.D., of a daughter.

MARRIAGES.

BARTLEY—BAYNES.—On September 21, at the parish church, Trory, county Fermanagh, Ireland, Dr. A. G. Bartley, Royal Artillery, to Elizabeth, eldest daughter of John Baynes, Esq., Savile Mount, Halifax, Yorks.

BURY—GORDON.—On September 22, at the parish church, Heworth, Durham, Henry Charles Bury, M.R.C.S. Eng., of Whetstone, Middlesex, to Fanny Hesleton, second daughter of James Gordon, Esq., of High Heworth House, Heworth, Durham.

EATON—WYLES.—On September 21, at Colston Bassett, William Eaton, M.D., of The Cottage, Grantham, to Eliza, relict of the late Joseph Wyles, Esq., of Storcroft House, Retford.

SATCHWELL—CARTER.—On September 23, at Edgbaston Parish Church, William Carratt Satchwell, M.R.C.S., of Tunbridge Wells, Kent, to Emily, youngest daughter of the late George Carter, Esq., of Edgbaston.

TURNBULL—MAXWELL.—On September 22, at St. Bride's Church, Liverpool, James Muter Turnbull, M.D., 86, Rodney-street, Liverpool, to Margaret, eldest daughter of the late Thomas Maxwell, Esq., of Auchenfranco, Kircudbrightshire.

WEBSTER—STUCHBURY.—On June 24, at St. Paul's Church, Ipswich, Queensland, Marshall Hall Webster, M.R.C.S.E., sixth son of George Webster, M.D., F.R.G.S., of Dulwich, London, to Eliza Jane, youngest daughter of the late George T. Stuchbury, Esq., of London.

DEATHS.

BLACK, J. R. HAMMERSLEY, Esq., M.D., late of Summer-place, Brompton, and formerly of Philadelphia, U.S., at the residence of his son-in-law, Thos. A. Raynes, Perry-hill, Sydenham, on September 27, aged 73.

COLBORNE, WILLIAM HENRY, M.D., at Chippenham, Wilts, on Sept. 27, aged 47.

COLLINS, HENRIETTA JANE HEAVEN, wife of Charles Howell Collins, M.R.C.S. Eng., and last surviving child of the late Rear-Admiral Grosett, of Clifton, at the Beeches, Chew Magna, Somerset, on September 16, aged 44.

FFOLLIOTT, JOHN, L.K. and Q.C.P. and R.C.S. Ireland, late Civil Surgeon Hyderabad, and Superintendent of Vaccination in Scinde, at Aden, on June 24.

GEEBE, R., Esq., Surgeon, at Edenbridge, Kent, on September 23, much regretted.

HEWITT, FREDERICK HUGHES, M.D., of Chapel-street, Belgrave-square, eldest son of Frederick Hewitt, Esq., of Clapham, at his father's house, on September 28, in the 48th year of his age.

RANSFORD, JAMES INGLIS, M.R.C.S. Eng., youngest son of Dr. Ransford, Sydenham, and Old Broad-street, London, lost with the *Carnatic* in the Red Sea, on September 13.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

BRISTOL DISPENSARY.—Resident Surgeon; must have both Medical and Surgical qualifications. Applications and testimonials to Mr. Whereat, Secretary, Corn-street, Bristol, on or before 2nd inst. Election on the 4th inst.

CHICHESTER INFIRMARY.—House-Surgeon. Candidates are required to be articled pupils of qualified Medical Practitioners. Applications and testimonials to E. Barton, House-Surgeon. The duties will commence early in October.

GENERAL INFIRMARY, LEEDS.—Resident Medical Officer; must be M.R.C.S.E. Applications and testimonials to the Resident Medical Officer on or before October 4, on which day candidates must attend personally.

HORNCASTLE UNION, LINCOLNSHIRE.—Medical Officer for the Tetford District. Candidates must be legally qualified and be registered. Applications and testimonials to Henry Lenton, Esq., Clerk, Horncastle, on or before the 5th inst. Election the same day.

HULL GENERAL INFIRMARY.—Resident House-Surgeon; must be M.R.C.S., and unmarried. Applications and testimonials to Henry Gibson, Esq., on or before October 18.

KIDDERMINSTER INFIRMARY.—House-Surgeon and Secretary; must have a Surgical qualification and be registered, and unmarried. Applications and testimonials to the Secretary on or before the 12th inst.

ROYAL ISLE OF WIGHT INFIRMARY.—House-Surgeon. Applications and testimonials to the Secretary on or before October 5. The duties will commence after November 3.

ROYAL SURREY COUNTY HOSPITAL.—House-Surgeon; must have both Medical and Surgical qualifications. Applications and testimonials to the Assistant-Secretary, Guildford, on or before October 5. Duties to commence on October 20.

Swansea New Hospital.—House-Surgeon; must be legally qualified. Applications and testimonials to the Secretary, 23, Gower-street, Swansea, on or before November 24. Election December 1.

Tiverton Union.—Medical Officer for the Thorverton District. Candidates must be qualified in accordance with the regulations of the Poor-law Board. Applications and testimonials to Mr. C. M. Hole, Tiverton, on, or before October 11. Election on the 12th.

Wigan Union.—Medical Officer and Public Vaccinator; must be registered, and have both Medical and Surgical qualifications. Applications and testimonials to Henry Ackerley, Esq., Wigan, on or before the 21st inst. The duties will commence on December 25.

Worksop Dispensary.—House-Surgeon; must have both Medical and Surgical qualifications, and be unmarried. Applications and testimonials to the Committee, Dispensary, Worksop, Nottinghamshire. The duties will commence on November 1.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Holbeach Union.—The Long Sutton District is vacant; area 10,014; population 4085; salary £37 10s. per annum. Also the Central Wingland District; area 2900; population 100; salary £5 per annum.

Reading Union.—Mr. H. H. Muggeridge has resigned the St. Giles District; area 2640; population 10,200; salary £118 per annum.

APPOINTMENTS.

Chesterton Union.—Henry Ryley, L.R.C.P., L.S.A., to the Third District.

Durham Union.—Joseph W. Blandford, M.R.C.S.E., L.R.C.P. Edin., to the Southern District.

Melksham Union.—George J. Perry, M.R.C.S.E., L.S.A., to the Fourth District.

Morpeth Union.—Alexander Pole, M.D. St. And., M.R.C.S.E., to the Morpeth District.

New Forest Union.—George R. Nunn, M.R.C.S.E., L.S.A., L.R.C.P. Edin., to the Second District and the Workhouse.

Royal College of Surgeons.—The Library of this Institution was reopened on Friday last, and the Museum will be reopened on Monday next. During the recess great alterations have been made in the upper gallery for the reception of the beautiful preparations of Professor Erasmus Wilson, presented to the Museum by that gentleman, who, it is stated, will also bear the expense of these alterations.

St. Thomas's Hospital.—Prizes and Appointments for the Past Session.—*Third Year's Students:* H. W. Saunders, London, College Prize £30 and Hon. Certificate; L. M. Thomas, Camberwell, do. £20 and Hon. Certificate; M. F. Simon, Blackheath, do. £10 and Hon. Certificate. *Second Year's Students:* Henry Williams, Longley, near Gloucester, College Prize £10. *First Year's Students:* B. Addy, West Deeping, Lincolnshire, College Prize £30 and Hon. Certificate; H. M. Maybury, Frimley, Surrey, do. £20 and Hon. Certificate.

Medical Society of London.—The first meeting for the session 1869-70 will be held on Monday, the 18th, at 8 p.m., when a paper will be read by Dr. Andrew Clark on "the Part which Pleurisy plays in the production of Phthisis." The Lettsomian Lectures will be given by Dr. Tilbury Fox; the subject, "Pathology and Treatment of Eczema, and incidentally the influence of Constitutional Conditions on Skin Diseases"—Lecture 1. Criticism of Modern Opinions on the subject; 2. The Pathology of Eczema; 3. The Therapeutics of Eczema. The Fothergillian Gold Medal for March, 1870: The most original essay on any subject in Therapeutics. For March, 1871: On some subjects in Obstetrics (including the Diseases peculiar to Women).

Railroad Injury and Injury by Machinery.—Dr. John H. Pickard, of Philadelphia, has published two sheets of letter-press, with illustrations on wood, entitled "Rules for the Course to be followed by the Bystanders (in case of either of the above injuries) when Surgical Assistance cannot be at once obtained." He divides his rules into those relating to (1) shock, (2) loss of blood, (3) to transport a wounded person comfortably. The directions under the above heads are plain, simple, and easy to be followed. We think a reprint of Dr. Pickard's sheets might be advantageously made in this country, and they should be posted at every railway station in the kingdom.

New Inspector of Prisons.—Dr. Briscoe has been appointed Inspector of Prisons in the room of Mr. Perry, resigned. Mr. Perry was appointed by Sir James Graham, on the recommendation, we believe, of the late Sir B. Brodie, who was at the time, or shortly before, President of the Royal Medical and Chirurgical Society. Mr. Perry was secretary. We have reason to believe that it was the admirable manner in which he fulfilled the duties of this office that induced Sir Benjamin to use his influence with Sir J. Graham to obtain the appointment for Mr. Perry, who retires from his post of inspector, after many years' service, with the esteem of all who know him.

Hydrophobia in Camberwell.—At an inquest lately held in Camberwell by Mr. Carter, he said, "This is the third inquest I have held on persons who died after having been bitten by the same dog."

The Queen's Hospital and Mr. Muntz.—Mr. G. F. Muntz, of Umberslade Hall, has just made the liberal donation of £500 towards the Working Men's Fund, now being raised for the enlargement of the Queen's Hospital, Birmingham. In a letter to Dr. Fleming, Mr. Muntz thus explains the motive of his donation:—"Such a movement has appeared to me not only a means of increasing the funds of the institution, but calculated to accomplish a greater result in fostering a feeling of independence and 'self-help' in the minds of many who receive benefit from the Hospital, such as will entirely change the relations which have existed." Mr. Muntz's munificence offers a striking contrast to his logic. All honour to him for his splendid donation; but how, we may ask, can it assist in "fostering a feeling of independence and 'self-help'" in the working classes who receive benefits at the Hospital?

The Health of Salford.—Dr. Syson, the Medical Officer of Health for Salford, in his report of the death-rate for the last six weeks, attributes the great mortality to—1. The defective privy accommodation. 2. The imperfect system of trapping at present in vogue in the houses. 3. General sanitary defects. 4. Improper and inefficient treatment of the sick. Dr. Syson enters at some length into these causes and their removal. In respect to the fourth he says, "I explain this excessive diarrhœa in this manner. At least 25 per cent. of the children who die are attended and certified for by druggists. Without at all reflecting on these gentlemen, you will readily understand how diarrhœa becomes a favourite death-term among them. Diarrhœa is frequently only a symptom of other diseases; it is a prominent one, and so by medically uneducated persons is often treated as the disease itself.' We apprehend that this great evil is general throughout the country. Certainly it prevails to an alarming extent in London and all the great towns. Further on, Dr. Syson remarks:—"A systematic Medical attendance is the only thing I can suggest. I cannot advise as to the best means of carrying this out; though I think it should be done in connexion with our Hospital and dispensary system. I am making inquiries of and taking counsel with my Medical brethren, and will make known to you the result." If he can solve this problem, Dr. Syson will have answered one of the most difficult questions of the present day.

Mr. Joseph Swan.—This estimable gentleman and distinguished anatomist, whose long illness caused so much anxiety to his friends, has happily recovered, and his first act in doing so has been to resign his seat as a life member in the Council of the Royal College of Surgeons. The only life member now remaining is Mr. John Flint South. Mr. Swan was admitted a Member of the College as long ago as October 1, 1813, a Fellow on December 11, 1843, and a member of the Council in 1831. Mr. Swan has been a valuable contributor to the advancement of anatomical science; in 1822 the Collegiate triennial prize was awarded to him by the Council of the College of Surgeons for his essay "A Minute Dissection of the Nerves of the Medulla Spinalis from their origin to their terminations, and to their conjunctions with the cerebral and visceral nerves." He also carried off the next triennial prize in 1825 for a minute dissection of the cerebral nerves from their origin to their termination, and to their conjunction with the nerves of the medulla spinalis and viscera. Mr. Swan also carried off two Jacksonian Prizes, one in 1817, "On Deafness and the Injuries and Diseases of the Organ of Hearing," and another in 1819, "On the Treatment of Morbid Local Affections of the Nerves." Mr. Swan was one of the few Members of the College to whom the honorary gold medal of that institution has been presented; he obtained it in 1825. We join with his other friends in hoping that his valuable life may be prolonged for years.

Working Men's Fund, Queen's Hospital, Birmingham.—Up to August 3 last, the first six months of its existence, this fund had reached to £864 3s. 8½d.

Mr. Barber, an army Surgeon, staying at Ilfracombe for his health, suddenly committed suicide at the hotel on Thursday, by swallowing the contents of a phial, supposed to be prussic acid. In his pocket was found a letter from the Adjutant-General, to the effect that as he still seemed to be in ill-health, he must submit himself to a board of Medical men for examination; and if then it was found that he was not sufficiently recovered to join his regiment, he must retire on half-pay. This is supposed to have weighed on his mind.

Dr. Hall, the Arctic explorer, has arrived at New Bedford from Repulse Bay, after an absence of five years. He had discovered the skeletons of several of Sir John Franklin's party at King William's Land, and brings numerous relics of the Franklin expedition; but he has found no letters or diary.

The New Homœopathic School.—The *Medical and Surgical Reporter* states that at a discussion on the employment of bromide of potassium in epilepsy, which took place at the Cleveland Homœopathic Medical Society, Dr. Beckwith said it was a pretty sure remedy given in *sensible* doses, and related several cases in proof. Dr. Wilson also reported that late clinical reports had shown that in bad cases it was safe to give as high as sixty grains three times daily. The same journal states that the reports of the London Homœopathic Hospitals show a decided partiality for similar "massive" doses.—*Boston Medical and Surgical Journal*, August 12.

Fatal Tetanus after Extraction of Teeth.—Dr. Steele, of Dayton, Ohio, relates the case of a robust healthy youth of 19 who, on March 1, had ten upper teeth removed (under nitrous oxide) for the purpose of having a full artificial set inserted. He bore the operation well, and resumed his farming operations. On the 7th he first perceived twitchings of the lower eyelids, which increased to the 14th, by which time also spastic contraction of the masseters and retraction of the angles of the mouth had set in. He got a little sleep by aid of morphia, and some relief from chloroform; but still the other muscles of the body became gradually involved, especially the extensors. There was at no time emprosthotonos or opisthotonos, but the body was powerfully extended to a straight position. He was not able during the last two days to remain in bed, and only occasionally to sit in a chair. During the remaining period he was held on his feet, and died almost in a standing position on March 19.—*Boston Med. and Surg. Journ.*, August 5.

NEW BOOKS, WITH SHORT CRITIQUES.

Animal Vaccination; an Inquiry into the present Unsatisfactory Condition of Vaccine Lymph, and a Remedy proposed. By Henry Blanc, M.D., etc. London: John Churchill and Sons.

*** This is a reprint of an able paper read by the author at the Exeter meeting of the British Association for the Advancement of Science. His views are familiar to our readers, and it is scarcely necessary to repeat them here. The author has treated the subject throughout with perfect candour, consistence, and fairness, and no one can rise from a perusal of this interesting *brochure* without agreeing with its last two sentences. "Time has given its verdict. Vaccine lymph by long human transmission has lost much of its essential qualities. We must improve, not abandon, compulsory vaccination, complete Jenner's great work, and restore to his immortal discovery all its former usefulness, glory, and prestige."

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

R. A.—Next week.

A. B.—The fee is two guineas for making the post-mortem examination and attending at the inquest to give evidence.

Fuer.—In 1865.

R. E. Parkstone, Poole.—Inquiry shall be made, and you shall learn the result.

Scotus can obtain admission to the Society on the recommendation of any one of the Fellows.

Theta will find a full definition of "Professional education" in the pages of the Students' Number.

Yorkshire.—Lane's School merged, as it were, into St. Mary's School. There is now no private Medical School in London.

Strange to London.—Any one of the teachers at the school to which he enters will give him the necessary information.

Studens.—1. Liston's "Operative Surgery" has not gone into a second edition. 2. Inquire of the publisher.

An Aberdeen Student.—The question as to the appointment of the same examiners over and over again, as well as whether local men are the best or not, shall receive full consideration.

Collegial Trust Funds.—The following are the funds of which the Council of the Royal College of Surgeons are trustees:—Sir Charles Blicke's bequest to the Library, £300; Sir Gilbert Blane's Naval Medals, £300; Jacksonian Fund, £333 6s. 8d.; Arris's bequest, £510; Gale's annuity, £689 16s. 5d.; Clift's annuity, £1518 6s. 6d.; Hunterian Fund, £16844s. 4d.; Erasmus Wilson Fund, £5000: total, £10,335 13s. 11d.

Chemicus.—Dr. Wollaston was the first who observed the phenomena.

A Member, Preston.—Monk's name was removed from the list on his conviction.

"*College Calendar*" *and H. C.*—Both statements were incorrect, owing to the manner in which the items and amounts are set out. The sum expended by the Council of the College of Surgeons during the past year on lectures, orations, and prizes amounted to £168 15s. 2d.

A Metropolitan Student.—The registration of those students pursuing their studies in London commenced at the College of Surgeons and Apothecaries' Hall on the 1st instant, and will terminate on the 15th.

Medical College, Epsom.—The Arts Examination at the Society of Apothecaries has terminated. You cannot, therefore, undergo any examination until December next, when there will be one at the College of Surgeons; on passing this you could at once commence your Professional studies, and thus only lose half a session. Write to the Secretary of the College.

Dr. Macpherson, R.N.—You will find the leading articles to which you allude, "Admiralty Injustice to Naval Surgeons," in the *Medical Times*, vol. xix. pp. 237, 256, and 309, and "On Relative Rank and Pay of the Army and Navy Officers," in the same volume, p. 291.

Mr. Williams and a Victim.—We hardly think it necessary to notice that Henry Timson, sentenced to ten years' transportation, and Albert Bell, who was fined at the Mansion House, are not qualified members of our Profession. Neither of these men appears in the Medical Register, nor are their names to be found in the London and Provincial Medical Directories, or in those of Scotland or Ireland. A "victim" can resist payment.

Parens.—We do not recommend that a student, during his Hospital attendance and lectures, should act as an assistant. He should devote his whole time to his studies; but, in some cases, there is a *necessity* for such an arrangement. Many Surgeons in general practice in London take assistants, who are allowed "time to attend lectures, etc." If a situation is taken with such an agreement, it should be very near to the Hospital or school.

Nemo.—The valuation of the Metropolitan Unions, according to Mr. Purdy, is £16,818,753, while that for the whole of Ireland is £13,045,755. In 1861 the population of the Metropolitan Unions was 2,802,000; in Ireland in 1867 it was 5,521,354. In February, 1868, the total pauperism of the Metropolitan Unions was 157,219, while in the same week in Ireland the total number was 81,484. In 1867 the total expenditure in poor relief in the London Unions was £1,316,089, while in Ireland, including relief under the Medical Charities or Dispensaries Act, the total was £794,894. It thus appears that the expenditure in Ireland under the Poor-law is considerably less than two-thirds of that for the Metropolitan Unions of England.

"*F.R.C.S.*"—It will be recollected by our readers that her Majesty was pleased to allow the Colonial Society to be distinguished by the title of "*Royal*;" the Fellows of the Society, therefore, were allowed to add to their names the title at the head of this notice. It was at once seen by the Council of the Royal College of Surgeons that this was an invasion on the privileges of its Fellows, and with a promptitude which reflects great credit on that body, the attention of the Government was called to the circumstance, and it is gratifying now to add that Earl Granville proposes to recommend that the Society shall henceforth be designated "the Royal Colonial and Indian Society."

Supply of Subjects at Liverpool School of Medicine.—A Liverpool Physician writes:—"The supply of subjects for the Medical School is derived from our very large poorhouse, in which there are always many friendless men and women dying. There is, therefore, never any lack of bodies for dissection. From my own experience in London and Dublin I should say that the facilities for the practical study of anatomy are greater here than in either of those cities—certainly far greater than they were during my student days. The anatomical department of the Liverpool School of Medicine has sustained a very serious loss in the removal to London of its senior demonstrator, Dr. F. T. Roberts, who has been appointed to succeed the late Mr. Stanton Cluff at University College."

The Social Science Congress and Health Topics.—M. A. B. writes:—"In addition to the subjects named by you in your last number as set down for discussion at Bristol, and possessing special interest for your readers, allow me to mention that the question of "infant mortality," among others, will be considered during the Ladies' Conference, in connexion with the Social Science Congress. Other kindred subjects—such as the better training of nurses, and the employment of a superior class of women as superintendents in private nurseries—will have attention. It has been suggested that a committee of ladies might be formed, as a result of the Conference, in order to inquire further into the subject, and for the purpose of carrying out some measures by which the present excessive rate of infant mortality might be, in a great degree, checked."

Constitution Bread.—Receipt by the late Dr. Kingsley, of Bristol.

Take of wholemeal	3 lbs.
,, oatmeal	8 ozs.
,, bicarbonate of soda, made into very fine powder(a)	½ oz.
,, salt	¼ oz.

Mix all the ingredients extremely well, particularly the soda, and make them into a soft dough, with about a quart of good sour buttermilk. It

(a) Unrefined soda that is sold at the grocers' at 3½d. per lb. answers better than the bicarbonate. The weights to be used are the avoirdupois.

must not be kneaded much, but put down at once in a baker ready heated (hotter than for barm bread) to receive it, and baked for an hour and a quarter.

Hydrocele Treated by Blisterino.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Lately a healthy-looking child, about 4 years old, came under my care for hydrocele. I treated the case successfully by the application of blisters to the scrotum. Complete absorption of the fluid took place in a week. I am, &c. William Campbell, L.R.C.S. Edin.

A New Mode of Treating Old Offenders.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The following method of treatment, adopted in the case of a "quack," who had obtained £4 10s. from a young man for five bottles of physic, might be tried in similar instances with like success. The young patient, whose marriage was drawing near, was anxious that the result of the union should be *comme il faut* in all particulars, and therefore sent his water to the expert, when the old, old tale was told, and the ruin of pocket, body, and mind began. Feeling worse, he consulted me, and was inclined at first to put but little faith in my advice—to marry and multiply. He still believed in his late adviser, but "could do so no longer if I could make him refund, as no honest man would submit to such a thing." The victim thereupon sent a note by my own servant, demanding the money to be returned by bearer, and it forthwith appeared. I need scarcely say that my patient left the house a happier and a wiser man.

I am, &c. Charles Orton.

Newcastle-under-Lyme, September 29.

COMMUNICATIONS have been received from—

Dr. Wathen; Dr. Wadham; Mr. W. Campbell; Dr. Loney; Dr. Henri Albanese; Mr. Gasgoin; A Ten Years' Subscriber; Dr. Tidy; Dr. W. Kingsley; Dr. A. Davidson; Dr. Liveing; Mrs. Baines; Mr. W. J. Marsh; Dr. John H. Packard; Mr. Christopher Johnson; Mr. R. Elgie; Dr. John Burton; Mr. H. Burford; Dr. Greenhow; Dr. Hilton Fagge; Dr. Cornelius B. Fox; Dr. Syson; Mr. J. Walker; Mr. Bultrel; Mr. Spencer Wells; Inspector-General Gordon; Dr. W. H. Stone; Dr. George Johnson; Mr. W. Little; Mr. J. A. Ross; Mr. J. Chatto; Dr. J. Hughlings-Jackson; Dr. B. W. Richardson; Mr. H. D. Chapman; Dr. Symonds; Dr. C. Orton; A Constant Reader; Dr. Murray.

BOOKS RECEIVED—

Blanc on Compulsory Vaccination—Du Traitement des Cancers, par le Docteur Henri Albanese—Medical Temperance Journal, No. 1—Cotton on Phthisis, fourth Edition—Miller's Elements of Chemistry, Part 3, Organic Chemistry—Holmes' System of Surgery, second edition, vol. i.—Fifth Annual Report of the Peking Hospital—Mrs. Carleton's Inquiry into the Nature of the Choleraic Influence, 2 parts—Bigelow's Mechanism of Dislocation and Fracture of the Hip—Dr. Beale on Protoplasm; or, Life, Force, and Matter—Heath's Practical Anatomy—Holden's Human Osteology—Knapp's Archives of Ophthalmology and Otology—British Journal of Dental Science, No. 157—Sinclair on Myxoma or Hyperplasia of the Villi of the Chorion—American Quarterly Journal of Psychological Science, October—Report of the Royal Albert Asylum for Idiots and Imbeciles of the Northern Counties.

NEWSPAPERS RECEIVED—

Cape Argus—Jersey Independent—Irish Times—Birmingham Daily Post—Anti-Vaccinator—Birmingham Daily Gazette—Medical Press and Circular.

VITAL STATISTICS OF LONDON.

Week ending Saturday, September 25, 1869.

BIRTHS.

Births of Boys, 1144; Girls, 1108; Total, 2252.
Average of 10 corresponding weeks, 1859-68, 1918·5.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	696	666	1362
Average of the ten years 1858-67	597·3	567·8	1165·1
Average corrected to increased population	...	...	1282
Deaths of people above 90	...	...	...

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-cough.	Typhus.	Diarrhœa.	Cholera.
West	463388	...	5	17	...	6	4	11	...
North	618210	2	4	30	1	13	8	25	...
Central	378058	...	1	27	...	2	7	7	...
East	571158	4	3	65	5	18	10	32	...
South	773175	2	9	52	3	10	16	40	...
Total	2803989	8	22	191	9	49	45	115	...

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·738 in.
Mean temperature	56·8
Highest point of thermometer	73·5
Lowest point of thermometer	42·5
Mean dew-point temperature	50·0
General direction of wind	W.S.W.
Whole amount of rain in the week	0·12

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, September 25, 1869, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the year 1869.	Persons to an Acre. (1869.)	Births Registered during the week ending Sept. 25.	Deaths. Corrected Average Weekly Number.	Deaths. Registered during the week ending Sept. 25.	Temperature of Air (Fahr.) Highest during the Week.	Temperature of Air (Fahr.) Lowest during the Week.	Temperature of Air (Fahr.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3170754	40·7	2252	1462	1362	73·5	42·5	56·8	0·12	12
Bristol (City)	169423	36·1	99	76	*67	72·3	42·2	55·8	1·08	109
Birmingham (Boro')	360846	46·1	274	175	158	71·7	45·7	55·7	1·27	128
Liverpool (Boro')	509052	99·7	395	295	274	70·8	48·0	55·2	0·32	32
Manchester (City)	370892	82·7	257	210	*177	72·0	43·0	54·8	0·88	89
Salford (Borough)	119350	23·1	96	60	56	73·4	42·0	54·4	0·81	82
Sheffield (Borough)	239752	10·5	185	126	123	71·0	44·0	55·7	0·33	33
Bradford (Borough)	138522	21·0	117	71	67	69·0	45·8	54·5	0·46	46
Leeds (Borough)	253110	11·7	252	129	137	68·0	45·0	55·7	0·66	67
Hull (Borough)	126682	35·6	91	59	64	69·0	40·0	54·0	0·12	12
Newcstl-on-Tyne, do.	130503	24·5	112	69	61	...	...	...	...	...
Edinburgh (City)	178002	40·2	122	86	65	64·7	44·0	54·1	0·70	71
Glasgow (City)	458937	90·6	323	268	226	62·9	43·6	53·7	1·84	186
Dublin (City, etc.†)	320762	32·9	145	158	145	71·2	39·9	55·7	0·24	24
Total of 14 large Towns	6546587	35·5	4720	3244	2982	73·5	39·9	55·1	0·68	69
Paris (City)	1889842	...	...	...	820 Week ending Sept. 18.	...	...	...	...	...
Vienna (City)	(1863) 560000	...	...	...	...	Week ending Sept. 18. ...	...	...	...	...

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·738 in. The barometrical reading increased from 29·02 in. on Sunday, September 19, to 30·08 in. on Thursday, September 23.

The general direction of the wind was W.S.W.

Note.—The population of Cities and Boroughs in 1869 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous.

* The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

† Inclusive of some suburbs.

APPOINTMENTS FOR THE WEEK.

October 2. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m. King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 1½ p.m.

4. Monday.

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 1½ p.m.; St. Peter's Hospital for Stone, 2½ p.m.

5. Tuesday.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.

6. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.

Obstetrical Society. 7½ p.m.: Council Meeting. 8 p.m.: Dr. W. Martyn, "Case of Triplets." Mr. J. T. Mitchell, "Case of Ruptured Uterus." Dr. V. Saboia, "On the Treatment of Ovarian Disease by the Injection of Iodine."

7. Thursday.

Operations at St. George's, 1 p.m. Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

8. Friday.

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

Clinical Society, 8½ p.m. Dr. W. H. Davy, "On the Hypophosphates of Iron, Quinine, and Strychnia in Nervous Exhaustion." Dr. Clapton, "On the Effects of Copper upon the System." And other Papers.

ORIGINAL LECTURES.

ON

CLINICAL PRACTICE IN THE IN-PATIENT AND OUT-PATIENT DEPARTMENTS;

ITS BEARING ON MEDICAL TEACHING AND ON THE STUDY OF PUBLIC HEALTH.

(AN INTRODUCTORY LECTURE.)

By Professor LEBERT,
Professor of Clinical Medicine at Breslau.

GENTLEMEN,—If, contrary to my usual custom, I open to you to-day the out-patient department by an introductory lecture, I do it for this reason, because I intend to impart to it a new character, in two different aspects.

The one is of a general nature, involving the results of my investigations of the last few years concerning the inestimable value of the observations gained in the out-patient department for Medical statistics, public health, and a survey of the predominant diseases of any town or country.

The other has a more local interest. The number of out-patients has increased to such an extent as to render our finances insufficient. Considering this point, I find we may be justly reproached on this account, that we have not been very economical in prescribing medicines when the funds at our disposal have been larger. Now, it appears to me to be part of the teaching within the out-patient department, which is the pattern for your future practice, that you should learn to prescribe as cheaply as possible, without violating the necessary regard which must be taken of the patients' interests. It is not with paupers only that we are obliged to be economical in our prescriptions, but with the middle classes also, amongst which we often meet with large families having sometimes but a moderate income, with a large number of necessary expenses. Here economy on the part of the Practitioner becomes a duty, and in many cases the use and repetition of his directions depend on the performance of this duty. I have, therefore, considered it necessary to draw up a pharmacopœia for our out-patient department, printed copies of which I place in your hands. It contains, besides some general advice for your guidance in prescribing, in reference to fifty-seven of the most important drugs, their application, and the diseases in which they are generally employed.

The polyclinic, or out-patient department, as used here, is a thorough German institution, and it deserves to be imitated in other countries, the more so since such clinics may be easily made available in large schools as well as in small ones.

To the earnestness and care which are bestowed upon the patients the fact is due, that men and women suffering from all kinds of diseases, and living many miles away from our city, flock to this Institution, eager to gain advice. Every morning those patients come to the Hospital who are able to leave their homes: they are carefully examined, and from them are selected those cases which will form the subjects of clinical lectures. Those not available for teaching purposes are treated in their homes by you, under the supervision of my assistants, and, if necessary, of myself. In order to do that without great loss of time, there is allotted to every one of you a certain district of the town and its suburbs, which forms the field of your practical training. Here you have to work independently; but in serious cases, or in such as are doubtful to you, you can have the opinion of your teachers on which to rely. A better mode of preparation for the practice in which you will be engaged in your future life cannot be imagined; and, besides this, each of the cases treated by you will, at some future time, form a reliable unit for the statistics of epidemic and endemic diseases.

Nearly three thousand patients annually form the material for our observation. The selection from amongst these for your instruction I make in such a manner that nearly all classes of diseases are brought under your notice during every session, and particularly such as are not to be seen in our wards.

Besides the grave and most interesting cases, I endeavour to explain to you also the cases of a less severe character, and, since you have to form a diagnosis and prognosis, and to order any hygienic and therapeutic measures, subject to my correction if necessary, such cases are particularly suitable to complete the model of your future practice, in which, in addition to dangerous cases, you will very often be consulted for diseases of a less serious nature. It appears to me that this kind of instruction guards you against the inclination to diagnose all cases as grave—an error into which young Practitioners, who have been accustomed to see exclusively rare cases, are very liable to fall when they commence practice, until they have several times been disagreably reminded of the Horatian "*parturient montes.*" There are likewise the diseases to which children are liable, which I like to bring under your notice; also different forms of nervous affections, chronic diseases of the skin, and all the forms of syphilis, of which you seldom see any in the wards.

One too often becomes aware of the fact that a strict diagnosis is possible only after a careful examination, by discovering in a patient still walking about with seemingly slight symptoms, acute pneumonia, pleuritis with copious effusion, typhus, or small-pox. At the bed-side in the wards I insist, as you are aware, that you should be thorough in your examination of a patient; but in the out-patient department I often remind you that here is the place to show that a patient may be examined in a comparatively short time, and an opinion quickly formed without neglecting the important points of his disease. On the one hand I detest the superficiality with which I have seen patients disposed of in Hospitals, when large numbers have been seen in too short a time—much better no advice at all than such mock advice—on the other hand, unnecessary prolixity and minuteness is quite different from what we consider profundity.

The practice of the out-patient department introduces you at an early period into the dwellings of the poor; it causes you to become acquainted with more than one dark shade of human life, the influence of which on disease and death is brought scientifically under your notice; and it teaches you to exercise feelings of humanity. Here you will perceive how much may be done, even in nests of epidemic disease, towards its prevention and the eradication of human misery.

The gentlemen who attended the polyclinic last year will remember that I drew their attention to the fact that the epidemic of recurrent fever, which was prevalent at the time, took its rise in a very limited district of our town. I drew at that time a gloomy picture of the misery of the inhabitants of that district. From the history of previous epidemics in our city I showed that they also took their origin from these same districts, that cholera and typhoid have spread thence; and I also pointed out that the cases of recurrent fever and typhus which even at the present time come to our polyclinic and to our wards, proceed from the same locality. How much have we been taught in the out-patient department with reference to measles, scarlet fever, small-pox, hooping-cough, and diphtheritis, and how often have we had the opportunity of interfering with success!

When I began last year to arrange and to analyse my statistical observations for a clinical work on the diseases of the chest, the first subject which engaged my attention—namely, catarrh of the organs of respiration—impressed me with this fact—how much more complete and numerous the statistical materials of the out-patient department were than those of the in-patient wards—whereby I have been taught to what important reflections and comparisons the mutual relations of both these series of observations lead. The following may serve as an example:—Whilst I was Professor of Clinical Medicine at Zürich, the average number of cases of idiopathic catarrh of the organs of respiration in the Hospital amounted to $2\frac{1}{2}$ per cent.; the total number of cases in the Hospital of Breslau is something over 5 per cent.; whilst the number of cases in the out-patient department amounts to 10 per cent. All the three series are founded on correct observations, but only the last one can be relied on as a fair average; this apparent contradiction ceases to exist if one takes into account that at Zürich only severe cases were admitted into the clinical wards, and that the Hospital is for the whole canton, which is of large dimensions, so that mild or even moderately severe cases did not come into the Hospital on account of the great distance, and for a similar reason severe cases were not always capable of being removed. The clinical wards at Breslau give likewise but an imperfect idea, because children do not often seek admission, and adults are treated as out-patients as long as they are able to work. But in the polyclinic all forms of these diseases in all degrees of intensity are treated, and as the patients are of all varieties in age, we here obtain a by far more complete and accurate survey of the subject than by the statistics of the in-patient department.

Here is another proof of my statement. You see before you

a large number of graphic representations of the meteorological condition of Breslau during the year of my observation, each meteorological factor being an item in two tables. The one represents graphically the conditions of each year, the different years being marked by different colours; the other represents the average value of all years of observation. On the latter I have begun to mark the curves of the monthly oscillations in frequency of diseases of the chest, the clinical and polyclinical cases always separately. The same thing is done with the graphic tables of the average value of all factors together, to put all which together in one space forms a problem not easy of solution. Thus we obtain a quick survey of the connexion or non-connexion between the diseases under investigation, and the separate or conjoined factors of the meteorological influences. Since the polyclinic affords at least four times more statistical material than the clinic does, the value of the former becomes therefore evident from this method also.

By-and-by the statistics clinically gathered from the out-patient department will become of great value, since the usual statistics of morbility and mortality of large cities contain innumerable errors, which are further increased by means of incomplete methods of calculation; hence they are too often stamped by the impress of fallaciousness.

You have often had occasion to see how much I have the etiology of disease at heart in Medical teaching. In addition to the social and atmospheric conditions which are favourable to the production of disease in our time, since the immortal works of Pettenkofer became known to us, the influence of the condition of the soil has been shown to be of the utmost importance. By Pettenkofer's method of measuring subsoil water (Grundwasser), a fact, perhaps the most important in recent etiology, has been established by Buhl—namely, that in Munich the mortality from typhoid is in a constant strict relation to the diminution in the subsoil water, and, inversely, that the decrease and minimum mortality in typhoid run parallel with the increase and highest level of the subsoil water.

I have been preparing for a long time a still more extensive examination of our town—viz., a thorough and scientific exploration of the whole "geologia subterranea Vratislaviensis"—a systematic account of the subsoil water observed at fortnightly intervals, combined with an exploration of the quality and thickness of the separate strata, in relation to their porosity, their possible permeability for air and water, with the discovery of the principal points of accumulation of the subsoil water, of the condition of the wells, the physical and chemical nature of their contents, a minute examination of the position of the sewers and dung-heaps and the possible filtration of their contents into the wells. In a town so easily accessible by epidemics as Breslau is, a study of such a nature is the more valuable since it alone enables us to compare the physical conditions with the local propagation of diseases in such a way that we may effectually interfere. In this comparison the polyclinical statistics again become of the highest value.

Our clinic proper (the in-patient department), in opposition to the more practical teaching of the polyclinic, presents to you pure scientific information according to the most recent and approved methods; but it has also, in addition, some reference to the practical branch of Medicine. When I compare our present stand-point with that of the time when I myself was a student, I find that opportunities for learning are now offered to you which thirty or forty years ago were scarcely dreamed of. When, in 1832, after having obtained a proper preparatory knowledge of natural philosophy, I first entered the clinical wards at Berlin, I heard there, in pretentious Latin, besides some really good information, a great deal of subjective speculation and obsolete tradition, and I witnessed a complicated and often unjustifiable mode of treatment—so much so, that a few months sufficed to compel me to turn my back upon methods which appeared to me to be in strict opposition to the principles of true natural philosophy; and I did this in order that I might seek information in the schools which at that time were considered the best—those of Schönlein, Louis, and Chomel. At the present time, however, modern Medicine is so thoroughly animated and imbued with the principles of physiology and natural philosophy, that our methods, although still in great need of improvement, are more closely approaching those of the best philosophers.

In the clinic, besides the old cases, I do not introduce to you more than one or two new patients daily, for this reason—that you have to examine the patient thoroughly, to discuss the disease with me, to form your diagnosis and prognosis, and to decide on the treatment. You have not only to determine and to weigh against each other the value of the different symptoms, but you have to arrange these different scattered links into a systematic whole, which is the mental image of the disease (Krankheitsbild). In doing this, I hate the practice of diagnostic hair-splitting and the prowess which not unfrequently degenerates into Medical buffoonery—a thing obnoxious particularly to students. You have to learn, by means of the phenomena manifested to you, in what state the structure and functions of the different organs are; how, through the co-ordination of these phenomena, the disease takes its rise and runs its course; how every case forms an individual variety; how, for instance, of ten different cases of pneumonia or recurrent fever every one case preserves a physiognomy of its own; in a word, how every case of disease forms a physio-pathological problem presenting itself to us for solution.

Under such circumstances, it is evident that the secretions of the patient must be examined, whenever it seems desirable, microscopically and chemically; that in every case of pyrexia the oscillations of temperature must be measured several times daily; that the prognosis, which is of such vital importance in private practice, must be a subject of separate minute discussion; and, finally, that full justice must be done in our therapeutic measures to hygiene, which is becoming an increasingly important item.

The treatment must be simple, and based on the present state of our knowledge; indications are to be followed which not only have reference to the disease, but also to the quality and physiological action of the drugs. Hence, as is also the case with dietetic measures, a thorough knowledge is required of organic chemistry, particularly with respect to the composition of food and medicines, and their changes within the body.

In cases which terminate fatally, you see me at the post-mortem table making a thorough investigation of all the organs, and afterwards in the pathological laboratory continuing the more minute investigations.

Finally, you are aware how much use is made of pathological experiments to aid in the solution of pathogenetic questions, and particularly so in our laboratory. Let us, therefore, again commence the session with the purpose of contributing our mite towards the progress of our noble science, by minute observations and a faithful record of the facts observed, and I hope that by so doing the session will also become of much use to you.

ORIGINAL COMMUNICATIONS.

ON TREATMENT OF THE PEDICLE AFTER OVARIOTOMY.

By C. F. MAUNDER,

Surgeon to the London Hospital, and to the Ward for Ovariotomy in Queen Adelaide's Dispensary.

How to treat the pedicle after ovariotomy has been performed is one of the vexed questions of the day. The object of the succeeding few remarks is to suggest that too much consideration is given to the pedicle, and, consequently, the result of the operation may be improperly ascribed. It is, perhaps, natural that an important feature in an operation or Surgical manipulation should attract a large share of attention, and yet that such attention be misplaced, the result of the proceeding being, in reality, a mere coincidence rather than as cause and effect. I am led to this conclusion by the fact that while on the one hand a large number of patients submitted to ovariotomy by one Surgeon who treats the pedicle in a certain way, recover, yet, on the other hand, a great number of cases in which the pedicle is dealt with on another plan by a second Surgeon also have a small death-rate. Thus, it follows that one operator attaches great importance to the plan which has succeeded in his hands, and another operator to his peculiar method; the truth being that in all probability the cases would have done well or ill had either method of securing the pedicle been chosen. But, while making this statement, I must not be understood to think too lightly of the pedicle. The chief point to be considered in dealing with the pedicle is the prevention of hæmorrhage, and, in so dealing, to use the means the most simple, provided only it be effectual. The most simple means is that which taxes the power of repairing an injury in the least degree; and if a Surgeon had courage he might resort to *torsion*, retaining or not the cut pedicle at the wound. There is

this objection to torsion, that when the patient rallies from the depressing effect of the operation some vessel or vessels previously unobserved may bleed. A similar objection applies to sealing the end of the pedicle with the hot iron and dropping it back into the pelvis; the eschar may become detached, and fatal hæmorrhage ensue.

I am thus left to choose between securing the pedicle with a ligature and dropping it back into the abdomen, or retaining it at the wound secured by clamp or ligature. In the first instance a foreign body is left in the abdomen, and this contrary to general principles, and possibly a source of fatal irritation; while in the latter case the stump is repaired outside the belly, and probably with the least risk to the patient.

While, then, I advocate, as a rule of practice, keeping the pedicle outside the belly, exceptions will occasionally arise. But, as in every other instance in which an operation is contemplated, our great aim should be to endeavour to discover those signs and symptoms which may lead us to predict a favourable or an unfavourable result. I believe any special way of treating the ovarian pedicle, beyond the object of preventing hæmorrhage, to be a matter of comparatively little moment, and that it will not affect the rate of mortality to a noticeable degree. At present the secret either of success or of death seems to lie in the general condition of the patient.

FUNGUS OF THE DURA MATER.

By LAWSON TAIT.

This term has been used by many authors to include all tumours which pierced the bone and skin, whether truly cancerous or not. Our definitions as to what is malignant and what is not are not very clear; but on good grounds can the true fungus of the dura mater, so well described in Louis' memoir, be included among malignant diseases? Lebert and Virchow have denied its malignancy on the grounds that the tumours are solitary, and do not exhibit any central softening. Better arguments still may be found in the facts that they do not mass together heterogeneous tissues as malignant tumours do, and that many cases are on record where a cure is said to have been effected. Their extreme vascularity is no strong argument for their cancerous nature, when we remember that simple fibrous polypus of the nose gives rise to more violent hæmorrhage than any other known variety of tumour.

Chelius gives what I believe to be the most correct view of the pathology of these tumours when he describes the following varieties:—1. A tumour growing from the dura mater alone. 2. A tumour growing from the pericranium and the dura mater at the same time. 3. A tumour growing from the pericranium alone. 4. A tumour growing from the tissue of the diploe. And 5. A tumour in which two or more of the above conditions are concomitant.

I have some doubts as to the occurrence of the fourth variety, because I have not yet met with the record of a case which answers the description; and, from the view of the origin of these tumours which I propose, it is unlikely.

I have recently given much attention to this interesting disease in connection with a case of the second variety of Chelius, which has recently occurred to me.

George O., aged 58, a political refugee from Strasbourg, was under the care of my friend Dr. Holdsworth for phthisis. On May 7 my attention was drawn to a tumour occupying the right temporal fossa, which he had noticed for the first time eleven weeks before. It had slowly increased, and was then about an inch and a half in diameter, soft and pseudo-fluctuating. It was quite flat and unlike a wen, and he suffered intense pain from it if he attempted to rest upon it. I at once gave the opinion that it was a fungous tumour of the dura mater, and was under the impression that the bone was perforated. On June 16 I took a cast of the tumour. The patient died on the 25th, and I obtained permission to examine the tumour. It occupied the whole right temporal fossa, and lay quite loose under the temporal muscle, to which it was not attached. It was capsulated by the pericranium, and had eroded, but not perforated, the skull. A similar but much smaller tumour was growing from the corresponding surface of the dura mater, and had eroded the inner table of the skull. The substance of the tumour was of soft consistence, reddish yellow in colour, and composed of numerous regularly shaped nucleated cells, with sparse interlacing of fibres. My view of the pathology of this affection is that it is a morbid and probably cancerous increase of the osteal cells of the periostea of the skull; and that in this case, had not the patient died of phthisis, he might have lived till the bone was perforated, when it would have been impossible to differentiate it from a specimen of the first variety of Chelius.

Edinburgh.

HOW SHOULD INVETERATE DRUNKARDS BE TREATED BY THE STATE?

A PAPER READ BEFORE THE SOCIAL SCIENCE CONGRESS AT BRISTOL.

By J. A. SYMONDS, M.D., F.R.C.P., F.R.S.E.,
President of the Health Department.

It is well known to every one here that persons of unsound mind are liable to come under the operation of the law. The enactments respecting them have three objects in view—1st, the safety of their lives, together with the security of their families and of their property; 2ndly, the protection of the public from the possible acts of insane persons; and, 3rdly, the provision of means whereby their mental disorder may have the best chance of cure or diminution—so that the law contemplates protection, repression, and curative treatment. Now, it cannot be denied that a person in a fit of intoxication is in a state of unsound mind; yet, if his fits have definite intervals, it is impossible to bring him within the scope of the laws of lunacy, and even when they recur so often that the individual exists in a state of all but continuous drunkenness, it is extremely difficult to apply to his case the protection or coercion of those laws. The afflicted persons who fall within their operation are (*a*) those whose unsoundness of mind is betokened by delusions—that is, insane beliefs; (*b*) or those who are congenitally weak in intellect, or whose faculties have become enfeebled, as in the dementia of cerebral disease and of senile decay; (*c*) or a class about whom there is often much controversy both in civil and in criminal courts—those whose unsoundness does not take the form of imbecility, nor of that which is most easily recognised as insanity—namely, intellectual derangement, but whose mental disorder consists in a perversion of the natural affections, in an exaggeration and perpetual predominance of passions, which, in the ordinary man, are only occasional and of short duration. They are persons who, in their conduct towards others, in their management of their affairs, and in their general deportment and habitudes of action, show a degree of absurdity, violence, incoherence, and disproportionateness of feeling and conduct, so different from their former characters, so deviating from the behaviour and feelings of men in general, that they are justly held to be of unsound mind, at least by those who have paid most attention to the limits of sanity and insanity; or we might rather say, by those who have surveyed and examined the debatable ground which lies between mental disease and mental health. This kind of insanity was particularly studied and discriminated, and named "moral insanity" by Dr. Pritchard, of whose renown, though it is coextensive with the whole civilised world, we in this city have reason to be especially proud. It corresponds to the *manie sans délire* of M. Pinel, and to the emotional insanity of more recent authors. Some have criticised the epithet of "moral" as being too limited, there being many cases in which the emotions acquire a morbid excitement, begetting insane conduct, without specially involving feelings and actions pertaining to right and wrong; but I apprehend that Dr. Pritchard used the word moral in its etymological and philosophical meaning as derived from *mores*. Now every one who has followed the disputes in our legal courts must be aware that the debateable cases generally belong to the class which I have so briefly and faintly sketched; and I have ventured to call particular attention to this species of derangement because the cases which belong to it are closely allied to those which are to be the subjects of the present discussion. Within this class, also, are included those strange forms of insanity which begin and end in impulses, apparently unexcited by the motives of ordinary passions or cupidities—impulses to grossly criminal acts, suicide, homicide, arson, and the like. To this list has been added of late years dipsomania, which is intended to signify insane craving for alcoholic drink—a name badly composed, since thirst (δίψος) belongs to any kind of liquor.

The question on the discussion of which this department is about to enter is a very difficult one for those who do not admit—as many legal authorities have refused to admit—the

existence of moral or emotional derangement; for alcoholic insanity, in its chronic form, chiefly involves the feelings, passions, volitions, and actions, and does not prominently present faults of judgment and errors of understanding unless during fits of drunkenness. But those who have had most experience of the emotional form of insanity are increasingly impressed with the belief that though in such cases the most flagrant manifestations of mischief are presented by the feelings and actions, yet that in less obvious degrees a careful scrutiny will detect intellectual faults and perversions. Indeed, it would be strange were this not the case. It would be strange if, while the mind in its ordinary action has the personal entity, affections, sentiments, perceptions, and associated ideas so bound together in every phase of its life—it would be strange if in derangement the disorder did not extend on the one hand from insane belief to the passions, and on the other hand from morbid passions to the beliefs and the operations of the understanding.

But to pass to that which immediately concerns us. Is it not incumbent on the Legislature and Government of a civilised community to provide means of restraining or protecting persons who, by habitual indulgence in alcoholic drinks, put themselves into the category of insanity? Almost every member of this assembly must have had cases brought under his notice from the labouring classes in which a family has been reduced to destitution and misery, and in which the wife and the children have for years been subject to continual perturbation and alarm, and often to absolute cruelty, because the father of the family during the greater part of the time which he has been able to steal from his employment has, by his vicious habit, deprived himself of the power of self-government—in fact, reduced himself to a condition closely bordering on that of a maniac or an idiot. But there are analogous cases in every grade of society. The peace of families has been destroyed, and they have been thrust from the enjoyment of all the comforts, and even luxuries, of refined life into absolute penury, because the head of the family has damaged his brain by habitual intoxication. It is unnecessary to take up the time of this meeting by describing the different forms of dipsomania. Whether it be the case of the man who rushes into a rapidly succeeding series of fits of drunkenness, during which he becomes an unsafe member of society, however sane and well-conducted he may be in the intervals; or a still more serious case, in which a man renders himself, in consequence of his deleterious habits, the subject of the well-known disease, delirium tremens, in frequent accessions, every one of which leaves the brain more gravely injured than at the beginning of the attacks; or the case of him who, without becoming the subject of delirium tremens, has so weakened his judgment, so obscured his perceptions, so altered his character and conduct in moral, domestic, and social relations as to have become intolerable as a companion, despicable by reason of his mental degradation, or dangerous to himself and every one around him; or the case of one who by his habit has brought his brain to such a state of irritability that he becomes liable, on occasions of slight moral provocation, or of what would once have been moderate alcoholic stimulation, to sudden attacks of fury or such ungovernable impulses as may drive him to homicide or suicide; or, lastly, the case of him who is reduced to sheer silliness and incapacity for performance of the duties of life—when we contemplate these cases, have we not, as a *soi-disant* well-ordered community, reason to blush with self-reproach that up to this period of the nineteenth century, with all its intellectual and moral culture, and its singularly advanced philanthropy, our laws have done nothing effectual to guard society, families, helpless women and children, and the wretched offenders themselves, against habits so odious and despicable by any adequate restraint or deterrent penalties? Some of us might feel ashamed that no check should have been imposed by our laws on the facilities for alcoholic intemperance, or that there should have been so insufficient a legal recognition of the criminality of intoxication as that which is implied in the adjudication of trifling fines; but what we have to consider now is whether the habitual drunkard ought not to be treated as an insane person. I myself, from all that I have seen and known, and from all that I have read on the subject, entertain no doubt whatever that he should be so treated; that a person who cannot, or who does not, resist temptations to put himself frequently into a condition, which, for the time being, is indistinguishable from insanity, should be liable to the operation of the laws affecting lunatics, and, in fact, to the deprivation of the liberty of which he has proved himself to be unworthy. I can see no reason why it should not be certified of such a person that, because of his proved habits of intoxication, and all that is involved in those habits, he is, according to the legal formula, a person of unsound mind, and fit to be confined. I, of course, presume the habit to have arrived at such a degree as to deserve the epithet inveterate or morbid. Instances have repeatedly fallen under my observation about which I felt confident that legal restraint would afford the only chance of redemption; but, alas! at present this benefit is not to be had. To obtain it no one will venture to strain the law, or run the risk of an action for false imprisonment. Sometimes after more vicious indulgence than usual, and as its consequence, a period of collapse and debility, or after escaping the peril of a severe seizure of delirium tremens, I have found individuals in a wonderfully edifying state of penitence, and willing to consider any plans for their reformation, whether solemn vows and pledges, or a voluntary surrender of their liberty for a probationary period; but the penitence has but too often been only a prelude to a fresh burst of debauchery. It seems childish to talk of a right to undisturbed liberty, or exercise of civil rights on the part of such insane and incompetent persons, but in what manner is it desirable that such restraint as I advocate should be enforced? Shall these unfortunate persons, to use a charitable euphemism, be sent to prison as offenders against society? or with a view simply to detention and security, shall they be placed in a lunatic asylum where they may be protected and cared for as if they were only afflicted persons?—or shall they be consigned to an establishment specially designed and organised for the accommodation and reformation of dipsomaniacs? These are questions for consideration and debate hereafter. They involve many difficulties, and before they could be entered upon, it would be necessary to inquire whether there should not be some differences made in the application of the law, according to the form in which the vicious habit or unfortunate disease presents itself. There can be no doubt that the cases do somewhat differ. The most important difference is that which depends on the original constitution of the drunkard. In some the morbid craving for drink has come in sequence to long years of excess, during the greater part of which time the individual, in his sober moments, was as healthy-minded as most people, and able to resist, had he chosen to do so, the seductions of conviviality or the temptation of the solitary enjoyment of the bottle. But, in other instances, the offenders have by original constitution, and frequently they owe it to inheritance, a susceptibility of the brain which renders them liable, not only to be easily deranged by alcohol, but also to contract the alcoholic habit in a much shorter time, partly from an overwhelming sense of nervous depression, and partly from the yearning for that spur of excitement and animation which alcohol has the power of applying to their languid and listless existence. These and other differences will doubtless be studied and provided for at a future time. Moving in a parallel direction, there will be other social improvements, rendering what we have in view more easy of accomplishment—for instance, that to which I shall have to allude to elsewhere, the development of State Medicine to a higher degree of organisation than it now possesses, under the administration and direction of a specially educated body of State Medical Officers. But what falls particularly to the consideration of this department now, is the question whether habitual drunkards or dipsomaniacs should, as I have said, be made the subjects of legal interference and restraint. It is obvious that the practical subjection of such persons to the law would be more easy were our social morality more stringent. Even if the Government or Legislature do not think it just to interfere with the supply of temptation by restrictions on the sale of alcoholic drinks, one does not see why they should not impose stronger penalties on persons found in a state of intoxication. It would be no little good if, through a sterner action of the Government, drunkenness could be denoted and defined, and denounced as a crime. It is already an offence against good society, but were it treated as a breach of the law, distinctness and precision would be given to what is now indefinite. Instead of being regarded as a state only a little removed from hilarity, conviviality, and good-fellowship, it would become a crime and a shame, dragging the practisers of it within the scope of penal jurisdiction. It is to be hoped that such changes are not far off, but not many years ago they would have seemed impossible. The habits of society have greatly altered since the days even of our fathers; but though they are so much improved among persons of education and refinement, it cannot be said that there is a corresponding change for the better among the poorer classes. It would, however, be a great gain were the law more em-

phatically declared and administered against drunkenness, and were its enactments capable of taking into their net a modern Pitt or Sheridan as impartially as the ignorant sinners in the lower circles of the community.

A few words must be said in answer to certain objections which are almost sure to be raised against what we are proposing—1. The measures might be held to infringe the right of liberty. This is not the place for discussing the abstract rights of man, but those who regard the rights of man as derivative from, and correlative with, their duties, will scarcely be inclined to allow any force to this objection, seeing that it is the duty of men to prevent others from running to destruction, or from becoming dangerous to society. Without entering upon theories of morals and of liberty, a practical view of the subject will make it evident that, in the proposed action, we contemplate only an extension to the sweep of the present laws; that we would bring the dipsomaniac, like other insane persons, within its protection and repression. There is no reason why fear should be entertained in the present day of the possibility of illegal imprisonment or detention. The public are quite sufficiently alive to any such danger, and, indeed, nervously apprehensive on the subject. Those who have had most experience of the working of the lunacy laws know well that owing to their jealous but laudable respect for personal liberty, great difficulties have often to be overcome in obtaining the protection of the law for those who greatly need it. I have seen much of their operation, and my impression is that, for one person improperly detained, there are great numbers improperly at large, and in possession of what we term their liberty. 2. Another objection is the expense which the country would incur. If so many persons are to be taken into custody or tutelage, it is said that you must build many more gaols and asylums. Perhaps this necessity might arise at first; but I think it more likely that the requirement would be sufficiently met by additions to buildings at present in existence in the form of annexes specially adapted to the tenants in view. In the case of drunkards whose seclusion and curative treatment may require a long time, plans might be devised for utilising their labour, and making the asylums to a certain extent self-supporting. And we may be almost sure that places of retreat will spring up under private enterprise, whether in connexion with private insane asylums or elsewhere, suitable to the wants of those who belong to a class capable of paying for their advantages. Dr. Christison describes a charming retreat in the Isle of Skye, to which several persons have voluntarily resorted in order to be broken of their wretched habit, or cured of their deplorable disease. But after all, I do not think that expense ought to be an object to a nation that can afford to expend £50 or more in the projection of a single shot or shell, or to incur a debt of nine millions for an Abyssinian expedition, whether its object was to rescue a handful of zealous or imprudent travellers, or to impress on Oriental minds how irresistible are British arms. 3. But the most serious objection to our scheme would be the difficulty of classifying the subjects on whom we wish that the law should operate. This will require much anxious consideration, but I apprehend that the cases would fall naturally under three principal heads:—1. The casual drunkards, for whom the laws at present provide in a measure, though they are inadequately administered. 2. The voluntary inveterate drunkards, who, by rapidly recurring fits of intoxication, become the subjects of delirium tremens, or, even without this result, reduce themselves and their families to pauperism, and seldom behave otherwise than as madmen. 3. The helpless imbecile dipsomaniacs, who require to be taken care of and possibly ameliorated. To show that it is not a mere speculation or theory that madness and drunkenness are closely connected, I will conclude these remarks with one or two numerical statements, for which I am chiefly indebted to my distinguished friend Dr. Browne, one of the Commissioners of Lunacy in Scotland. It was found that at the Glasgow Lunatic Asylum, out of the number received into that institution during seven years—that is, from 1840 to 1846 inclusive—nearly one-fifth of the cases were ascribed to intemperance—that is, 375 out of 1900 cases of mania. M. Esquirol found that out of 132 cases of mania 18 were owing to alcoholic excess. M. Calmeil, in speaking of that form of paralysis which is so often asssociated with or follows insanity, the form characterised by staggering gait and imperfect articulation, presents the history of 62 cases. Of these 20, or one-third, were the result of habits of intoxication. In melancholia, Esquirol found that out of 372 cases 55, or one-seventh, were attributable to the like cause. M. Morel, the celebrated French writer on mental alienation, cites the observation of Dr. Halleran that out of 747 insane inmates of his asylum 160 owed their malady to drunkenness; and M. Morel adds that these figures correspond with his own statistics at Mareville.

When insanity follows delirium tremens, it is found to be most difficult of cure. It is said that half of the cases prove hopeless. Of suicide, which coroners' inquests usually and correctly throw into the category of insanity, it is recorded that out of 38 cases which occurred in ten years in Aberdeen, 20 were intoxicated before attempting self-destruction, and 17 had the character of habitual drunkards. Out of 218 cases reported by Dr. Caspar, of Berlin, 54—that is, more than one-fourth—were produced by intemperance. Dr. Lombard, of Geneva, assigns drunkenness as a more powerful cause of suicide than rancour or disappointment in love; the fates of 133 were determined by that cause. These latter numbers belong to what might be called the temperate nations, but Dr. Brown collected 1222 cases that occurred in Great Britain, and of these it appears that 158, or about one-seventh, sought their deaths under the influence of drink.

I have now only to remark, in conclusion, that whether success or failure may follow the prosecution of some such measures as I have so very imperfectly proposed, I cannot but think that it would be no little good to the people of these realms were it made manifest that now at last their legislators, and governors, and well-wishers have come to the conclusion that the national drunkenness must be earnestly faced, fought with, and subdued, and were it authoritatively declared that drunkards will in future be treated either as criminals or as persons not in their right mind, and therefore not fit to be entrusted with the privileges of free men.

ON THE WORKING OF THE CONTAGIOUS DISEASES ACT AT DEVONPORT.

A PAPER READ BEFORE THE SOCIAL SCIENCE CONGRESS AT BRISTOL, OCTOBER 4, 1869.

By W. P. SWAIN,
Surgeon to the Royal Albert Hospital, Devonport.

THE following paper is intended to be a short account of the manner in which the Acts of Parliament for the prevention of contagious diseases have been carried out at Devonport. It will only refer incidentally to the extension of the present Act to the civil population, but it is hoped that the information now laid before you may be an encouragement to those who, with myself, earnestly desire to see this extension; whilst at the same time our experience at Devonport, which has now extended over a period of six years, may serve as a guide to those who are embarked upon this most difficult undertaking.

Before adverting to the working of the present Amended Act of 1866, I must remind you, shortly, of what has been the previous course of legislation on this matter. In July, 1864, an Act was passed "for the Prevention of Contagious Diseases at certain Naval and Military stations." These stations were Portsmouth, Plymouth, Woolwich, Chatham, Sheerness, Aldershot, Colchester, Shorncliffe, the Curragh, Cork, and Queenstown. This Act provided that the managers of any Hospital might apply to have it made a certified Hospital for the Act, and, that if the Hospital was found fitting upon inspection by an Inspector of Hospitals appointed under the Act, it should be so certified, and subject from time to time to the visits of the inspector. It then provided that information might be laid before a magistrate stating that any woman, being a common prostitute, was affected with a contagious disease, and that within fourteen days before the date of the information she was in a public place for the purpose of prostitution. She was then to be conveyed to a certified Hospital, and if found diseased, detained there for a period of not longer than three months. The Act also provided that any person harbouring a prostitute knowing her to have a contagious disease should be liable to a penalty of ten pounds. This Act continued in force until September, 1866, when "the Act of 1866," under an amendment of which we are now working, came into force. The Act of 1866 applies to the same places as that of 1864, with the addition of Winchester. It provides for the appointment of visiting Surgeons and assistant visiting Surgeons, also assistant Inspectors of Hospitals. It also provides for the periodical examination by the visiting Surgeon of all known prostitutes living within a radius of five miles of any place to which this Act applies, and for their being sent to a certified Hospital if found diseased. They are not to be kept in Hospital for a longer period than three months without a certificate signed by the Medical officer

under whose care they are, and also by the Inspector of Hospitals or visiting Surgeon, and then to be detained for not more than three months longer. If at the expiration of that time a woman is still diseased, a notice to that effect is served upon her at the time of her discharge. With regard to the periodical examination, the Act provides that it shall be compulsory on all prostitutes, the order to attend being valid for one year. By a special clause a woman may voluntarily submit to examination for any period not exceeding one year. Any woman may apply for a release from periodical examination, and if it is proved that she has ceased to be a common prostitute, and she will enter into recognisance for her good behaviour during three months after, she may be released. The Act provides, also, the punishment of imprisonment for neglect to appear for periodical examination—for quitting a certified Hospital without a certificate of cure—or for misbehaviour whilst in Hospital.

I have thus concisely stated the main features of the two Acts. It will be observed that the Act of 1866 is a good step in advance of that of 1864. Its special feature is, that it provides for the periodical examination of all known prostitutes, and also provides an officer to carry out that duty. Why that officer should be called a "Visiting Surgeon" is to me incomprehensible, as his duties are not to "visit" the women either at their abodes or in the Hospital, for it is enacted in the 19th clause that he shall prescribe the times and places at which the woman is required to attend for examination. The term "Visiting" Surgeon is a misnomer, and is calculated to mislead both the public and the officer himself as to the nature of his duties. The better name would be "Examining Surgeon," which would clearly indicate the duties which have to be performed. There is a provision also in the Act of 1866, providing for the further detention of a woman, if uncured, for three months.

This year "a Bill intituled, an Act to amend the Contagious Diseases Act of 1866," has been passed. It was passed through both Houses at the fag-end of the Session, and in the most hurried manner. This is much to be regretted, for the Amended Bill bears upon it the most unmistakable marks of hasty legislation, and if strictly carried into effect will be most detrimental. For instance:—Sect. 3 provides that if any woman "attending for examination is found by the Visiting Surgeon in such a condition that he cannot properly examine her, if such Surgeon has reasonable grounds for believing that she is affected with a contagious disease, she shall be liable to be detained in a certified Hospital until the Visiting Surgeon can properly examine her, so that she be not so detained for a period exceeding five days." I can conceive no more arbitrary enactment than this. By it a woman is liable to be deprived of her liberty upon simple police information—information which I shall hereafter comment upon as being most unreliable, and which is doubly unreliable in the present instance, because it is not substantiated by the skilled evidence of the Examining Surgeon, without which the mere information of the police is worse than useless. How great is the power of detention thus conferred, may be seen from the fact, that at Devonport the average number of women who present themselves for examination in "the condition" referred to in the amended Act, is 52 per week. But even supposing the detention were advisable, the time, five days, fixed for detention is most absurd. According to our experience, "the condition" which prevents a woman from being examined, lasts on an average over that period of time, so that, at the end of five days, she would be in no better condition for examination than when first detained in Hospital. I believe the only excuse for inserting this clause is the alleged fact that many women improperly decline to be examined on the ground of their condition. From the experience of the last six years I can most positively affirm, that there is very little difficulty in ascertaining the truth or otherwise of the woman's assertion. This clause must either remain, as I trust it will, quite inoperative—or if it is put in force will materially endanger the successful working of the Act, by creating in the minds of the women a strong feeling that they are being arbitrarily dealt with.

Then again there is a provision for dealing with drunken women which only partially meets the evil. Our great difficulty has been this;—that many women, before they come up for examination to the visiting Surgeon, will drink, not enough to render them unfit for examination, but sufficient to make them partially intoxicated. If found diseased they are then sent on to Hospital without escort, and no doubt drink more on the way. After admission into the Hospital they become uproarious, and contribute much to upset the discipline of the wards. The amended Act only provides for the detention of women for twenty-four hours in a police cell when too drunk to be examined. It should have gone further and provided for their safe delivery, in a sober state, to the Hospital authorities. My strong conviction is, that when the examination room is at a distance from the certified Hospital, a conveyance should be provided for the women who are found diseased upon examination, and that they should be taken there under the charge of the police.

Sect. 7 of the amended Act is, I think, objectionable; it provides for the detention of a woman for a further period of three months in addition to the six months allowed under the Act of 1866, if at the end of six months she still remains uncured. My experience is, that if a woman at the end of six months' treatment is still uncured, a further detention of three months will in most cases be useless, as the condition may be looked on either as incurable altogether, or as incurable within three months. Under the Act of 1866, women are liable to a month's imprisonment if they, upon being discharged uncured, still persist in exercising their avocation. This power has never been used; if it were, the necessity for lengthened detention would be avoided. The detention of such cases in Hospital is irritating to the women, disheartening to the Medical officers, and a fertile source of disorder in the wards.

I mention these defects in the present amended Act, partly in the hope that at some future time they may be remedied, and partly, also, to impress upon those who are interested in extending legislation of this sort, to be more watchful for the future when Acts of Parliament are about to be passed dealing with the subject. As I said before, the Amended Act was passed through both Houses on the last days of the session, when few members were in town, and it had actually passed the House of Lords, and the first reading in the Commons, before the committee or Medical officers of the Royal Albert Hospital, were even aware that such a bill was in contemplation. If a draft of the Amended Act had been submitted to us, I think, with the experience we have gained during the last six years, we might have suggested some alterations and additions which would have made it a much more valuable piece of legislation than it is now likely to be found.

(To be continued.)

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

KING'S COLLEGE HOSPITAL.

CASES OF RELAPSING FEVER.

(Under the care of Dr. DUFFIN and Dr. KELLY.)

SEVERAL cases of relapsing fever have lately occurred in King's College Hospital. For some years this fever has been uncommon in London. When it is present, it often accompanies typhus. In the first case the history of contagion could not be made out, but in the rest it could be traced with almost perfect accuracy.

At No. 20, Great Wyld-street, a very unhealthy locality, four children were taken ill in succession with a febrile disease that seems to have observed relapses. The mother of Ellen M., who (Case 5) nursed them, was taken suddenly ill with fever and delirium, and died in the workhouse on the fifth day of her illness. The body was brought back to No. 22, Great Wyld-street, the house whence all the cases (except Case 1) were derived, and there it remained three days to undergo the process of "waking." In forty-eight hours after the funeral Catherine C. (Case 4) was taken ill; and the rest followed in rapid succession.

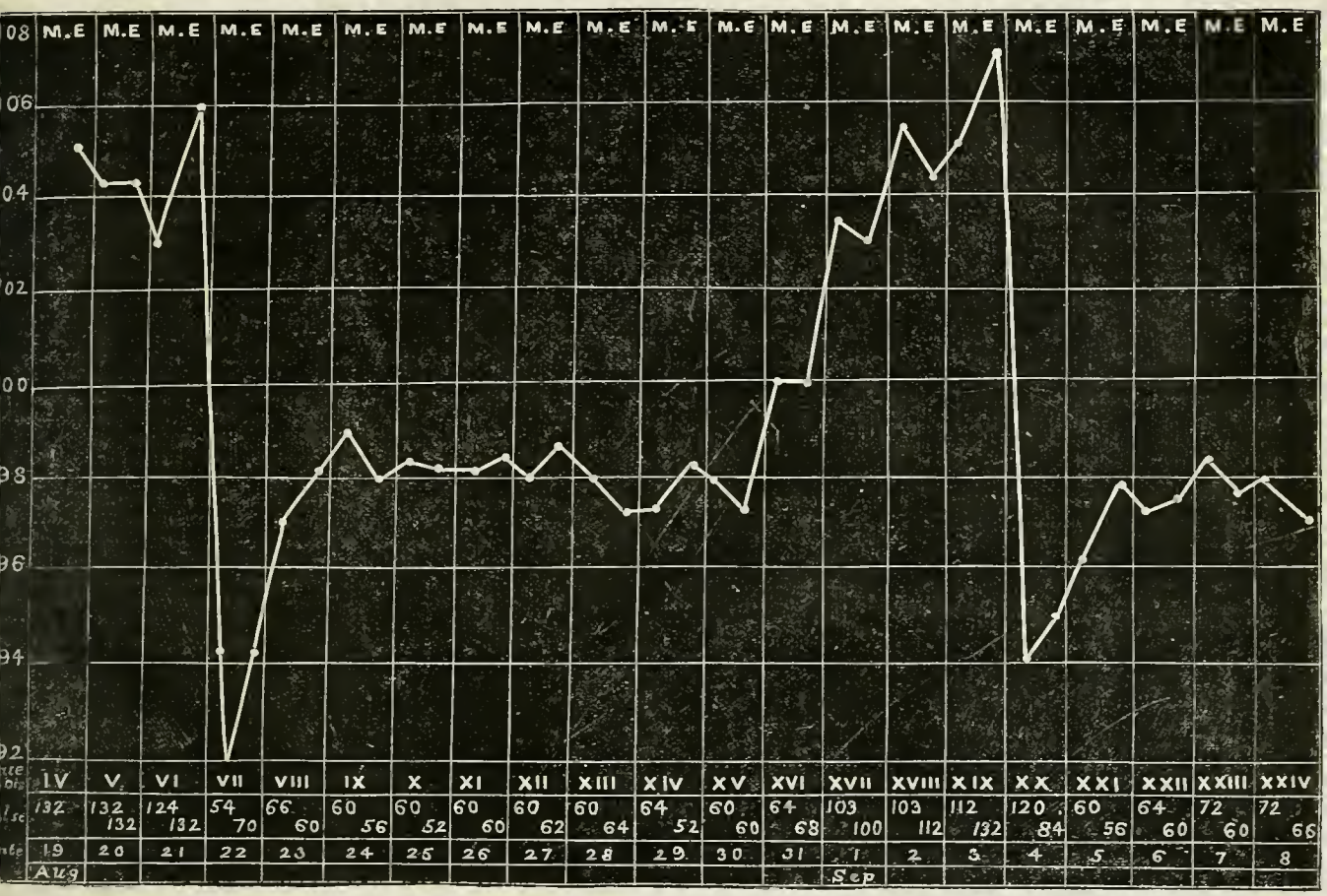
Cases 1 and 5 were the only ones that seem to have been starving; the rest had lived very well.

For the notes of the cases we are indebted to Messrs. Curnow and Hoar, the resident Medical officers.

A chart of the temperature has been added to the case of David B., which shows the variations of the temperature and pulse more accurately than a mere description.

Case 1.—David B., aged 22 years, was admitted under the care of Dr. Kelly on August 19, 1869. He had been a soldier, but was discharged for bad conduct. Two years ago he was in Ireland, and since then he has led a very dissipated life. For a fortnight before admission he had eaten very little, but had been drinking a great deal. On August 12 he got wet through,

but remained well until the evening of August 14, when he was taken suddenly ill with shivering and rigors. The next day he was very feverish and thirsty, and vomited frequently. On admission he had very much the appearance of a typhus patient, but his eyes were not suffused, and he had a very sallow tint; his conjunctivæ were not yellow. His skin was very hot, and his pulse very rapid; the tongue was coated with a thick, white, moist fur, and was very tremulous. He never complained of any marked pain in his limbs at any part of his illness, but he was very delirious; he frequently vomited his food. There was at first a trace of albumen in his urine, which was high-coloured and abundant. Epistaxis was very frequent, but there were no petechial spots on the skin; bowels open once a day; stools light and liquid. Chest sounds quite healthy; no abdominal tenderness nor enlargement of liver and spleen.



On August 21 he seemed worse; there was a good deal of delirium; his tongue was dry, with a dark yellow fur, and he frequently vomited. In the evening his temperature was 105·8° Fahr., pulse 132, respiration 54. During the night his temperature suddenly fell, so that in twelve hours it stood at 92° Fahr. and the pulse at 62. During this rapid defervescence of nearly fourteen degrees he perspired most profusely, and vomited a good deal.

In the evening of August 22 he felt much better, and complained of nothing but weakness. Temperature 94·2° Fahr., pulse 72, respiration 18. His tongue rapidly cleaned, and his appetite improved. He had been placed on a milk and beef-tea diet, and had taken a quinine mixture. Medicine was now discontinued, and he had fish in addition to the above diet. For the next few days he seemed very well; he ate and drank heartily, and slept well, and was able to go about the ward. There was now no albumen in the urine, and his tongue was quite clean. At this time he was perfectly free from fever, and his pulse was very slow. No alteration took place until the morning of August 31, the sixteenth day of illness, when his temperature rose to 100° Fahr., and his tongue began to be coated with a white moist fur; he was drowsy, but not delirious; the pulse was about 64. The next day the temperature and pulse had both risen, and he was in the same state as on admission. The tongue was dry and furred; there was some tenderness over the liver and spleen, but neither seemed larger than before; he was very thirsty, and vomited three times; no albumen in the urine, and no delirium. Some rhonchi were heard over the bases of both lungs, and the expectoration was bronchitic.

On September 3 he seemed much worse; the tongue was dry and brown, and there were sordes on the gums and teeth; he vomited frequently and expectorated slightly. He was ordered a saline effervescing mixture, and returned to the milk diet. At 9 p.m. his temperature was 107° Fahr., and pulse 132. Both then began to descend, and by 10.30 p.m. the temperature was 103·2° Fahr., pulse 112. At 3 a.m. September 4, or in six hours' time, the temperature was 94·2° Fahr., and it had thus rapidly fallen through nearly thirteen degrees. He only perspired after the defervescence, and then not so profusely as on the first occasion; the bowels were open once a day; he passed an average quantity of water, and no excess of lithates. The temperature was from 94° to 95° Fahr. during the 4th, but September 5 it rose to the normal standard. His tongue very rapidly cleaned, and he became hungry; the pulse as before was slow. The moist râles over the chest soon disappeared, and in a day or two he seemed as well as ever. He was kept under observation until September 10, when he left the Hospital, and no further history could be obtained about him.

Case 2.—Christopher C., aged 40, was admitted under Dr. Duffin. In this case the invasion appears to have been sudden. It consisted of slight rigors and severe muscular pains. He took to his bed twenty-four hours later. When first seen the nervous phenomena were very marked. His aspect was stricken, as that of a man in the second week of typhus; the cutaneous sensibility was much increased, especially over the abdomen; there were great muscular pain, tremor, and loss of power to raise himself; his speech was hesitating, he was inclined to be garrulous, and was confused in his ideas. If left to himself he picked at the bedclothes, muttered, and at night was sleepless and actively delirious. The secretory phenomena were scarcely less important. The

skin presented a distinct lemon-tinted jaundice, and the hepatic dimensions were found uniformly increased by about an inch. From the general hyperæsthesia it could not be accurately ascertained whether tenderness of this organ existed; the urine, however, although high-coloured, presented no appearance or reaction of biliary colouring matter. The fæces, on the other hand, when an obstinate constipation could be overcome, were of the usual brown colour. It was from the first observed that the urinary chlorides had diminished to a mere trace; certainly no albumen was passing out of the kidneys. Splenic dimensions normal. With this there was complete loss of appetite and occasional vomiting; the tongue was dry, and brown in the centre. The circulation was evidently labouring under a very considerable shock. The heart's impulse was imperceptible to the hand; at the apex the first sound only, at the base the second sound only, was audible; the arteries were lax and very compressible; the number of pulsations averaged 110 per minute. The lungs were found quite free of œdema. The average temperature varied between 102° and 105°, the skin being dry and harsh. When admitted an abundant crop of fleabites was noticed on the abdomen, but no other rash. His face, however, presented an ordinary acute herpes. The condition of this man presented but little variation till the seventh day of his illness, when a slight declension of his temperature was observed early in the day, accompanied by a fall of ten beats in the pulse, and, for the first time, a short interval of natural sleep. As the day progressed the amendment became more marked. The fall of the temperature called for special notice. In the course of twelve hours a decline of 7·6° Fahr. ensued—viz., from 102° to 94·4°. The lowest limit reached was at 11 p.m. Two hours later a rally of a degree was manifest, by 10 a.m. on the eighth day a further degree had been gained—viz., 96·2°—and by the evening the ordinary limit of 99° was touched. The nervous and circulatory signs disappeared with extreme rapidity, and already, twenty-four hours from the fall of the temperature, the hepatic dulness was found to be decreasing. The case calls for no further comment till the 15th day of illness. During the night the temperature underwent an increase of five degrees to 103·2°. The ordinary febrile signs returned, coupled with the muscular pains and sleeplessness. The other main nervous features remained in abeyance. Neither the jaundice nor the vomiting returned, and the diminution of the chlorides was less marked than previously. This relapse lasted five days. The highest limit of temperature reached was again 105° Fahr. It was, as before, followed by a rapid and complete recoil, the lowest limit touched being 95·2°. Since then the temperature has oscillated about the normal limits during the last week. Although the patient expresses himself well, he is still under observation.

Case 3.—John C., 10 years of age, son of the above, was admitted under Dr. Duffin. There was a sudden invasion, consisting of rigors, vomiting, and muscular pains. Cerebral signs set in within twenty-four hours; sleeplessness, active delirium, and abdominal hyperæsthesia were well marked. The hepatic and splenic dulnesses were of normal size, and there was absence of jaundice. The vomiting, however, was a prominent feature. The tongue had the brown typhoid character; the chlorides disappeared from the urine; the circulation presented only the ordinary febrile characters; the highest limit of temperature noted was 104·6° Fahr., and this was maintained with little variation. On the seventh day a fall of eight degrees occurred, with general improvement. On the sixteenth day there was a relapse, consisting of delirium, sleeplessness, and muscular pains, a pulse of 130, and a rise of temperature to 105·4° Four days later there was a recoil of eight degrees, and then the boy entered on convalescence.(a)

Case 4.—Catherine C., aged 37, mother of the above, admitted under Dr. Duffin. This case was complicated with acute bronchitis of a severe type, due to exposure. The highest point reached by the temperature was 103·6° Fahr. On the seventh day the latter fell eight degrees, and there was a marked amendment in the bronchitis. On the fifteenth day relapse ensued, followed after three days by a recoil of six degrees. This woman never had either large spleen or liver, but she had a typhoid tongue, and vomiting during both the attacks.

Case 5.—Ellen M., aged 17, admitted under Dr. Kelly's care on September 16. She was taken suddenly ill on September 12, with rigors, thirst, and vomiting. On admission she was very thirsty and hot; temperature 102·2° Fahr.; pulse 160. Abdominal hyperæsthesia; no jaundice and no delirium; a little tenderness over liver, but no enlargement. Tongue moist and white; no rash nor petechial spots.

September 16, 9.30 p.m.—Temperature 104° Fahr.; pulse 120. This was the fifth day of illness.

September 17.—Temperature 98° Fahr. A defervescence of six degrees had occurred during the night; it was accompanied by no sweating or diarrhœa.

Up to September 25 she had no pyrexia, but in the evening she was worse; temperature 102·5° Fahr. Much pain in limbs; tongue coated; very thirsty and sick, with delirium.

26th.—Morning: Temperature 103·5° Fahr.; pulse 132. Evening: Temperature 103° Fahr.; pulse 136.

27th.—Morning: Temperature 98·8° Fahr.; pulse 108. Evening: Temperature 96° Fahr.; pulse 108. Thus in a few hours a defervescence through six degrees had taken place. The first pyrexial period last five days; the second only three days, and began on the fourteenth day of illness. No diarrhœa was noticed; there was occasional epistaxis; no jaundice at any time. She was very strumous-looking, and had physical signs of phthisis.

Case 6.—Ellen B., aged 2 years 10 months, lived in the same room as Ellen M. She was admitted under Dr. Kelly on September 15, the fifth day of illness, with a hot skin and quick pulse and furred tongue. The next day her temperature was 102·6° Fahr. in the morning, but suddenly fell to 95° Fahr. in the evening. She vomited twice, but did not perspire. No pyrexia until the evening of September 23, the twelfth day of illness, when the temperature rose to 103° Fahr., and kept high until September 27, when the temperature fell from 102° Fahr. (morning) to 92·6° Fahr. (evening). At this time she vomited very frequently. The next day the temperature rose to the normal height, and has kept so since. The frequency of the pulse increased with the temperature, but was not so low as in the case of the adults. The first pyrexial period lasted five days; the second only four days; there was no jaundice nor rash, nor any enlargement of the liver or spleen.

(a) During the height of the fever the chlorides were entirely absent from the urine, and there was a slight diminution of the urea and phosphates. Immediately after defervescence the urea resumed its normal proportions, but it was only on the fifth day subsequently that the chlorides resumed their usual abundance.

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Medical Times and Gazette.

SATURDAY, OCTOBER 9, 1869.

THE DEBATE ON THE CONTAGIOUS DISEASES ACT AT THE SOCIAL SCIENCE CONGRESS.

The most exciting event of the Social Science week at Bristol was, without doubt, the warm debate of Monday on the question, "Shall the provisions of the Contagious Diseases Act be extended to the civil population?" It was evident enough that warm work was expected. A public meeting had been held in the city two days before, to give vent to the sentiments of the opponents, and the room was early crowded with a large number of gentlemen whose meek white ties by no means corresponded with the redhot energy of their proceedings. The business began with a paper by Dr. Swain, of Devonport,

which we print elsewhere, and which our readers will see to be a calm dispassionate statement of the operation of the present Act, and its effects on the disease in the garrison towns of Plymouth, Stonehouse, and Devonport. This was followed by a paper from Mr. Bulteel, whose sentiments may be gathered from his letter in last week's *Medical Times and Gazette*, and from Mr. Woollcombe, who, like the two last-named gentlemen, is engaged in the practical working of the Act. The general conclusions from their papers were that the Act works well for its present purpose, but requires some modification to adapt it to the civil population. Besides these, came a paper by Mr. Berkeley Hill, warmly advocating, and one by Dr. Taylor, of Nottingham, warmly denouncing the proposed extension of the Act; and certainly, so far as forensic eloquence and force of declamation were concerned, it was impossible to deny the highest praise to the opponents of the measure.

When we come to analyse the Act itself, the question submitted to the meeting, and the arguments of the various speakers, we cannot help seeing that there was some failure of clearness and of tact in the manner in which the question was submitted, and the discussion brought to a close. "Shall a given Act be extended to the civil popnlation?" Evidently, on the first glance, an "Act" is a very complex matter. The question here proposed involved a dozen propositions rolled into one, on each of which it was clear that no uniform views prevailed, and which ought to have been dealt with separately.

Amongst such questions are, first, Is it right to heal men and women affected with venereal disease? Do we step in presumptuously by so doing between the Creator, and the creature whom he punishes for infraction of morality? We are afraid that some obscure notion of the latter sort still lingers amongst out-of-the-way persons, but we can hardly suppose that any one who would relieve the ills arising from gluttony or drunkenness would seriously propose on principle to cast out the victim of unchastity to the dogs.

A second question is, Does the existence of venereal disease act as a check to immorality? Some persons are deterred without doubt; but it must be confessed that if the deterring power were worth much, we should not now have to be legislating against venereal disease.

Then. in the next place, supposing the disease to have a deterring power, is it good policy to do away with it? This question is answered as the last.

Fourthly, is venereal disease so prevalent and formidable as to require special legislation? Here comes a marked diversity of opinion; for most persons admit it to be good policy in the case of soldiers and sailors, who are public servants, and who are especially liable to these diseases from the circumstances of their calling. But respecting the population generally, whilst some, with Mr. Berkeley Hill, pile up figures and draw charnel-house pictures of the widespread prevalence of the worst forms of syphilis, others, like Mr. Simon, submit them to a very considerable discount. The assertions of extreme prevalence seem to us to answer themselves; for if, as Mr. Davies was understood to say, every male inhabitant of Clifton has had the disease, to what appreciable extent is that population damaged thereby?

Fifthly, there is a question which was not raised at this meeting, but which might have been, and it is this:—Supposing the Government warranted in spending a large sum yearly in preventing contagious disease among the civil population, is syphilis the one to be chosen out of Dr. W. Budd's list? Probably most people would admit that scarlet fever causes more devastation in one year than syphilis in ten; and that no man is obliged to contract syphilis, save by his own voluntary act.

Sixthly, there is the question of the liberty of the subject, on which Dr. Taylor laid eloquent stress; or, to put it more truly, on the risk that innocent women may be persecuted and submitted to indignity by the police on the plea that they are prostitutes. That the danger is not unreal is shown by Continental experience.(a.)

Seventhly, is prostitution to be put down, or is it to be regulated? Are women to be furnished with clean bills of health by a Government official, that they may exercise their trade with safety? This was one of the knottiest points of argument; and it deserves notice that Mr. Holland, and many other warm supporters of the measure, accused their opponents of misrepresentation on this point, and warmly asserted that the object was to repress disease without encouraging vice by licensing prostitution.

But, eighthly, it must be recorded that one speaker, the Rev. Mr. Clay, "maintained that prostitution was a necessity, but he hoped the time would soon come when we should sweep the streets of those girls, and if they would ply their trade, they should do it in licensed houses."(b.)

From the cold zero of this reverend gentleman's morality to the boiling zeal of those who fear to cure syphilis lest they should encourage vice, it must be seen that there are a variety of degrees, and hence that many men, who evidently desire to suppress prostitution, would hesitate to give their adhesiou unreservedly to the sentiments of either extreme party. This was clearly the view of Dr. Druitt and of Dr. Stallard, who both tried to give a more practical and less violent character to the debate. As we have often said, repress open prostitution; give ample facilities for the cure of unfortunate women and their reformation, if possible; anyhow, detain them till cured; but let not the honour of the Medical Profession in England be sullied by making its members the ministers of licensed prostitution. The Contagious Diseases Act, in its present shape, is not fit for the civil population.

HOSPITALISM AT ST. BARTHOLOMEW'S.

The functions of an Hospital are the treatment of the sick and the education of the Medical student. Apart from these, there is a certain set of characteristics which are too apt to trail after Hospital establishments, as camp followers do after an army. One is the lay-governor element—the power which Hospitals give the governors, on the strength of an insignificant subscription, to control, snub, patronise, and otherwise degrade the Medical Profession. And it must be noted that as the pure *military*, as distinguished from the *Medical* administration, is disappearing from military Hospitals, so the government of civil Hospitals should pass from the hands of lay treasurers and managers into Medical hands. A second is the pernicious effect of many Hospital buildings on the health of the patients, which has been brought into due prominence by Sir J. Y. Simpson, to whom we owe the word Hospitalism. A third branch of this obnoxious *ism* relates to the interference of Hospitals with the rights and emoluments of private Practitioners, and with the independent and self-supporting character of the labouring classes.

Evils of these kinds arise imperceptibly, and are acquiesced in till some prophet comes to denounce them. So at St. Bartholomew's there may be evils, venial till brought to light, but which ought, when once manifest, to be uprooted quickly; and it is singular that the reform of them now should

(a) We need no apology for the following quotation from Sir C. Rawlinson on Saturday, in the Reformatory Department, on the treatment of professional criminals—men-thieves, be it observed:—"Sir Christopher Rawlinson protested against one of the suggestions made by Serjeant Cox—viz., that any one should be subject, upon the summons of a policeman, to be taken before the magistrates, and charged with being a professional criminal. With all respect for the unpaid magistracy as a body, he asked was there any magistrate, as a rule, who was fit to cross-examine or to watch the evidence given by the police? He (the speaker) had sat as judge for many years, and he had seen the police defeat the most astute counsel. Luckily, perhaps, a third looker-on succeeded in detecting the conspiracy which existed between those very men who were the guardians of our property, but not always the guardians of our liberties. (Hear, hear.) There was among the police a certain *esprit de corps*, and they were as anxious as a young counsel to carry a conviction, without considering the innocence or guilt of the subject."

(b) Quoted from the *Western Daily Press*, Oct. 5, 1869.

be demanded through the independent action of the students and subordinate Medical officers, whilst the Medical staff seem to stand aloof.

The governing body of St. Bartholomew's, it is alleged, allow one-fourth of their magnificent buildings to be absorbed by gilded halls, fit for the entertainment of Royal personages and lord mayors. Their nurses, on whose health and energy the well-being of the patients depends, are lodged in miserable unhealthy cupboards. Is this true, or not? If so, have the governing body taken any steps to remedy them? Have the Medical staff made representations? If so, how have they been received?

The governing body have created the worthless, delusive, and demoralising plan of throwing open rooms for "casualty patients," where all comers are received and treated. The duty of seeing the crowd of persons who come is thrown upon the House-Physicians, whose time ought to be occupied with the care of the in-patients. The governing body allege that they are afraid of public opinion; that it would never do to allow it to be said that any poor person ever was refused relief by so rich a corporation. Can they, then, explain why they have never made due provision for this—shall we call it—trap for popularity? Why not appoint paid officers to do this exhausting and degrading work? Have the Medical staff ever remonstrated with the governing body for the protection of their juniors?

Continued agitation amongst the better and older students is going on respecting the dismissal of Dr. Charles Mayo from the post of House-Physician for "insubordination." The fact is that a man of education, Fellow of a College at Oxford, who had travelled to see most of the Hospitals in the civilised world, and had served in the American army, is required to go through the disgusting sham of treating casualty patients at the rate of one hundred per hour. Of course he remonstrates, and then is turned out. But if the Medical Staff do not care, the rising body of students have the greatest interest in no longer allowing the management of the Hospital, and the access to its appointments, to be controlled by the hands which at present hold the reins. A meeting of eighty senior students and past resident officers was held last Friday to compliment Dr. Mayo on his pluck, and to demand a radical reform in Hospital administration. One of the speakers made the following statement, which ought to be answered. After all, however, it is not petty details of economy, but the influence of the whole system on the Medical Profession, which deserves condemnation.

"He was an old student of the 10th year, and was well acquainted with the Hospital, and was also a governor of other Medical charities; and in reflecting on St. Bartholomew's Hospital would probably be reflecting on these as well, because few institutions of the kind would stand the ordeal of a strict examination. With regard to the out-patient departments, he could answer for their being greatly abused. Only recently there had come to his notice two flagrant cases in point—the one was that of an Hospital out-patient, who was found to be a man worth some £10,000; the other was that of the child of a tradesman in receipt of £400 or £500 a year. Coming back to our own Hospital, it was obvious that, with the increase of the number of out-patients, there was an increasing proportion of improper applicants, and even in the wards this holds good, for any one who sees the thousands that pour in on visiting days must remark that they present all the appearance of being in well-to-do condition, and the proportion of wearers of silk dresses is quite astonishing. As regards the administration of the revenues, we can only form our opinions by means of a few prominent results, as the accounts of the institution appear to be a secret strictly confined to a favoured few, nothing like a balance-sheet ever being published; however, most of us know that a late treasurer had spent thirty to forty thousand pounds in refacing the Hospital with stone, and in our own time we had just witnessed the expenditure of a sum, probably to be reckoned by thousands, in the gilding and decorating of the hall and emblazoning on the staircase walls the coats of arms of the *employés* in the office. On the other hand, there has been a long-standing effort on the part of the executive to limit the prescribing powers of the students because of the the expense of the drugs. The nurses, too, are expected to be on duty for fifty hours out of every seventy-two, and they are frequently on duty thirty-six hours consecutively. The statistics of the mortality and sickness among these women show a death-rate treble the average, and a sickness in the ratio of 22 to 9. Last year from their own published tables over 60 per cent. of the nurses had been warded. By the way of another illustration of the Hospital mismanagement, when a pint of essence of beef has been ordered, only half a pint is sent up, and when half a dozen oysters not more than five appear."

Do these things exist, we ask; and if so, who is responsible?

TREATMENT OF A "FIRST-CLASS LUNATIC" IN JERSEY.

At this time, when the treatment of lunatic patients without restraint is attracting considerable attention, the following case should not be passed over without comment:—Mr. Frederick Browning, a resident of London, in the early part of last month was on a visit to a friend in Jersey. He was a temperate, robust man, but had overworked his brain respecting pecuniary calculations and Blue-books, and it was found necessary that he should be removed to a lunatic asylum. He was accordingly, on Monday, the 6th ult., taken to the Jersey Lunatic Asylum. Here he became, it was said, very violent, but, instead of being placed in a padded room, "which was engaged," he was subjected to a variety of plans of restraint, culminating with his being tied down in bed with his hands tied behind him, "so that he had to lie on hands and arms," in a posture in which Dr. Blood asserts "sleep to be impossible, and the ligature was so tight that the Doctor was unable to feel any pulse." We quote from the *Jersey Independent*, which contains a long and elaborate account of the inquest on Mr. Browning, and a very sensible leading article on the subject.

On the Friday, Mr. Browning being "very violent," a strait-waistcoat, "with very large arms," was put upon him. He went to sleep for a time, took a pill and some beef-tea; but he was found to be sinking, and the attendant, ten minutes before death, removed the strait-waistcoat. An elaborate post-mortem examination was made, and a coroner's jury decided "That death was caused from acute tubercular meningitis, or acute inflammation of the membranes of the brain."

The report of the inquest contained in the *Independent* is of great length, and the evidence in some points rather contradictory. The following startling facts, however, were elicited:—Mr. Browning was captured on a certificate signed by two Medical gentlemen, who had not seen the patient for two days previously. He was admitted to the Asylum on this certificate. The "entry-book" was produced before the coroner, and it contained "no entry of Mr. Browning, nor was there any entry of the names of those who had been the cause of his restraint. Mr. Le Feuvre, the clerk on whom this work devolved, stated the cause of the omission to be his not knowing the Christian name of Mr. Browning. On examining the book, it was found that in every case there had been no entry of the person's name upon whose authority an inmate had been admitted, save in two single instances; therefore there have been fifty-nine inmates admitted without any one appearing responsible for their detention." It was stated that the Medical superintendent of the Asylum had another book "which contained every information," but that gentleman was away, and the book under lock and key. It was sworn by Dr. Blood, who visited Mr. Browning as a friend, at eight o'clock in the evening, that the "Medical superintendent," the "superintending steward," and the "head warden or nurse" were all absent. It was sworn by Dr. Blood that Mr. Browning was then under restraint such as described above, and that this restraint had been resorted to on the sole

"responsibility" of the "nurse" himself, as Mr. Browning "had been very violent, and he feared that that gentleman might hurt himself or somebody else." It was urged in extenuation of the use of restraint, that "patients were too strong for the number of attendants."

Captain Saumarez, a friend of Mr. Browning, found him "in a cell where one would hardly put a dog;" and this, be it remembered, was the treatment of "a first-class patient whose friends were regardless of expense." "The attendant wanted to pull Mr. Browning down on his bed." Captain Saumarez remonstrated against that interference as unnecessary, and told the attendant to "leave the man alone, as he was harmless." We quote from the leading article in the *Independent*:—

"The attendant, however, who, in point of accomplishments for his office, knows at least one phrase of what is called 'Medical Latin,' persisted in saying 'Mr. Browning was suffering from delirium tremens;' but, remarked Captain Saumarez to the jury, 'Every one who knew Mr. Browning knew him to be a temperate man.' Such is the treatment on Tuesday, the day after the patient's admission."

Drs. Blood and Dickson described the apartment alternately as a "room" or "cell." Great credit is due to the *Independent* for the fearless and able manner in which it has commented on this lamentable case. With it we say, "a simple description of the treatment in this asylum selected from the evidence carries its own commentary, and we obtrude no reflections." But we cordially endorse its concluding remark—"Such is the Jersey Lunatic Asylum in treatment, in appliances, and in direction. Is it not a remarkable institution?" We hope it is not only remarkable, but *unique*.

THE WEEK.

TOPICS OF THE DAY.

Dr. W. R. Sanders has been elected to the Chair of General Pathology in the University of Edinburgh, vacated by Professor Henderson. Of the three candidates who were in the field, only two—Dr. Sanders and Dr. Grainger Stewart—were proposed. The election is in the hands of the University Curators, and was decided at a meeting on Friday last. As we have already expressed emphatically our opinion that either of the above-named gentlemen would fill the post with equal credit to the University and to himself, and as of the two one only could be successful, we think that the members of the University have good reason to be satisfied with the choice that has been made. We should have felt the same had the votes been in favour of Dr. Grainger Stewart. We, who recollect Dr. Sanders in his student days, and have had his name frequently before us as the contributor to our contemporaries of valuable observations in Medicine and pathology, may be allowed to express our satisfaction that so painstaking and exemplary a career should have been crowned at last with a most fitting and honourable reward. To Dr. Grainger Stewart we can only wish that before long his striking abilities and attainments as a pathologist may receive a no less deserved and suitable distinction. How both these gentlemen's qualifications were estimated by the electors is testified by the close division which decided the election—Dr. Sanders was elected by four to three.

Professor Laycock, of the University of Edinburgh, has been appointed Physician to the Queen in Scotland.

For the seat of the Universities of Glasgow and Aberdeen there are now two candidates in the field. Mr. Gordon has consented to be nominated on the Conservative side, and Mr. Archibald Smith, of Jordan-hill, a gentleman of some literary and scientific repute, has been proposed by the Liberal graduates of Glasgow for the support of the same party in the University of Aberdeen. It is said, however, that there is a division in the Liberal camp, and that a clique represented by a body styling itself the Scottish Universities Union of London wishes to bring forward Mr. J. S. Mill as a candidate for the Universities. But we cannot believe that Mr. Mill would have much chance of success amongst the successors and disciples of the protester "*Against the monstrous Regiment of Women.*" The same body, "the Scottish Universities Union," proposes, we think with an equal prospect of success, to support Dr. Prosser James as a candidate for the Universities of Edinburgh and St. Andrews in case of Dr. Lyon Playfair becoming Master of the Mint.

Dr. Richardson's first lecture in the present session was delivered on Tuesday last, and was largely attended. The subject was the new anæsthetic "Chloral." The properties of chloral were demonstrated by numerous experiments. The lecturer showed, we believe for the first time, that chloral was capable of exerting its narcotic effects on animals of different and widely separated rank in the animal kingdom. Frogs, fish, mice, rabbits, and cats were in turn placed under its influence. A large carp was sent into the most perfect sleep by Dr. Sedgwick, who assisted the lecturer, by the subcutaneous injection of five grains of chloral. We believe that to Dr. Sedgwick the suggestion of this experiment is due, and it was, we suppose, unparalleled in the history of fishes. Altogether the lecture was one of great interest.

THE SOCIAL SCIENCE CONGRESS.

At the close of a long debate on Infanticide on Thursday, the chairman, Sir J. Eardley Wilmot, said that they had spent a whole day in coming to conclusions which all the world had come to long ago. Under this sarcasm was concealed no small praise. If one long and rainy day's debate did really teach the well-dressed crowds of enthusiasts who flocked to the meeting some positive conclusions on complex questions in politics or morals, that day was well spent. Anyhow the founder of the Association may be proud of his work; not the least result of it is the fact that so many persons come to learn, and care to know, how to mitigate some of the most pressing ills of civilised life.

DEATH OF THE SUPPOSED FENIAN KELLY.

An accident occurred last Wednesday week by which a man was brought into King's College Hospital with a compound fracture of the skull. Considerable excitement has been caused by a report that he had been identified as a well-known Fenian who had escaped from the Manchester police-van in 1867. The marks which seemed to identify him were the colour of his hair, an absent tooth in the lower jaw, and a scar on the abdomen. It seems that Kelly had brown hair, while this man had hair of a reddish tinge; the height differed also, as the deceased was nearly 5 feet 9½ inches, while Kelly was only about 5 feet 7 inches.

On looking closely, it was observed that no tooth was missing in the lower jaw of the patient, but the second incisor on the left side had grown backwards, so as to give the appearance, when the mouth was closed, of an absent tooth. In the upper jaw the first bicuspid on the right side was broken, and the second bicuspid on the same side was absent. There was a very faint white scar on the abdomen, about halfway between the pubis and umbilicus, and an inch to the left of the median line. An inquest was held at King's College Hospital last Tuesday, when the question of identity was set at rest, and the man's real name was found out to be Edward Martin.

CHOLERA AND FAMINE IN INDIA.

In the news which is furnished by the last mail from India we read of cholera, drought, scarcity, and anticipated famine. This is especially the case in Upper and Central India. In Rajpootana, so famous for its droughts, which are historical, its sandy thirsty soil, and brackish wells; in Hissar, towards Delhi and bordering on the

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desert track, the district officer expects "a calamity such as has not happened within the memory of man in that part of India." In the Punjaub a second year of drought is fully anticipated. In the whole district from Allahabad to Kattywar on the Indian Ocean all the young shoots of vegetation are parched up and burnt, but especially in Rajpootana, or the ancient kingdom of Ajmere. Joudpore, it is said, must be abandoned, for there is no drinking water. In Marwar and Haraota all the land is waste, the cattle perished, fever and cholera everywhere. In Gwalior not less than 2000 have died in three weeks' time. The bodies and burning piles are sickening to see. "When the list of those who have passed to the graveyards shall be made up, it will show an array of officers, delicate women, stout soldiers, and children painful to contemplate." With this general prevalence of the malady, it is in Umritsir, the proud and ancient city, chief mart and place of manufacture, that the cholera holds its reign. The city has 135,000 inhabitants, it is surrounded by walls, and lies in a waterlogged hollow. The drains in ordinary times are most offensive. Every year there is some epidemic—cholera, fever, or smallpox. In 1867-8 the death-rate was 59 per 1000. Just now there is panic in this city, and nearly all strive to get away from it. When the deaths from cholera rose to 2000 a month, the Medical staff, previously inefficient, was increased, and the drains attended to. The authorities were warned by 17 cases in May and 38 in June. August came, and the fatal cholera cases rose from 28 on the 1st to 104 on the 10th, and 118 on the 14th. "When the daily average became 90, it was discovered that the native beds (charpoys) on which the dead were carried out were taken back into the city, and the shrouds worn again by the living." Such horrors are with difficulty outdone.

FROM ABROAD.—M. LORTET'S ASCENT OF MONT BLANC—DECAY OF THE INFLUENCE OF THE FAMILY DOCTOR.

ASCENTS of Mont Blanc have of late become of too frequent occurrence for their narration to excite any interest in any but a specialist of the Alpine Club. Two, however, performed last summer by Professor Lortet, of Lyons, are exceptional in this respect, as he carefully examined by aid of the most improved instruments the effects produced upon the respiration, circulation, and animal temperature. The ascents were made at short intervals—viz., August 17 and 26, and he has since communicated the results of the observations made by aid of the anapnograph, the sphygmograph, and thermometer, to the Académie des Sciences, besides publishing them in full detail in the *Lyon Médical* for September.

Before making these ascents he was somewhat incredulous as to the reality of the existence of that disturbance of functions known as *mal des montagnes* or mountain sickness, believing that the imagination had more to do with this effect of rarefied air than travellers chose to admit. Frequently ascending Mount Rosa to the height of 4300 metres without undergoing the slightest inconvenience, he felt sceptical as to the effect of the additional 500 metres. The experience of these ascents has, however, convinced him of the reality of the occurrence. The nausea, breathlessness, and somnolence attendant upon this last portion of the ascent left no doubt as to the reality of the suffering produced by the rarefied atmosphere. The summit once reached, all ill effects subsided, except the breathlessness caused by any exertion. One of the party vomited the whole time, and on examination his temperature was found reduced to 32° C. under the tongue, the pulse being rapid and powerless. Leaving aside M. Lortet's graphic description of the ascent, we may cite the principal results of his observations. 1. As regards *respiration*, he found the number increase from 24 at Lyon and Chamonix to 36 at the summit of Mount Blanc, the breathing being very short and oppressed even when quite still, and the slightest movement inducing breathlessness. After two hours' rest these effects gradually diminished, the respiration descending to 25, but always remaining painful. Traces were taken by the anapnograph, and from these it appears that the quantity of air inspired and expired on the summit is much less, and the duration of the inspiration as compared with that of the expiration is much shorter. The quantity of air inspired is very small, and as this is submitted to a very low pressure, the amount of oxygen brought in a given time in contact with the blood is necessarily very small. 2. *Circulation*. Although the ascent was performed very slowly, the pulse rose in an extraordinary manner, mounting up progressively from 64 to 136, and at the final effort to 160. The vessel seemed almost empty of blood, the slightest pressure arresting its course. During the last 300 metres the veins of the hands, arms, and temples were distended, the face being pale and somewhat cyanosed. All the party, including the guides, experienced the heaviness and somnolence, often very oppressive, due probably to a stasis of venous blood in the brain or to defective oxygenation. After two hours' rest at the summit, the pulse still continued to beat between 90 and 108. Numerous sphygmographic traces are given, not only exhibiting the conditions of the pulse in M. Lortet's person, but also in that of Cupelain, one of the most experienced of Alpine guides. Although in him the *mal des montagnes* exhibits itself by no remarkable symptoms, the sphygmograph indicates that he nevertheless is subjected to functional disturbances. The sphygmograph applied under these circumstances exhibits curves having an exact resemblance with those termed by M. Marey "*courbes d'algidité*." The pulse is so wretchedly small that the spring of the instrument is scarcely raised. This alone would indicate a general cooling of the body, the reality of which diminution of temperature has otherwise been shown. 3. *Temperature*. This was carefully taken at various altitudes by placing a Walferdin thermometer under the tongue. *While walking* the diminution of temperature was very remarkable, and proportioned to the altitude attained. M. Lortet's temperature, from being 36·3° C. at Chamonix, descended gradually as he mounted up, until at the summit it had become as low as 32° When in a state of immobility, however, it remained at 36°, as at Chamonix. During the muscular effort necessary for climbing the temperature may descend by 4° or even 6° C., which is an enormous descent; but after a few minutes' rest it regains nearly its normal point. At the summit as long as half an hour is required before the readjustment takes place. Since his return to Lyons, M. Lortet has found that the rapid ascent of the moderate hill which overhangs that town suffices to raise the temperature from three-tenths to seven-tenths of a degree. These observations apply, however, only to climbing while *fasting*, for, notwithstanding the efforts required if these be performed during the digestive process, not only will the 36° be maintained, but a rise to 37·3° may be noted. About an hour after the meal the body again loses its temperature under muscular effort. The chilling M. Lortet explains by the large amount of calorie which under the efforts incident to climbing is transformed into muscular force—an amount which the economy is only just able to furnish. Although the body may be burning, and covered with sweat under the exertion of mounting, it yet loses heat, and frequent halts are necessary for the regeneration of this. It is, in fact, but another exemplification of the law developed by Meyer, Joule, and Tyndall, that heat and motion are but different modes of action of the same force. M. Lortet suggests that this loss of heat ceases during digestion, probably on account of the acceleration of the general and capillary circulation, and also from the extreme rapidity of the absorption of the aliment. This explains the custom of the guides insisting upon eating about every two hours, but unfortunately, after 4500 metres have been attained, the loss of appetite becomes so great that even a few mouthfuls are swallowed with difficulty.

In a recent article in the *Presse Médicale Belge*, Dr. De Smeth, a distinguished Practitioner of Brussels, makes some observa-

tions which certainly indicate a feature of our times as regards the relations of Practitioners and their patients. He is treating of insanity as observed in children and the various forms which it assumes, and the peculiarities of conduct which may give rise to fears of its occurrence:—

"The considerations which we have sketched, and in which we have been able to indicate the principal points of a too neglected subject of study, seem to us sufficient in order to place its importance in a prominent light. The part which the Physician is called upon to play under these circumstances assumes a special character in its importance and its intimacy, and may be exerted with a prestige and efficacy that defies all comparison. The enlightened guardian of the moral and physical health of the families that honour him with their confidence, he may, by impressing a wise discretion on the culture of the faculties, successfully combat an innate or acquired predisposition to this, the saddest of maladies. His counsels, sought for on all important occasions, may prevent parents, blinded by their ignorance from engaging their children in courses but little conformable to their aptitudes, and the pursuit of which ends only in mediocrity or disappointment, when, as a consequence of disproportioned efforts, it does not lead to insanity itself. . . . . But our concurrence is scarcely ever invoked in these circumstances but to witness the irreparable consequences of a situation, the menaces of which we might have counteracted. Distant are those times, and living only in the memory and regrets of some of the seniors of our calling, when the Physician was the friend, the habitual adviser, the tender and enlightened confidant of the joys and griefs of families, wherein intimate and frequent relations imparted to him a profound knowledge of the moral, physical, and intellectual organisation of each of its members, and a long experience enabled him to appreciate the effects of hereditariness, prior disease, temperament, constitution, and idiosyncrasy in patients whose fidelity never failed him. All this is changed. Learned men and practical *par excellence*, we are now too much engaged with the disease to think much about the patient. We repair the human machine much as the watchmaker does a disordered clock, and any communication foreign to the matter would be repressed by a satirical smile. The public has not misunderstood this radical transformation which has been brought about in the Medical tendencies of our own times. As a general rule, it is rather the curer of diseases that is called in, than the Physician, in the noble, broad, and philosophic signification which the word imports, and which we are all so much interested in preserving to it. The indifference with which we are chosen, the reticences in the avowals that are made, the ease with which we are abandoned, and the limited nature of our action by confining ourselves to intervention in physical suffering, ought to convince us that, by failing to recognise human duality and the relations of the physical and moral being, we divest Medicine of a great portion of its dignity, prestige, and utility, and debase our Profession to the level of the veterinary art. Let us hope that these doctrines will not prevail much longer, and that a just appreciation of the moral position which belongs to us, by virtue of the powerful and reciprocal influence of the two principles which govern human nature, will impel Medicine on a course where the intelligent practice of our art will be actively seconded by the consideration due to those who exercise it."

Although there is doubtless some truth in Dr. De Smeth's exposition of the altered relationship of patient and Practitioner, and the diminished influence of the "family Doctor," yet it is only part of the truth, for much is attributable to the restlessness, ubiquity, incertitude, scepticism, and credulity of modern society.

THE ST. BARTHOLOMEW'S DINNER.

(*From a Correspondent.*)

The annual dinner of old Bartholomew's men was held this year in the hall of the Hospital. The company was painfully reminded of the incongruity of festivities in such a place by the prompt suppression of an attempt at cheering called forth by the proposal of the chairman's health. It has been suggested that the chapel at Kensal-green might be a suitable place of meeting for next year. There, at all events, there would be little risk of disturbing the sleepers. The depressing influence of the place, the chief decorations of which consist of endless columns of pounds, shillings, and pence, together with the knowledge of the crisis through which the school is passing, sufficed to make the proceedings somewhat tame. Mr. Paget, in proposing the health of the governors, stated that the Medical Council of the Hospital were at perfect concord with them on all matters relating to the Hospital, including the Casualty Department; but that this was not the time or place for entering into discussions upon them. The statement sounded something strange to those who knew that recommendations for the improvement of the department referred to had been made by the Medical Council many months ago, and had been completely shelved by the governors or their representatives ever since. Concord on such terms would seem to be somewhat dearly purchased. Dr. Mayo was present at the dinner; but Mr. White, the treasurer, who has usually been a most important personage at these meetings, was not there. We also notice that his health was not drunk, nor was his name mentioned.

THE SOCIAL SCIENCE CONGRESS AT BRISTOL.

(*From our own Correspondent.*)

The first and most appropriate public act of the Congress was the attendance at divine service in Bristol Cathedral, on Thursday, September 29, after which a sermon was preached by Dr. Ellicott, the Bishop of the diocese. It is scarcely our province to criticise this sermon, but we may say that the Bishop's tone was manly and independent, and whilst welcoming the Congress, he reminded the members present that a far higher set of influences were necessary for combating the evils of our time. He said:—

"Though the influence of the three evil forces—vanity, selfishness, and selfwill—is beginning to tell upon society, still there are two great moral forces, deeper consciousness of brotherhood and greater earnestness of purpose, which are daily becoming more and more operative. But we must not count too hopefully on such things. Moral forces have their range and their influence, but they will never save souls; they will never heal those that are oppressed of the devil. If we would be true social reformers, we must evangelise. If we would ever hope to restrain some of the most appalling sins now existing in society, we must teach and preach, with the warmth and breadth of His own love, a personal and redeeming Lord; I believe all men of enlarged knowledge and sympathies are now becoming more and more practically convinced."

What we may venture to call the "minor key" thus pitched by the Bishop was maintained in the address delivered in the evening by Sir Stafford Northcote, the President, at the Victoria Rooms. His review of the nature of parliamentary government, and of the relation of the mother country to the colonies, seemed as it were pregnant with omens of evil, present and to come. His comments on charitable bequests and endowments harmonise with the growing sentiment, that the abuses are apt to exceed the uses of endowments and bequests. "The State," he said, "as it seems to me, would act unwisely in discouraging private endowments altogether. Yet in encouraging them it would do well to provide against their being so used as to thwart and impede public policy. It is suggested, first, that there should be a recognised public authority to which all proposed endowments should be referred for acceptance, and that this authority should have power to cancel the endowment if its acceptance should appear likely to be inconvenient to the public interests. In any case of disallowance in the lifetime of the intending founder he would simply retain the absolute command of his property. In the case of the disallowance of the terms of a will, the property would follow the testator's disposition of the remainder of his estate. Secondly, when an endowment had once been accepted, the terms should be strictly observed for a limited, but adequate, time after its creation. Thirdly, after the lapse of a fixed period, some public authority should be charged with the duty of reporting fully upon the working of the endowment, and of recommending any revision which might appear to be desirable." Passing in review the Health Department, Sir Stafford said "that the time is probably at hand when three new ministries

must be created; a Ministry of Health, a Ministry of Education, and perhaps (though on this point I speak with diffidence) a Ministry of Justice. The present day, however, is the day of Royal Commissions; that of Ministries is yet to come. More than one such commission is now inquiring into questions affecting the public health. We want a body of men able to withdraw themselves without inconvenience from the engrossing demands of private practice, and to devote themselves to the especial study of the public questions which require Medical attention. To a certain extent, of course, it is desirable that all Medical men should study those questions; and upon some of them it is necessary that they should be prepared to give opinions as cases arise. But the physical powers even of Medical men are limited; and it is impossible that a doctor in large private practice, with all the anxieties which such practice necessarily entails upon him, should give to questions of a public character the time and consideration which their importance demands. In the second place, when we have got our Medical Civil Service, how are we to turn it to the best account? If we are to have an organised Medical staff spread over the face of the land, some kind of local organisation will be required for it. The machinery cannot be wholly worked from London. The solution of this problem will, I hope, be materially assisted by the labours of the Royal Commission now sitting under the presidency of Sir C. Adderley." Sir Stafford touched in succession on the topics of the condition of the agricultural labourer, whom he desired to see emancipated from the influence of the Poor-law, on the humane treatment of animals, and on the place of women in the treatment of social questions. His address concluded with a few words on that most difficult of questions, how to reconcile central with local government. For it is a singular paradox, as the *Medical Times and Gazette* has more than once intimated that, whilst the labouring classes are now supposed to be competent to decide the most important points of home and foreign politics, central government seems necessary, in order to secure the commonest attention to the sanitary and other requirements of each district. The men who decide on the destruction of a hierarchy cannot be trusted to feed their own poor, or to cleanse their own gutters.

On Friday morning Mr. G. W. Hastings delivered his address as President of the Jurisprudence Department. Man's freewill, he said, disturbs the material universe. "The material universe is self-regulated, the forces appointed to vary the surface of the earth operate without fail for ever. But when we come to man we find a change. A moral element has supervened. The freewill, which is the grandest heritage of the race, has opened the floodgates of evil as well as the infinite possibilities of good. The actions of mankind, and the consequent development of society, do not spring from the spontaneity of mechanism, but from the intellect of choice. His destiny is so ordered that invention is a necessity at every stage of his progress, and each step that is gained brings some new obstacle to task his energy. Human society has to win its way through toil, privation, and disease; civilisation slays its tens, and finds only that it has its hundreds to cope with; and these manifold evils that grow so persistently with the good fruits of man's companionship have to be repressed where that is possible, or regulated, if they cannot be repressed, by the strong arm of the law." He summed up the improvements effected in the last few years in the theory and practice of the law, and pointed out those yet desiderated, and especially the want of a public prosecutor, in his address, which was terse, consecutive, and well wrought from beginning to end.

In the Reformatory Section, Dr. Lankester read a paper on Infanticide, and the question whether it can be diminished by legislative enactment. This crime, he observed, was almost confined to domestic servants. During the last seven years he had held inquests on the average on seventy-one of these children per year. In the present state of the law infanticide seldom met with punishment, and the most absurd, unscientific, and ignorant views were taken as to how the child came by its death in order to save the woman's life when she was sent for trial. He expressed the opinion that our legislation of the past seventy-five years had rather encouraged this crime.

Mr. A. Herbert Safford read a short paper, in the absence of Miss Griffiths, on the prevention of the offence. It might be fairly taken that as the majority of the murdered were the children of servants or young women in light employments, there was some cause beyond the shame common to all, which induced these women to be especial sinners against the sixth commandment; might it not be that women so situated would not be able to procure employment while nursing their infants? He suggested that an Act of Parliament should be passed authorising charitable societies to receive illegitimate children, and to proceed before a magistrate against both the fathers and mothers for their support. These societies should receive any pregnant single woman, and after her confinement endeavour to procure her employment. The children would be educated and placed out in life by the societies. The societies would proceed before the magistrates for an order upon any defaulting parent for such weekly sum as, having reference to his or her position, the magistrates should deem fair and reasonable.

Mr. B. B. Baker urged that putative fathers should be made to pay for their illegitimate children according to their means and position, and that the wealthy man should be mulcted in a heavier sum than the labourer. Dr. Macmillan thought that a lying-in charity should be established where women could quietly get rid of their burdens. Colonel Ratcliffe took the view that greater censure should be brought upon the man, and that, in addition to a money fine, he should be subject to a penal chastisement. Mr. T. W. Saunders, Recorder of Bath, pointed out the difficulty of finding a woman guilty of wilful murder, because Surgeons would rarely swear that it was impossible for the death to be the result of some accident or excitement. The offence was committed, not to avoid periodical payments, but to avoid the shame and the loss of service. Servants concealed their condition and killed their children, and in a few hours went on with their daily work, and hoped that nothing would be found out. Such remedial measures as refuges would do nothing for this class, whose object was to conceal their condition. He suggested an alteration in the law of murder, whereby it should be competent for juries to find the woman guilty of "Infanticide"—that is, killing the child about the period of its birth—and that in such cases a larger measure of punishment should be inflicted than for concealment. Dr. Elizabeth Blackwell, of New York, said she had had considerable experience in the Hospitals of New York, and wished to draw attention to two points. The first thing was that it would be very injurious to enact any severe measures on the woman, because it tended to produce what was a greatly increasing crime—that of abortion, which was a tremendous evil in America, and was causing great anxiety amongst the population and attention on the part of the legislature. No severe measures should be enforced against the woman for killing the child, as it would tend directly to increase abortion. Men constantly brought women to abortionists for that crime to be produced, and it was desirable to avoid the furtherance of that most deadly crime, with which, in her opinion, infanticide was not to be compared. The second point to which she directed her attention was the great advantage of private charities to meet these cases. In New York such cases were dealt with in the Hospitals, and in the majority of instances the women were sent out entirely redeemed, and with employment procured for them. Mr. Aspland, of Manchester, suggested that the evil would be stopped by a systematic registration of all stillborn children. Mrs. Meredith, who has recently paid many visits to the female prison at Brixton, gave some information on the subject, which was of a startling character. With regard to the women imprisoned for child-murder, they had a kind of sisterhood about it. She believed that killing children was the most difficult thing a human being could do. No woman could do it unless taught how to do so. She disbelieved that any young mother for the first time mastered that wonderful art of bringing a child into the world and killing it. There was one young girl of 16 who was confined in the workhouse, and was there taught how to kill her child, and now she knew that art she would no doubt practise it again if she had an opportunity. It was thought quite a mean thing by these women if one was found out in such a matter. Mrs. Meredith thought that while Brixton prison was such a school of crime, it would be futile to attempt to check infanticide. One of the women discharged from prison had confessed the method she adopted—"You can turn their tongues, and then you can bring them back before they get stiff." Mrs. Meredith said that the superintendent of Brixton allowed the prisoners to converse with each other. Dr. Green stated broadly that no woman in her sound mind wilfully and deliberately destroyed her offspring—nothing but active insanity or desperation at the time would drive her to it. In the majority of cases death was caused by neglect. The law could do much to diminish infanticide. It could declare the offence not punishable by death. There should be some asylum for women placed in this position. Miss Carpenter also advocated the removal of death punishment for infanticide. There ought to be as strong a feeling against the unchastity of the man as of the woman. Dr. Lankester replied to the various

speeches, and after endorsing what had been said about workhouses, he strongly urged that seduction should be made a crime. It had been said that there had only been one child murder in Bristol during the year 1868; but he found that there were sixty-four cases of "found dead," and according to his calculations fifty of those were newly-born children. Another phase of the matter was that one woman out of every six who delivered herself died as a consequence of her temerity. His summing up of what the law could do mainly suggested the abolition of death punishment for infanticide; but Mr. Safford, who followed, was adverse to this view, and suggested a power of returning a verdict of "murder with mitigating circumstances," like the French method. The Chairman briefly reviewed the opinions of each speaker, and then left several questions for the consideration of the section. The first of these questions was—That this section recommends that the punishment of infanticide by death be abolished. The second was that the registration of stillborn infants be recommended to the Legislature. Thirdly, that the Home Secretary be recommended to publish, with the statistics of coroners' inquests, the number of newly-born children found dead.

It was proposed further, "That the association recommends that asylums for the reception of pregnant single women be established as a means of preventing infanticide." As there was not a perfect unanimity on the subject, the question was withdrawn. A sharp discussion ensued upon a proposal to recommend that seduction be made a criminal offence, Mr. Saunders in particular strongly condemning a resolution improperly considered, and which, he said, would make the commerce of the sexes a penal offence. This question was also withdrawn, owing to the difference of opinion, and the chairman (Sir J. Eardley Wilmot) remarked that they had spent a whole day in coming to conclusions which all the world had come to long ago.

In the Health Department, the leading feature of the day was a paper by Dr. Budd, on the question "Can the Government further beneficially interfere in the Prevention of Infectious Diseases?" He argued first on the vastness of the brood of infectious, self-propagating diseases. He exhibited a summary of the deaths from all causes in the metropolis in the years 1863 and 1866:—

Deaths from all Causes in London.

1863.			1866.		
Small-pox	2,012		Small-pox	1,388	
Measles	1,698		Measles	2,259	
Scarlet Fever	724		Scarlet Fever	1,885	
Hooping-cough	2,229		Hooping-cough	2,983	
Continued, Typhus, and Enteric Fevers	2,892		Continued, Typhus, and Enteric Fevers	2,681	
Cholera	154		Cholera (Asiatic)	5,577	
Other infectious diseases	335		Other infectious diseases	420	
Hydrophobia	2		Diphtheria	431	
Glanders	3		Glanders	2	
	10,049			19,626	
Phthisis, or consumption	7,991		Phthisis	9,277	
Other tuberculous affections	3,106		Other tuberculous affections	3,121	
	11,097			12,398	
Deaths from all other causes	48,837		Deaths from all other causes	49,784	
Deaths from all causes	69,983		Deaths from all causes	81,808	

For this purpose London alone is chosen because the *data* lie near at hand, and also in order to show what infectious disease is in our great towns, and in London as chief among them. The year 1863 is taken because it was one of about average prevalence of sickness—the year 1866 because it was marked by a great epidemic. For the sake of comparison, the members of the self-propagating group are placed together at the head of each list. The table shows that in 1863 the total number of deaths from all causes in London was 69,983; and of these the infectious group was answerable for 10,049, or about one-seventh of the whole. In 1866 the total number was 81,808, and the number from infection 19,626—a truly enormous multitude of persons to die in a single city, in a single year, of one class of diseases—the infectious class as at present recognised. But no scientific man supposes that this group can be considered to be finally constituted. What most marks the progress of this branch of science is the rapid way in which diseases are being added to the infectious group. It was but the other day that enteric fever and Asiatic cholera, which appear in these tables against such high figures, were registered, by the same able registrar as at present, in an entirely different class. What if you should soon have, and I believe you will have, to add consumption and other forms of tubercle to the list—what if, as I more than suspect, you should soon have to transfer to it other types also—types widely separated in our present classification? For 1863 the number of persons who died in that year from tubercle in London was almost exactly equal to the number that died from the recognised infections. The addition of consumption to the list would, therefore, raise the proportion from one-seventh to two-sevenths of the whole mortality. When all the really self-propagating diseases are put in their right place they will be found to be chargeable with nearly a third of the total number of deaths, and with nearly half of the occurring sickness. They are propagated by some distinct material cause, which, although multiplying within the living body, passes through phases in which it is often entirely within our power, and in which it may be effectually dealt with. In the non-infectious group the work of prevention is remote, indirect, and too often feeble. In the infectious it is direct, signal, and decisive. We may often protect an entire community from impending and wholesale mortality. These two points settled, it still remains to ask whether our knowledge of these diseases, and of the mode of their propagation, is yet sufficiently clear for the guidance of legislation? To prevent infectious disease, the only thing required is to destroy the infectious seed as it issues from the body of the already infected man. To do this is doubtless difficult, but it is in no sense impossible, especially as we know from what surface or surfaces of the body all the great infections escape. All that is needed is the fitting organisation to give effect to knowledge, and this organisation can only be supplied by the State controlling or compelling individual action for the general good. In order that Government may interfere with effect, our present machinery must be greatly enlarged, radically altered, and endowed with new powers—with power, above all, to abrogate finally the permissive character of our present sanitary legislation, and to do away with that form of liberty to which some communities cling, the sacred liberty to poison unto death not only themselves, but their neighbours. After dwelling at some length on the practical lessons taught by the successful war lately waged against cattle plague and sheep-pox, Dr. Budd proceeded to describe the omnipresence of the diseases against which he desires to contend, and to point out the inadequacy of the existing sanitary machinery to cope with them. What we have is a small board of very able men, largely occupied, among other things, in writing very excellent reports. What we want is a standing army, well-trained, and ably commanded, to garrison the land. The paper went on to describe, by way of illustration, the practical measures that would stop the spread of typhoid fever and that had been uniformly successful in the writer's hands, leading to the inference that a disease that kills 15,000 English people annually, and that sickens 140,000 more, might be altogether abolished and driven out of the land.

The discussion which followed was mainly concerned with the question of the expediency of Government interference. Dr. Trench would say "Don't let the Government interfere any more till those who are our teachers are more prepared to help us and educate the general public for interference." He said that the local authorities had power to disinfect, and it was a penal offence for a man to move from a dwelling clothing or materials that had been in contact with infectious disease. Dr. Davies, health officer of Bristol, differed from Dr. Trench in his views as to further Government interference. There was a clause in the Sanitary Act of 1866 giving the local authorities power to make by-laws for the carrying out of the Act, but the power was permissory and not compulsory, and he asked how many local authorities had availed themselves of it. He had for three years been trying to get by-laws under the clause, and had not succeeded, and though he saw daily overcrowded and dirty houses, he had no power to act. There was also a power under the Sanitary Act of 1866, for local authorities to erect Hospitals, but these Hospitals were not limited to infectious diseases. They had stamp d out typhus in Bristol. Dr. Rumsey criticised the remarks of Dr. Trench. To postpone State action till the people were educated would be to reverse the great principle which was started years ago by Dr. Chalmers, and which he called "the aggressive policy," or, that where people were uneducated and ignorant of the laws of health, they must be taught, and until taught must be compelled to observe those laws. Until education was universal they must have laws to compel action which might be beneficial to the community. Mr. G. Godwin moved a resolution—"That this meeting is of opinion that not merely can Government beneficially interfere in the prevention of infectious diseases and the general promotion of sanitary reform, but that it is imperatively called on to move at once and resolutely to arrange and simplify existing laws, to

make sanitary registration compulsory, and to assist in obtaining for the people pure air, pure water, and pure food." Mr. Michael stated that he should also move this resolution—"That in order to secure the efficient action of sanitary law, it is desirable that a special department of the State should be created for the supervision and regulation of the public health." Dr. Trench explained that his meaning was that until they put into effect the laws which they already had, they did not require further interference. Dr. Budd argued that the ignorance of the people, about which so much had been said, was the strongest of all pleas for the interference of the Government. Dr. Macmillan, of Hull, regretted to say that the standard of municipal authorities has been going gradually down, and he must say that the poor ratepayer had really got the whole of the management of local government. There were men upon these boards who ought to be educated up to a certain standard; certain powers had thus been placed in wrong hands; and in fact these men were not the right men in the right place. How could they alter that state of things? Let them apply to Government and have Medical men elected under the supervision of the Government, and if those Medical men were judicious and able to do their work, he had no hesitation in saying that the action of the Government would prove beneficial as regards the election of Medical officers. Dr. Baylis, Medical officer of Birkenhead, thought no one could conscientiously say that the same attention was paid to save the lives of the people as was paid to save the lives of cattle.

A paper by Dr. Hardwicke on the same subject was read by Captain Clode, the Secretary of the Health Department. The author was of opinion that an officer of public health should be appointed in every town or district where at present no such officers existed, and that it should be compulsory upon persons in charge of Hospitals, workhouses, schools, etc., to prepare and keep a register open to the public, containing the names and addresses of persons under their observation or treatment for contagious diseases.

On Friday the first event was Canon Kingsley's address on education, for which he claimed the rank of a natural right. "I hold that whatever natural rights a human being brings into the world with him at his birth, one right he indubitably brings—viz., the right to education; that is, to have his faculties and capabilities educed, brought out; at least so far as he can see for himself what there is to be learned, and what there is to be done in the world in which he must needs live, and what of that he himself can learn and can do. Of course it follows that he has a right to demand education first from his own parents. They are responsible for him, not merely to the State or to God—they are responsible for him to himself. But if his parents will not, or cannot, give him education—and that too many will not, who does not know?—if parents, I say, will not, or cannot educate, of whom is the child to demand his natural right? I answer, from the State. And if the child (as is the case) is unaware of his own right, and unable to demand it, it is the duty of all good citizens to demand it for him." Not only was the State bound to give, but to employ compulsion, if need be, that all children may receive education. "It is the duty of the State, then, I hold, to educate all alike in those matters which are common to them as citizens; that is, in all secular matters, and in all matters also which concern their duties to each other as defined by law the next question is, who shall pay for this national education? I say the State, reimbursing itself of course by taxes of some kind; taxes which shall touch the parents, who are immediately responsible for the existence of the children; and next the employers of labour of every class, because they, for their own profit, have made the existence of these children possible. Every one acquainted with the very alphabet of political economy knows what I mean." Neither must education be confined to words or theories. "Let us see that our primary education, and still more our advanced education, includes some better teaching of nature and of fact. Let us see that the children of these realms are taught, if not the principles of physical science, at least some of those habits of careful observation and sound induction which alone make physical science—indeed which alone make health and wealth upon this planet—possible. I say that this study of physical science alone cannot give us a sound foundation for any higher education whatsoever, if the higher education is not built on the knowledge of nature and fact, which are, as Bacon says, the voice of God himself revealed in things. You may train a generation of fanatics, bigots, dilettanti, pedants, mandarins, or other children of Prometheus, the *à priori* dreamer; but you will never train them into the children of Epimetheus, the inductive and therefore truly practical philosopher—into men and women who, taking their stand on nature and on fact, know something of what can be done in this strange world wherein God has placed them, and something of how to do it. No one is more deeply convinced than I am of the need of sound religious teaching. But no one is more deeply convinced than I am that even the best religious teaching, especially in these days, will bear but stunted and shrivelled fruit, unless accompanied by physical teaching; and thus supported (as all human thought should be), humanised in the minds of teachers and of children alike on a substructure of truth, reason, and common sense."

In the Health Department Dr. Symonds, the President, read a paper on the legislative measures that might be proposed to deal with cases of uncontrollable drunkenness. This will be found in another page. Dr. Beddoe read a paper on the same subject, contributed by Dr. Gairdner, of Glasgow. The President read the following resolutions which were to be proposed:—1st, "That it is the opinion of this department that the penal laws repressive of voluntary drunkenness should be extended, or at all events be more rigidly enforced;" 2nd, "That dipsomaniacs should be liable to deprivation of liberty, with a view to their protection and reformation." Professor Newman was of opinion that they should first put down drink shops. The fault of much of their legislation was that they dealt with results and overlooked causes. Dr. Martin, of Warrington, was inclined to agree with a good deal of what Professor Newman had stated, on the ground that prevention was better than cure. He also thought that Government should be urged to remove the temptations—the drinking places—from the doors of the poor people. Dr. Taylor thought that Government should educate the people and open to them places of amusement, which were now almost sealed. Mr. Towell, Oxford, said that drunken habits were now almost confined to the lower classes of society. Dr. Lankester maintained that drunkenness was not on the increase. The evil was a great one, but they ought not to exaggerate it. As coroner for Middlesex, he thought he might say that one-half of the cases which came before him were traceable to alcoholic drinks. He advocated an extension of education and the teaching of physiology at schools. He thought also that publicans who sold drink to men who were already drunk should be punished, and that it was the duty of teetotallers, instead of opening filthy coffee-shops, to open decent places of amusement, where no alcoholic drinks were to be obtained. The Rev. N. Heywood thought that the resolutions did not go far enough towards the object in view. Mr. R. Charleton was of opinion that there would be a hazard in putting so much power in the hands of magistrates and police; but they might legalise the voluntary detention of persons who, under a painful consciousness of their own inability to resist temptation, were anxious to be confined. The resolutions were then proposed, seconded, and carried, the first unanimously, and the second with one dissentient.

Dr. Davies read a paper contributed by Miss Duck, "On some points of Hospital management." The object of the paper was to draw attention to this important point—that, whereas statistics of Hospital mortality had deservedly suggested the question whether Hospitals in their present form did not lead to the loss rather than the saving of life, no correct answer could be given to this important inquiry until due care was taken that two matters, on the necessity of which there could be no question in theory, were attended to in practice, *i.e.*—1st, that through want of cleanliness the patients be not exposed to infection; 2ndly, that through want of good nursing the orders of the Doctor be not neglected. To secure these two points an efficient internal organisation must exist, and what this should be Miss Duck afterwards described. Mr. G. Godwin said that all the cleanliness and attention advocated by Miss Duck would have no effect unless the Hospitals were properly planned and constructed. Dr. Lankester said it appeared to be a fact that the mortality in large Hospitals was enormous as compared with the mortality from the same diseases out of the Hospitals. He advocated separate wards or cottage Hospitals, and said it was a question whether the benevolent would not do better by giving money to the poor for them to improve their homes and remain there to be cured rather than go into Hospitals. Dr. Pearce said there could be no doubt that great Hospitals were a mistake. Mr. M. Whitwill said that what we wanted was well constructed Hospitals and good management in them. With regard to what Dr. Lankester had stated about the improvement of the dwellings of the poor, he said that unless the poor were taught how to nurse the sick and carry out the instructions of Medical men the improvement would not have the desired effect.

In the evening a meeting was held to which working-men

were specially invited, and which was the scene of some amiable sparring between Sir Stafford Northcote and the Rev. Canon Girdlestone, in which the latter was believed to show himself the better man.

Saturday morning's proceedings opened with an address on Economy and Trade, by the Right Hon. Stephen Cave, President of the Section. The chief point of interest to Medical readers was his denunciation of the "munificent bequest" system. In the Health Section, papers were read on Sewers and Sewage, by Dr. Carpenter, of Croydon, by Mr. J. V. N. Bazalgette; on the Sewers of Clifton, by Mr. S. Snead Brown: and on the Sewage System at Stroud, by Mr. R. Brudenell Carter. Excursions to Cheddar, and to the opening of a training ship for boys, wound up the day's proceedings amidst the deluges of rain which fell during the whole of the week.

On Monday, Dr. J. A. Symonds, President of the Health Section, delivered an address in the Victoria Rooms at 10 a.m. He said:—The duty of this department of the Social Science Association is that of considering such questions as regard the promotion of public health—that is, the health of large bodies of human beings. At first sight it might seem that if individuals and families take due care to preserve their health, the general health must be the result of it; or rather, its sum total. And if all that is required for the purpose in view were an intelligent and assiduous observance of such rules of life as produce well being, then the most promising line of operation for such associations as this would be that of promoting the education of as many people as possible in matters belonging to individual health. But all the efforts of individuals in conserving their own proper health would be incapable of neutralising some of the causes of disease diffused around them, unless aided by the co-operation of the public. In vain would a man be temperate and judicious in his diet, regular in his exercise, punctilious in his ablutions, and ingenious as to his house arrangements, whether for temperature or ventilation, or cleanliness, if the public sources of many of his requirements are deficient or corrupt; if, for example, the water supplied him is impure, if the air, which he is so careful to let in abundantly, is loaded with miasms, and if the well-ordered outlets of his dwelling are in relation with inadequate or obstructed public conduits and reservoirs.

The Effect of Epidemics upon the Public Mind.—All the zealous endeavours of the early sanitarians would have been longer in overcoming the public indifference had it not been for the epidemics which befell us. The influenzas of 1831 and 1837, and the awful cholera visitations of 1832 and 1849, struck a terror into the people that shook them out of their torpor, and made them consider their ways and their sanitary sins and shortcomings, and disposed their hearts to listen to the sermons and admonitions of the apostles and preachers of hygienic righteousness.

Suitable Amusements.—The great misery of the world is not dying, but dragging on a maimed, mutilated existence, in which labour is suffering, and pleasure is a burden and disappointment, a state without spring, and without light or colour, or at best a dull, monotonous *chiaroscuro*, which, if not distressing, is utterly joyless. Yet to vast multitudes life is nothing better, because in the districts inhabited the fountains of life are inadequate, or are adulterated and poisoned. We cannot very much wonder that the artisan, dulled and half stupefied by the close air and ill odours of the workshop and the lodging, or by the fumes of the factory, should reel into the cheerful beerhouse or the glittering gin-shop, craving for some temporary relief to his weariness and depression. I need scarcely remark *en passant* that one of the most crying wants of the community, with regard to public health, is provision for unobjectionable amusement. In supplying his needs it is not enough to give him oxygen in plenty, and pure water and wholesome food: he has to be entertained as well as fed. Recreation and play are as necessary to mankind as are food and raiment. And if there are not sources of rational and innocuous amusement, then there will inevitably be riot and debauchery. An enlightened and refined community will some day provide for these things. It will not, as of old, be left to self-seeking, ambitious consuls and emperors to corrupt the people with "*panem et circenses;*" but governments will keep a paternal eye over the sports and amusements, as well as over the health and the toil of the great mass of the community. Here, however, we are encroaching on other departments. But indeed it cannot be otherwise than that the departments should occasionally overlap each other. The mind and the body, the body and the mind; the laws that bind, and the laws that loose; the knowledge that strengthens and enlivens; and the economy that provides and husbands the resources of life and strength; all of these in their several requirements and operations are perpetually crossing and interpenetrating each other as the unavoidable result of the compositeness of man's constitution, and of its correlative wants.

Vaccination.—Those who can remember, as I can, the time when the nation was just realising the benefit of Jenner's transcendent discovery in the new sense of security to life, and, I may add without any hyperbole, in the renaissance of the beauty of men and women; those who can remember that time, and the infinite labour expended in reasoning and preaching, and pleading, and persuading a doltish and prejudiced people to profit by the beneficent light which, through a genius all but divine, had been flashed upon them; those who can remember the hard emergence of human life and human beauty from that period of desolation and disfigurement, are shocked by the levity with which doubts are now thrown upon the value of vaccination, the most precious boon that any one man ever conferred on his fellows. I may state that since I put down these words, I have read a report of a quite recent discussion, in the French Academy of Medicine, of this fear of contamination from cow-pox; and I am glad to say that the result was enormously preponderant against the alarmists. And so I trust that compulsory vaccination will not give an inch to this foolish and petulant opposition.

The Work in the Future.—We talk of air poisons, and water poisons, and earth poisons, but we do not really know what they are. What is marsh miasm? What is the contagious substance, the *causa causans*, in small-pox and scarlatina? Are they living or dead things? Are they organic germs, capable of indefinite self-multiplication when once embedded in an appropriate nidus? Or are they new combinations of proximate principles, generated out of the death, decay, and disintegration of organic matter under particular conditions? The decision is not come to.

The Propagation of Epidemics.—And there are epidemics about which it is not settled whether they are propagated by contagion only, or by other means; or whether, owing their origin only to earth, air, and water, and organic matter, they are afterwards sown among a population by the first victims. To some it appears as heterodox to believe in a mere chemical septic origin of typhoid fever or cholera, as to believe in the equivocal or spontaneous generation of the lowest forms of life. The anxious, eager thoughts of inquirers fume and ferment over these questions in a zymosis, as energetic as the hypothetical process, which one section of the controversialists attributes to the object of their researches. But under the vigilant outlook and investigations of combined chemical and microscopic detectives, the latent offenders will some day be brought to light, and their mysterious genesis unmasked. Where there is so much room for guessing, I might not be seriously blamed for surmising that it is not improbable that the so-called poisons, though forms of life, and sprung from a remote ancestry, may, like other organisms, have undergone Darwinian metamorphoses in their long descent; that varieties have been constituted into species, that the *nova febrium cohors*, which suddenly alighting on a population, and perplexing and affrighting it with novel forms of havoc and desolation, may be transformed descendants of ancient enemies of man; that the plague of Athens in one age and country is in another the plague of Egypt, or the black pestilence of the middle ages, or the sweating-sickness of the Renaissance, or even the cholera of the second decade of the present century. But whatever the vagueness of our conjectures, the wildness of our speculations, or the strife of our controversies, it is a consoling fact that our scientific sanitarians can, in many cases, destroy the substances in which the invisible agents of evil lie dormant, whether by making their habitats untenantable, or incapable of maintaining their noxious life, or by chemically decomposing them as mere morbific matter. An admirable contribution to the science of disinfectants, and to the art of using them, has been given to the public in the present year by Dr. Angus Smith; and I cannot but add that my distinguished friend, Dr. Budd, who has devoted so much ability and so much toil to the elucidation of contagious diseases, has favoured the public with some valuable practical directions on the means of guarding against infection from scarlatina.

A cordial vote of thanks was passed to Dr. Symonds for his admirable address.

Monday's proceedings consisted chiefly of a debate on the Contagious Diseases Act, a notice of which is found elsewhere. On Tuesday the Health Section was occupied with the question of registration of disease, and the proceedings of the Congress were closed in the afternoon. We shall notice some details hereafter.

OPENING OF THE MEDICAL SCHOOLS.

CHARING-CROSS HOSPITAL.

The Introductory Address was delivered by Dr. Silver.

After welcoming old and new pupils, Dr. Silver proceeded to say:—At the present moment the utilitarian philosophy would seem to be all-powerful amongst us. Everything is judged by its results, be these good or be they bad. And there is a certain party of Medical reformers who would introduce what they consider the same test into Medical education. They would let the student loose, as it were, to go where he will, to study where he will, when he will, and how he will. They would only reserve the right of examining him at certain intervals, and would finally send him out into the world with the stamp of their approval, no regard being had to his training, but only to his capacity for passing certain examinations. Happily, however, all men are not of this opinion, for some of the most advanced thinkers of the day hold that the *training* is all in all, that *examinations* are very well in their way as supplying a means whereby a trained man may be readily distinguished from an untrained man, and that they thus constitute a valuable safeguard for the unskilled public; but that, after all, our efforts should be concentrated on the process of educating a Medical man, not on examining him. The best method of acquiring and utilising experience is surely a matter for consideration. Now it is against crude and imperfect rules of observation I have to preach my sermon. I uphold method as opposed to tact. No doubt certain men excel in tact, and in their hands it may be safe, but the exception does not constitute, if it does prove the rule. It is narrated of a famous painter that being called upon to give evidence of his skill as a draughtsman, he took the chalk, and, with a single sweep, formed a circle so perfect that when tried by the compasses it was found faultless. Is this any reason why ordinary men should not use compasses when employed on a mechanical drawing? Tact, the result of individual experience, is crude and imperfect, vanishing with the death of the possessor, but the rules of art are immortal, usually susceptible of improvement, but still capable of being transmitted from one to another, and sufficiently well defined to enable the student to be trained in their use.

I do not know that I can give a better reason for upholding and enforcing the necessity for training in Medicine than one which has been supplied me by the writings of Dugald Stewart. "In the mechanical arts," says he, "it is well known how much time and ingenuity are misapplied by those who acquire their practical skill by their own trials, undirected by the precepts or examples of others. What we call the rules of an art are merely a collection of general observations, suggested by long experience, with respect to the most compendious and effectual means of performing every different step of the processes which the art involves. In consequence of such rules, the artist is enabled to command the same success in all his operations, for which the unskilled workman must trust to a happy combination of accidental circumstances; the misapplication, too, of the labours of one race are saved to the next, and the acquisition of practical address is facilitated by confining its exertions in one direction. The analogy is perfect in those processes which are purely intellectual, and to regulate which is the great object of logic. In the case of individuals who have no other guide to direct them in their inquiries than their own natural sagacity, much time and ingenuity must inevitably be thrown away in every exertion of the inventive powers. In proportion, however, to the degree of their experience and observation, the number of these misapplications will diminish, and the power of invention will be enabled to proceed with more certainty and steadiness to its object."

In every department of science and art our own experience or that of some one else furnishes us with the rules for our guidance. This being so, it follows that every precaution should be taken so that no errors creep into our experience or into our observations and conclusions from them. Our sources of knowledge in Medicine are two—observation and experiment—but a crowd of isolated experiences are comparatively useless to a man, and certainly cannot be communicated to another; it is necessary to extract their essence, so to speak, to elicit from them some general principle, a neat and compact bundle easily handled, easily passed from one to another, and capable at all times of yielding up the concentrated essence of previous observation and experiment.

Placed by the bedside of a patient, we are brought face to face with a complicated mass of phenomena which we are bound to analyse; but we must set about the business not at random, but methodically, and herein lies one distinction between the trained and the untrained man: the one proceeds by rule and method, the other at random. But even at the very outset we run the risk of being drawn aside from the right path and of falling into the pitfall of some fallacy. Observation is a mental act, and consequently liable to be tinged in accordance with our mental condition. A man's previous training may be defective, as is not unfrequently the case, or he may have no training at all. If so he is almost certain to mix up what he sees or hears with what he infers from his observations; or, again, his mental vision may be warped by his fancies, by his feelings, by his prejudices, or by his preconceived notions. Herein lies the great objection to specialism, that it inclines a man's mind in one particular direction, not in observation only, but also in inference. But the untrained man has still another difficulty to contend with; proceeding by haphazard, not methodically, he is almost certain to overlook some symptom or other, and a single symptom not unfrequently completely alters the aspect of a case. It is sometimes urged, in opposition to the employment of a scientific method, that many of our greatest men of genius have made their discoveries in contempt for logical rules of observation or experience. This may be so apparently, not so in reality; and even though men of genius can afford to break rule and method, men of more ordinary capacity, we poor creatures of to-day, cannot afford to do so.

Thus, it will be seen that, in the simplest, the most fundamental process in Medical science, the chance of error is great. Need I tell you how much the want of due training intensifies the risk of going wrong. It has been said that there are more false facts than false theories in Medicine—that is to say, that the observations of many men are not to be trusted. Some of the fallacies I have already alluded to have crept in, and the so-called facts are untrustworthy.

I must also say a few words on the subject of experiment in Medicine. The great advantage experiment possesses over simple observation is that you can make as many experiments as you like, but you must wait for your chance of making an observation. Of experiment in this sense there is but little in pure Medicine, although the foundation of some of its departments, taking Medicine in its widest sense. One obstacle in the way of experiment in Medicine is the excessively complicated nature of the phenomena to be studied. To elucidate them, therefore, many separate experiments must be performed; the conditions of each must be varied as much as possible—in short, every precaution must be taken to prevent the accidental being mistaken for the essential concomitants of the trial. To do this well and with safety requires great experience. Examples of induction from experiment are most common in physiology and pathology. Consider how many attempts have been made to clear up the function of each portion of the brain, or to show how far tubercle can be transmitted from one individual to another. Neither question is settled, yet thousands of experiments have been made with a view to their settlement. Neither must it be forgotten that the multiplication of the means of research implies a corresponding increase of the chances of error in their use, and consequently the greater necessity for training in him that would employ them. It cannot be helped, but the two do go hand in hand. Increased risk of error cannot fail to follow extended means of investigation, especially in unskilled hands.

But I have already shown that a series of detached and isolated experiences—observations or experiments—are, comparatively speaking, useless, except some principle be extracted from them, and this can only be done by a careful sifting of the facts collected. They must be placed side by side, and compared and contrasted. By this means we can separate the true from the false. We can ascertain how much is inferred, how much observed, and so assign to each its true value. We can also see what is essential or uniformly present, and what non-essential or only occasionally making itself evident.

If we have a sufficient number of facts to deal with, we may now be enabled to make a generalisation of some value. But the bugbear of Medicine has been the general principles laid down on an insufficient foundation. Men have not taken the trouble to collect and compare; they have rushed to their conclusions, and these consequently have not been able to stand the test of time and experience. They have been overthrown, and their authors covered with ridicule. One of the most notorious instances of this is presented by homœopathy, the advocates of which assert that the law of *similia similibus* is as universal as the laws of gravitation. This portion of the pro-

cess of Medical research is peculiarly dangerous to the untrained man.

But there is still another difficulty in the way of the investigator, and that lies in the very words he uses. We know exactly what sense a given word conveys to our own minds, but we cannot know what meaning it bears to another. Words are in themselves real powers—by turns our masters, by turns our servants—capable of much evil if wrongly employed. Among Medical men the risk of mistake is greatly lessened by a technical language which facilitates the transmission of exact ideas from one to another, but the use of this language among the general public is to be looked upon askance. Take an example: The stomach, anatomically speaking, is an organ whose situation is strictly defined, but an Englishman's stomach generally implies the whole abdomen, and you will often find an Irishman's heart situated in the most extraordinary places. In common parlance, again, an artery and a tendon are synonymous and interchangeable, and so on. In another way words are apt to prove our masters. We have been instructed that for such and such a disease there is a certain remedy. Should you be told that a patient was suffering from this disease, you would be apt to prescribe what you had been told was the appropriate remedy. Here you would run full tilt into the error of treating the disease, that is a nonentity, instead of the patient, with whom alone you really have to do. Another objection to our terms lies in the fact of their frequent connexion with some long-vanished theory. What notion do such words as *tonic* and *alterative* convey to modern minds? But I might multiply this kind of thing *ad nauseam*.

I think, however, I have fairly proved from what I have laid before you, the dangers attending the use of imperfect methods in Medicine, as well as the dangers attending the mal-use of a nearly perfect instrument. I have, I think, proved to you how essential training in the use of this instrument must be, and how dangerous it must be to judge of a man's knowledge and capabilities by a cursory examination only. If a man has method there is much he can acquire for himself; if he be not trained in the use of scientific methods when a pupil, it is not likely he will acquire them afterwards. Consequently I think, as I have said before, that it is the training of the student rather than the examination which should engross our attention, and for this purpose the teacher's hands should be strengthened, not weakened. When men are students they have not come to the period of life when wisdom is at its maximum, and they are too often led aside from the path they ought to pursue by false lights and false teachers. Above all things strive to make yourselves masters of the proper methods of scientific investigation, to observe accurately, and to reason rightly.

What I have been telling you to-night has been simply the outlines of applied logic, which I think, as do many others, should constitute one of your preliminary studies. I have said nothing, and shall say nothing, as to your training in the sciences subsidiary to Medicine. If you have been properly instructed in these, so much the better. You will bring to the study of practical Medicine minds not only well stored with facts valuable in the elucidation of disease and its treatment, but minds well trained in the method of the sciences. But it is at the bedside and in the out-patient room you must acquire the practical art of observation, you must learn to generalise your observations; you must acquire principles which are to guide you hereafter, as well as practise the art of reasoning from these principles to isolated cases.

Now, for this purpose—viz., for that of training—are many cases required? I say no. In this all-essential respect you will find a small Hospital better than a large one. You may have dinned into your ears the superior advantages and attractions of large Hospitals and large schools, but for the purpose of training a small Hospital, provided it furnishes a fair variety of cases—above all, if it be properly utilised—is far better than a larger one. Men may talk as they please about the superior advantages of a Hospital with 500 or 600 beds, but what student can avail himself of that number? Practically, each student, if he is to study the art of observation and inference, must limit himself to a very few cases at one time, and, provided the number of cases be proportioned to the number of students, a Hospital with 120 beds is as good as one with 1200. I may be told of the immense advantages these large Hospitals present in the way of operative Surgery, but the Practitioner's life is not passed in performing Surgical operations; if it were so, the argument might hold good, but his chances of an operation are few and far between, and for my part I would rather trust to a man who had performed an operation once or twice on the dead body—to one who had used his own hands and his own head—than to one who had witnessed 200 such operations performed by others.

Above all things, I would encourage practical work on the part of the student; let him cultivate the art of observing and the art of experimenting. Experience and the assistance of others will get rid of the difficulties and fallacies first encountered, and he will thereby acquire confidence, and not confidence alone, but that which entitles to confidence. I have shown you how lying words are—how apt to mislead a man; it is therefore far better to see things than to hear them described. But as you cannot see everything, as in certain cases you must trust to verbal description, you must train yourselves not only in the art of understanding the words of others, but also of communicating your own ideas in exact terms to others. The words of Bacon, whose system I have to-night been trying to explain to you, are in this matter worthy of all respect and attention. "Reading," said he, "makes a full man, conversation a ready man, writing an exact man." Now, from the point of view I have to-night adopted, you may readily conceive which of these I would impress upon you. Exactness is with us all in all. Writing is that which will give this, and for our purpose there is nothing like accurate case-taking, for thereby not only is careful observation fostered, but the transmission of your own impressions to the minds of others is cultivated, and this, let me again assure you, is no slight matter. You will have teachers at your elbow to correct you, should you make a slip. We are anxious to do everything in our power for our pupils, and any feeling of diffidence should be laid aside in consulting us.

Gentlemen, I think I have said enough. I have shown that in your process of education training is the great thing to be aimed at. Crude experience is all very well in its way, and its way is to serve as the basis of general principles. But to have a trustworthy experience you must be trained in observation; to utilise it, you must be trained in mental analysis. Simple experience alone may make an empiric, it will not make a scientific Practitioner.

THE LONDON HOSPITAL.

The Introductory Lecture was delivered by C. Meymott Tidy, M.B., Lecturer on Chemistry at the Hospital, who commenced by observing:—

"To-day, gentlemen, is a day for old and young to meet, though the one turn his back upon the other—for old to look back, for young to look forward. Age may look back indeed to-day sad, serious, sober. How long it has laboured, how steep and uphill its path, how weak and nerveless its mightest effort, how small its reward has been; yet, maybe, it is not all so sad. Strong deep marks it may see left behind it—steps which its own hand has cut—a ladder for its sons—no formless shapeless grooves, but a mould of beauty, passion, and of strength; and though its hand tremble now and its eye be dimmed, still a good conscience is its joy, and a faith in the future its possession. Nor is it a little joy for the old to turn back in love and sympathy for his sons—to tell his children of the rough, rugged paths that have been made plain, of the old hard fight which is victory now, of the struggle whose crown is triumph. Nor does he envy the son who begins where he left off, for the child of science is begotten at his father's grave. It were a happy meeting here to-day if it did nought but cherish the love of a father and the worship of a son. We may be quite sure of this—that it is only as bowed down in reverence before the spirit that is past and dead, that we can become the children of a living progress in the future."

Dr. Tidy then referred to the medley character of the assembly. Perhaps the spirits of those great men were present, who had made our school famous in the past; there were those preparing to follow them; there were those who were in the thick of the battle with death and disease; and there were those who to-day entered the ranks. And those present for the first time the Council cordially welcomed. "It is good for you to be here, and yet we trust you have not come by any mere accident to commence what I must honestly tell you is a laborious career, which you had better never have chosen unless you come with the plain straightforward object before you of bringing all that science can possibly suggest for the relief of a suffering humanity. A day of retrospect will come in this world, and a day of reckoning in the next. And let me say, if you fail to administer that relief from any lukewarmness on your part, from any carelessness in your studies, or from any neglect in noting the practical business of your Profession, it were far better that you

had never known to-day, for you will have to bear the brunt of a conscience that will be constantly telling you that lives more precious than silver or gold have been lost through your want of skill; that misery has been brought on many a family as the result of your previous neglect; that the enormous capabilities fortune has entrusted to you of doing good have been actually converted by your own most grievous fault into opportunities of doing evil. Oh! I say, it were ten thousand times better that you had never known to-day, unless you are determined to lay aside all that would divert you from honestly fulfilling those sacred engagements you are now making to be bound with more than marriage ties—ties which death, and death only, can sever—to that profession which will have no divided allegiance, but the man and the whole man."

Dr. Tidy then said that the presence of past and present students suggested an inquiry as to the influence of past investigation on present discovery. He pointed out that we are only wiser than the ancients in so far as their work served as a nucleus for our own—that the brilliant discoveries of later years had their origin in many a stray note put on record in the pages of some dusty manuscript—in short, that science was "a history of development." Dr. Tidy illustrated this first of all by reference to the labours of the alchemists, pointing out how, in several particulars, their work paved the way for our discoveries. Taking another illustration from the history of lithotomy, he showed how the successes of Liston and Dupuytren were, in a great measure, due to the failures of previous operators and their labours in showing the cause of those failures. Dr. Tidy then gave an account of the various discoveries since the time of Newton (in illustration of this developmental process) that have led up to the marvellous results of spectroscopic research. He endeavoured to prove that the work of Kirchhoff, Sorby, and others was only to forge one link of a long chain. The discoveries made with the spectroscope were then referred to:—1st, in our examination of terrestrial matter, the discovery of cæsium and rubidium by Bunsen, of thallium by Crookes, of jargonium by Sorby; then, 2ndly, the clue it gave us to mysterious chemical changes taking place in the liquids of the human body—as, *e.g.*, the blood. Dr. Tidy then described the spectroscopic changes produced by cruorine and hæmatine in their several states of oxidation, pointing out the immense importance of this subject to those engaged in Medico-legal research, the $\frac{1}{10000}$ of a grain of dried blood being easily detected. It was to be remarked, however, that the spectroscope could not answer the question whether blood was human or otherwise. Dr. Tidy lastly referred to the marvellous results of spectroscopic investigations concerning the nature of the sun and stellar worlds. "And do you not think," he said, "there are spirits in the spirit world joying as they listen to this story of the work of progress, but joying especially to think one or more of the links in this chain of discoveries were links forged by themselves?"

Dr. Tidy then examined the chief hindrances to development. 1. An undue respect for the opinions of great men—a love for pinning one's faith to "authorities" in Medicine. The only true road to truth is devotion to independent inquiry. Believe nothing but what you can prove. 2. A second hindrance to development is a love some men have for theorising, and building systems on a few insufficient experiments. System-makers and system-mongers have always been a curse to science; such men place facts on one side unless they suit them. Thus Dr. Tidy accounted for a miserable system like homœopathy—a system which has led some brought up to love truth and to love freedom to hug the chains of error and falsehood. The remedy was caution in observing facts and great care in drawing deductions.

The lecturer then referred to circumstances that had assisted development—first, the recognition of the mutual relationship existing between the various branches of Professional study, and then the facility of a ready and unrestricted communication of ideas by the aid of the "Medical press," the lecturer especially naming the *Lancet* as the first of our Medical papers that ventured to print the lectures of great teachers, thus scattering far and wide new and more extensive views of the nature and treatment of disease.

Dr. Tidy then insisted on the necessity for accurately mastering the foundations of Medical science—anatomy, physiology, and chemistry; for these were the building's foundation. He especially remarked that any true progress in medicine or physiology must be brought about by taking advantage of chemical research. He also pointed out that to note the behaviour of drugs in the test-glass would give us a far keener insight into the actions of various medicines than any fancy symptoms we may note which may or may not be produced by the drug in question.

"It is now our turn," the lecturer said, "to take our part in extending this chain of Medical progress." He then pressed on the new students the need of work—that they should aim at forging a few links themselves, to leave some marks that may sustain their individuality when they were dead and gone. All may be discoverers if they like. Discovery is not limited to a small handful the world pleases to call men of genius. Because you fail in doing all you wish, it is poor philosophy that says do nothing at all. Then, further, if you intend to devote your time to Medicine, it must be all of it. To bestow on other work a fractional part of your powers will be to leaven enthusiasm and divide your energies; and, what is more, you must not ask for reward—let the inward feeling of having done your duty be your best if your only reward.

"In conclusion," Dr. Tidy said, "gather up into a few words the work you are entering upon to-day:—To store your mind with whatever is already known for diagnosing the various forms of disease with which you may be brought into contact; to make yourselves conversant with all the changes those diseases may undergo; to be ready without loss of time to apply the best remedies that modern science has suggested for the cure or relief of the disease, and to propose such hygienic measures as may possibly prevent a repetition of the sickness; but, above all, to aim at being yourselves discoverers—each for himself aiding this great work of Medical progress, each one ready when the call shall come, and come it will, to pay back again to the just and Almighty Ruler the talent or the talents lent him, but only lent him, and ready, mark this, to pay them back with usury. This is your work—go and do it."

WESTMINSTER HOSPITAL.

The Introductory Address at this Hospital was delivered by Mr. Joseph Walker, the Dental Surgeon to the Institution.

After a few prefatory remarks, congratulating the old students and the members of the staff on returning to the duties of the ensuing session after enjoying the pleasures of the country, Mr. Walker made a feeling allusion to the loss the Hospital had sustained during the past year in the retirement of Mr. Brooke, whose name is known throughout civilised Europe and America for his self-registering apparatus, and in the death of Mr. Bruce, whose attainments were of the highest order, whose unwearied exertions in the dissecting-room had probably predisposed his constitution to the reception of the poison which proved fatal to him, and who, had he been spared, would in all human probability have proved a leader, as he was a Master, in Surgery. In welcoming the old students the lecturer took occasion to note the renovation the Westminster Hospital had undergone, and trusted that the improvement would be found not to be limited to the outside alone, but that the internal arrangements would be found to present corresponding advantages to those who were about to enter; and particular attention was directed to the circumstance that special departments had been organised in which several of the Physicians and Surgeons undertook to give instruction in particular forms of disease, and in the diseases of special organs. Mr. Walker then proceeded to speak of the high estimation in which the Medical Profession is held by all classes of the community, and pointed out that no gratitude is so sincere, no remembrance so lasting, as that which follows the restoration to health of a patient whose life has been despaired of. He then dwelt on the importance of recognition on the part of the State of the services rendered to it by Medical men, and trusted some responsible head would be appointed who might render an account to the Houses of Parliament in person of the state of the public health. The subject of vaccination, the importance of personal freedom in the case of those who conscientiously objected to it, was adverted to, and the necessity of care in the procurement of healthy virus were dwelt upon.

From this the lecturer proceeded to speak of the changes and improvements that had taken place in the examining bodies, and reminded his hearers that if they did not wish to be put to shame by those of the fairer sex who were now entering the Profession, they must exert their faculties to the utmost. "The training of our students should be so thorough, both in the theoretical and practical department, that no incompetent man could by any means slip through these examinations—that these should be undertaken by men in the full zenith of their intellectual strength, and should be so conducted that the various abilities of men of different calibre may be developed; but a Surgeon should mean a man capable of performing every

operation he may be called upon to undertake, and who at the bedside of a patient is able to diagnose and give a fair forecast of the probable progress of each case. Such an examination may be supplemented by one of a higher order for the more distinguished positions in our colleges, but should at least be accepted by the public services, and as long as the representatives of those services consider it necessary to have special examinations, so long is it a standing reproach to the whole Profession." The speaker thought that every man should for some time, as for a year, be compelled to act as an assistant, when the responsibility of serious cases might be shared with an older Practitioner. The students were exhorted to avail themselves to the utmost of the advantages which they now possessed, and so to acquire a thorough knowledge of their Profession, since of all deceptions that of an ignorant Medical man was the most heartless. In particular they were to set a high value on the clinical posts and the dresserships, which at a small school were open to every pupil; to attend carefully to the out-patient practice and the several special departments; to learn diligently the natural and healthy structure of the body, the forms and position of the prominences of the limbs, the sounds of the heart and breathing, and to compare them constantly with the same in disease. The value of maintaining a high character was then dwelt upon as being the "noblest possession of a man, constituting a rank in itself, and an estate in the general goodwill, dignifying every station, and exalting every position in society. It exercises a greater power than wealth, it secures all the honour without the jealousy of fame. It carries with it an influence that always tells, for it is the result of proud honour, rectitude, and consistency, qualities which perhaps more than any other command the general confidence and respect of mankind. Character is human nature in its best form. It is moral order embodied in the individual; men of character are not only the conscience of society, but in every well-governed state they constitute its best motive power, for it is moral qualities in the main which rule the world."

LIVERPOOL SCHOOL OF MEDICINE.

The Introductory Address was delivered by Dr. A. Davidson, October 1. The lecture began with a reference to the large number of subjects included in the prescribed course of Medical study, and the impossibility of the student becoming fully acquainted with all of them. In order to ascertain which of them were the most important and deserved most attention from the student, they must be considered with reference to his future work as a Practitioner of Medicine. With this end they were classed in two divisions—viz., the scientific and the practical.

Now the great peculiarity of the Medical education of the present, as compared with former times, was the amount of science that was now taught to the student; and most people attributed the increase of knowledge and skill of the Medical Profession as a whole, which had undoubtedly taken place in late years, to their scientific training, and desired, therefore, that even more science should be introduced into the curriculum. But there was a minority, including the great names of Graves, Trousseau, and Syme, who thought that there was already far too much science taught, and that this was done at the expense of practical instruction. Here, then, was a very important question, not merely suitable for discussion at the General Medical Council, but requiring to be decided on by the student for himself—Was he to devote a large portion of his time to science, or was he to be content with studying Medicine practically? With the view of arriving at a decision on this, it was necessary to consider what was the value of science to the practical Physician. 1. It trained his powers of observation and his judgment. This was of the greatest importance to him. 2. It furnished him with a stock of scientific information on matters with which he was constantly dealing. To the ordinary Physician this was of much less use than was generally stated. He was guided far more by the rules of practical experience than by scientific knowledge. It was to the pioneer of Medicine that scientific knowledge was chiefly useful—to the man who had the ability and opportunity to apply science to the advancement of Medical knowledge, and who was willing rather to devote his life to this, and to teaching, than to establish himself in ordinary practice. The ordinary Practitioner had little time or opportunity to do this, and therefore scientific information was of much less use to him. And then as to the value of science in cultivating the mind, this would establish its place rather as a part of preliminary education than of Professional study; and besides, this training was to be obtained only by a genuine study of science, and not by that process of cramming to which the present system strongly tended.

Turning now to the practical division and comparing it with the other, it was seen to constitute Professional knowledge proper. It was knowledge which the Physician must always have in his mind, and he constantly applying all his life to the cure of disease. Its extent was enormous, so that the whole time of the student's curriculum might well be occupied with it, and was the best opportunity for obtaining the greater part of it; for anatomy could only be learned in the dissecting room, and the Hospital was the best place for learning practical medicine.

The conclusion, then, was that practical knowledge was the main thing; the study of science must occupy a second place, and must never be allowed to interfere with the former. To study science to the neglect of practice, even for the sake of obtaining what was thought a high diploma, was a great mistake. The public knew little of the value of the various diplomas, and both the public and the Profession estimated a man more by his general character, and by the Hospital appointments which he held, than by the letters which he appended to his name.

There was good reason to hope that before long the present confused system of Medical examinations and licences would be swept away, that a thorough preliminary examination would be established (in which might be included the necessary amount of science), and that as the Profession of Medicine was essentially one, so there would be one single licence to practise granted to the student on showing sufficient evidence that he had been well instructed in anatomy, physiology, and practical medicine.

THE OPENING OF THE WINTER SESSION OF THE ARMY MEDICAL SCHOOL, NETLEY.

This event, while still only coming, cast before it a shadow sufficiently dense to produce in the columns of our contemporary the *Lancet* of last week a paragraph announcing that it had taken place on the 1st inst., three days before the actual occurrence. Such prescience is too much for us. We cannot attain unto it, but must content ourselves with the more humble and useful office of recording events as they happen.

An opening address of an exceedingly interesting and instructive character was delivered by Dr. Aitken at 1 p.m. on Monday, the 4th inst. The audience, in addition to the candidates for the Indian Medical Service and Medical Officers of the British Service about to go through the course, was composed of the commandant, the chaplain, some of the military officials of the Royal Victoria Hospital, the Professors and Assistant-Professors of the Army Medical School, and a few of their friends in civil life.

Dr. Aitken's address was listened to with unflagging interest, and was loudly applauded. It was a *résumé* of the Medico-military history of the wars in which our own and most other countries have been engaged during the last fifteen years, and which were such a rude and startling comment on the Utopian vaticinations of universal peace and commercial progress which followed the Great Exhibition of 1851. In the description of each struggle, the embarrassments, hardships, failures, and successes of the military Surgeons engaged formed, of course, a principal part. Dr. Aitken clearly traced the steps by which, so far as our own Army Medical Department was concerned, good was evolved out of the evil which attended the experiences of the first Crimean winter; and, while according to Miss Nightingale and Lord Herbert certainly their full meed of praise for their share in the good work, did not forget to inform his hearers that to the two famous old military Surgeons Jackson and Bell, is due the credit of having more than sixty years ago urged upon the Government the necessity of instituting an Army Medical School such as that in which he was then addressing them. In his sketch of the late American Civil War, although in the presence of representatives of a different system, he did not shrink from alluding to the experience acquired during that great struggle, that military Hospitals were found to be more efficient in every way when under the management of Medical officers uncontrolled by military commandants. On the subject of the conveyance of sick and wounded in war he also observed that it has ever been,

and will continue to be, the grand difficulty of military Surgeons, to whom, before the problem can at all approach to solution, the organisation and responsible control of all means of transport for that purpose must be given.

The functions of the Army Medical officer chiefly as regards the prevention, in preference to the mere treatment, of disease, which distinguish his position from that of the civil Practitioner, were fully considered; and Dr. Aitken left it to his hearers to reply at the termination of the ensuing course of instruction whether or not the due performance of such duties involves ample Professional occupation for Army Medical officers.

The Major-General Commanding, at the close of Dr. Aitken's lecture, addressed to the candidates and Medical officers a few courteous words of welcome, and expressed the hope that, under the circumstances of the accommodation being insufficient for the unusual and unexpected number of Medical officers, those gentlemen who had come off worst in that respect would cheerfully accept the inevitable, as every effort would be made to render them as comfortable as possible.

It is not to be wondered at that the number of "shaves," chiefly on the subject of promotion, was fully proportionate to the number of Medical officers assembled from different parts of the kingdom. That which appeared to receive the greatest share of approval was that on April 1 next full-pay retirement is to be offered to thirty Surgeons-Major of more than twenty-five years' service. Another was that Inspectors-General were to retire after five years' tenure of office, this being merely the reintroduction of a rule which had been in force till 1858. A third was to the effect that a system of voluntary retirement, at any period of service, on a shilling a day for each year of service, would shortly be introduced. We cannot of course vouch for the truth of any of these rumours, but they all indicate the direction in which tend the wishes of the Medical officers themselves—namely, an improved system of retirement.

It was also stated that no more Assistant-Surgeons are to be appointed to the Royal Horse Artillery, in order to prevent the uniform of that brilliant and exclusive corps from being worn by Medical officers. After the recent decision as to precedence between the Royal Horse Artillery and the Household Cavalry, this, if true, may be considered as a compensatory victory for the former corps. We hardly think, however, that the motive of such a measure, if about to be enforced, can have been fairly stated, but the mere suspicion of its existence shows how strong is the feeling on such matters, and how advisable it would be that the officers of the Army Medical Department should have one distinctive uniform of their own.

We may also here state that the report of suicide having been committed by a military Medical officer a few days ago, at Ilfracombe, referred to the death in that manner of Mr. W. J. Barber, Apothecary to the Forces, who had been on half-pay since October, 1868.

The following Medical officers are about to go through the ensuing course at Netley:—

Madden, C. D.,	Surgeon-Major,	1st Batt., 4th Foot.
Doherty, D. J.,	Surgeon,	18th Foot.
Wood, J.,	,,	81st ,,
Jackson, R. W.,	,,	100th ,,
Gibaut, W. M.,	,,	Staff.
Becher, E.,	,,	,,
Myers, A. B. R.,	Assistant-Surgeon,	Coldstream Guards.
Kerr, B. C.,	,,	2nd Batt., 6th Foot.
Gribbon, G. C.,	,,	1st ,, 25th ,,
Tate, R.,	,,	2nd ,, 2nd ,,
Milburn, J. T.,	,,	10th Hussars.
Low, E. L.,	,,	Military Train.
Davidge, J.,	,,	Royal Artillery.
Bourke, J.,	,,	2nd Batt., 15th Foot.
Hamilton, J. B.,	,,	Royal Artillery.
Wiles, J.,	,,	Rifle Brigade.
Palmer, E. T.,	,,	Staff.
Staples, F. P.,	,,	,,
Moriarty, T. B.	,,	,,
Allen, Alex., M.D.,	,,	,,
Parsonage, O. S. A., M.D.,	,,	,,
Gray, J.,	,,	,,

The Académie des Sciences.—This body is not always in great haste to fill up its vacancies. That caused in the section of Rural Economy by the death of Professor Lindley on November 1, 1865, has just been supplied by the election of Professor Cornalia, of Milan, who has acquired much distinction by his researches on the diseases of silkworms.

GENERAL CORRESPONDENCE.

DR. BARNES'S WATER-BAGS.

Letter from Dr. Barnes.

[To the Editor of the Medical Times and Gazette.]

Sir,—In your journal of September 25, Dr. Playfair asks "for information as to my experience with regard to what seems to him to be a serious drawback to my method of inducing labour by my well-known water-bags."

This "drawback" is his fear that the pressure of the bags on the presenting part of the child is apt to displace it, and so to bring about a mal-presentation. Dr. Playfair relates four cases in illustration, and "in all of them he says he strictly carried out Dr. Barnes's directions."

I think a little analysis will show that the cases do not lend any real support to Dr. Playfair's conclusion, and I must beg leave to take exception to the statement that he strictly carried out my directions. I have never had the presumption to lay down rigid "directions" for the performance of this or any operation. What I have endeavoured to do is, first to find out from observation of nature and experience the *principles* which should guide us in the selection and performance of an operation, and then to point out in what way those principles can best be carried out. It is obvious that the guiding principles must vary greatly according to the features of different cases. I have not, therefore, laid down, and do not practise, any uniform plan of inducing labour. I have in the "water-bags" shown a new power, a new aid, in effecting delivery; but I do not rely upon this power as alone sufficient for carrying the process to completion. Dr. Playfair seems to expect more from the water-bags than I do. Let me now examine his four cases. The first passed "satisfactorily;" "pains soon came on, and the mother was delivered safely of a living child."

This case may be taken to prove at least this much: the water-bags do not *necessarily* displace the head. The second case was one "in which it was considered advisable to empty the uterus on account of convulsions." "The bags answered admirably the purpose of dilating the cervix and bringing on pains, but the shoulder presented, and version was necessary."

Dr. Playfair does not state the period of pregnancy which had been reached, nor does he state that the head was presenting at the time when the bags were first applied. I need hardly remind Dr. Playfair that mal-presentation is common in premature labour, even when no interference is exercised. It is quite possible that in this case the water-bags are only to blame for not displacing the presenting shoulder and bringing down the head.

The third case was one of pelvic deformity. "When the os was dilated, and the pains began, it was found that the cord had come down by the side of the head." What is more frequent than this accident in pelvic deformity? The head, striking the two projecting points of the brim, the sacrum and the symphysis, is unable to fill completely the cervix, so that, the moment the cervix expands, the liquor amnii or the mere weight of the cord carries the cord down by the side of the head. The cause of the descent of the cord might have been determined had the distance of the rent in the membranes from the edge of the placenta and the position of the root of the cord been observed. I will hazard the conjecture that the cord sprang from near the lower edge of the placenta, and that the rent in the membranes was close to this edge, so that the cord would naturally drop through. The chance of this accident occurring would be greatly increased if, in addition to distortion, the labour is premature. It is quite possible that in this case also the water-bags are only to blame for not preventing the cord from slipping down.

In the fourth case labour was induced "at the eighth month in a patient who had had several dead children at the full time from placental degeneration." A catheter passed some distance between the membranes and the uterine walls "had no effect in inducing contractions." Next day the os was fully dilated by the water-bags, but, pains being absent, the membranes were ruptured. "Curiously enough, upwards of thirty hours elapsed before labour began, and when the head passed into the pelvis Dr. Playfair found a brow-presentation; he eventually delivered by the forceps."

In this case, again, Dr. Playfair did not observe, or fails to report, what the presentation was before and just after the use bags. It does not appear to me very "curious" that thirty hours after the rupture of the membranes a brow-presentation should be observed. It was probably due to long-continued

friction of the occiput upon the wall of the uterus supported by the pelvic brim, whilst tonic contraction of the body of the uterus was acting upon the child's spine through its breech. I should not have waited thirty hours after the cervix was fully expanded and the membranes ruptured, without ascertaining if the presentation was one that required correction, or one that could safely be trusted to nature. Of course, I do not presume to suggest that Dr. Playfair did not act judiciously; but I simply submit that this is an instance in which he did not "strictly carry out my directions," or observe the principles I have enunciated.

Although, as I believe, the cases adduced by Dr. Playfair are very far from affording even presumptive evidence that my water-bags are apt to cause mal-presentation, I freely admit that the question deserves careful attention. In my memoir in the last volume of *St. George's Hospital Reports*, I expressly say (p. 119):—"It is possible that the dilating-bags may displace the head from the brim. If this should happen, we must be prepared to turn." I had previously shown that turning in premature labour is by no means so hazardous to the child as it is in labour at term; less hazardous, indeed, than it is to follow the ordinary practice—letting the child take its chance. I can, moreover, affirm that the displacement of the head by the water-bags is a rare event.

A word as to the action of the water-bags. It is simply adjuvant, and is not always required. I have divided the agents for inducing labour into two classes—the provocative and the accelerative. The catheter is provocative, the water-bags accelerative. I do not use them to provoke labour, but to expand the cervix where uterine action cannot be evoked. The principles of action are summarised in the following propositions drawn from the histories of cases in the memoir referred to:—

"1. In induced premature labour the accomplishment of delivery is extremely uncertain as to time.

"2. This uncertainty involves danger to the mother and child.

"3. The immature condition of the uterus often entails defective contractile power and increased resistance to the passage of the child.

"4. Hence it is desirable to aid the dilatation of the cervix, and to supplement the contractile power, to watch and control the course of labour throughout, and to bring it to a termination within a definite period.

"5. This aid can be afforded safely and beneficially by the cervical water-dilators, and by the forceps, and turning.

"6. By the proper use of these accelerative means, children may be saved which would otherwise in all probability perish.

"7. In the management of cases of placenta prævia these accelerative means are of eminent value.

"8. Labours may always be completed with safety within twenty-four hours."

These propositions embody the principles of action in the induction of premature labour. Of course judgment and practised skill are requisite to carry them out so as to insure the greatest amount of success. But, given these conditions, I have no hesitation in affirming that the operation for the induction of labour, which, heretofore, had been almost a matter of accident so far as the result to the child is concerned, may now be looked upon as a scientific proceeding, combining safety and certainty in a high degree. I am, &c.

ROBERT BARNES.

31, Grosvenor-street, Grosvenor-square, October 5.

ST. BARTHOLOMEW'S HOSPITAL.

[To the Editor of the Medical Times and Gazette.]

SIR,—The public must be by this time thoroughly interested in the affairs of St. Bartholomew's Hospital. As a student of some standing, I presume to explain some peculiarities which have existed for some time in the out-patient department. There are certain officers of the Hospital—viz., four Assistant-Physicians and four Assistant-Surgeons—who have no beds allotted to them, but, by the courtesy of their superiors, are permitted to take charge of a few. The duty of these gentlemen is (or at any rate used to be considered to be) to take the duty of the wards of their respective superiors in their absence, and to see such patients in the so-called out-patient room as the resident officers think fit to send across to them, in order that students may from these receive instruction to fit them for their future posts as clinical clerks and dressers. By this arrangement means are provided for preliminary Medical and Surgical teaching. The thorough carrying out of this system, I regret to say, has apparently fallen into disuse of late. By this system each resident officer was provided on the Medical side with five clinical clerks, and on the Surgical with five dressers competent to take the bulk of out-door patient practice, selecting such cases as demanded the attention of their superior officers.

Unfortunately, however, this very perfect organisation is lost for want of accommodation in the out-patient reception room, called the Surgery. There is only accommodation on the Medical side for two, and on the Surgical side for four officers on duty, instead of, for the one, room for twenty, and for the latter twenty-five. I say, therefore, that no alteration beyond that of accommodation and utilisation of the existing nominal staff is necessary to put an end to the distressing scandal which has of late been brought forward. Let the governors by their representatives afford, at least temporary room for their working staff, even if they have to utilise for the time being the newly gilded banqueting-hall, and let the Assistant-Surgeons and Physicians insist upon doing their duty in the matter of teaching and turning out students competent to relieve the present plethora of the out-patient room, resting satisfied that the resident officers will aid these endeavours to the best of their power.

Permit me to add a comment on the words that fell so mournfully from Mr. Paget's lips at our annual dinner the other day. Since the "matter has been under consideration," the only evidence to outsiders of consideration has been the appointment of four Registrars. Until this time two Registrars were considered sufficient to record the headings of the Physicians' and Surgeons' wards, and to draw up statistical reports for annual publication. These newly appointed Registrars seem, however, to consider it their duty to take an elaborate record of every case admitted, regardless of the diagnosis of the Physician or Surgeon, of the interference with the resident officer, and of the increased tax upon the poor patient. In my time the clinical clerks and dressers used to consider the careful record of cases their province, and as the most valuable part of their office. Now, as any one must see, clinical teaching is by this means obstructed. These appointments have a significance, and, to me, it looks very like placing the feet of four men on the ladder of staff progression, which I deeply regret to say exists in its worst form at St. Bartholomew's. A further consideration of the whole of this matter I leave for those of your readers who may be interested, and the better comment of others who, like myself, are deeply concerned in the welfare of the school of St. Bartholomew's.

I am, &c. A FORMER HOUSE-SURGEON.

PROFESSOR FAYRER ON HIS OPERATIONS FOR HERNIA.

[To the Editor of the Medical Times and Gazette.]

SIR,—The *Medical Times and Gazette* of July 3, 1869, contains an account of two cases of hernia operated on by Mr. Wood in King's College Hospital. The cases are followed by remarks commenting and animadverting on an operation for hernia that I and my colleague Professor Partridge have been for some years in the habit of performing in this Hospital. These remarks require notice, as they do not represent the matter fairly.

With reference to the two unsuccessful cases for which I am apparently held responsible, I have to say that the first, F. H., aged 25, pilot of Calcutta, has never been in the Medical College Hospital at all, and that he was not operated on by me. He is said by your correspondent to have been operated on by Wutzer's method in 1864. I have not performed that operation since 1862, when I abandoned it for one much simpler, less tedious, less painful, and more successful, and which I still think is neither "clumsy, unscientific, nor fallacious." A reference to my statistics, quoted by your correspondent, will show that the latter epithet is not deserved. At the same time, I repeat that it, like all operations for the radical cure of hernia, is somewhat uncertain, and that it requires some care and confidence for its effective completion—would the eminent Surgeon whose operation is contrasted with mine say that such is not the case with his?

As to the second case—W. B., mulatto—he was operated on by me in the Medical College Hospital in February, 1867. This was not my own operation; it was done on the suggestion of Dr. Chisholm, an American Surgeon. I have performed the operation twice, and should not repeat it. I have previously recorded my objections to it. It is manifestly unfair to confound this operation with one from which it totally differs. From your correspondent's remarks it appears that he has not

made himself acquainted with the operation he decries. He speaks of the practice of plugging and distending the inguinal canal, evidently mistaking the plug which is introduced into the canal for something that is meant to distend it. Such is not really the case. The object of the so-called plug is merely to support the invagination and secure the proper application of the ligatures to excite by pressure at the apex of the canal a sufficient amount of inflammation to close the internal inguinal ring. The plug should not distend the canal—it need not even fill it.

The operation is not very painful, and it is performed in less than half the time that is necessary to perform Wood's operation. The plug is seldom retained in the canal more than four days, as it is removed directly suppuration appears about the ligatures. It is comparatively free from danger; the only case recorded as fatal died of erysipelas. Have there been no fatal cases in other operations for the radical cure of hernia?

The results are given in the statistics referred to, and no one left the Hospital as "apparently cured" without being put to the severest tests, such as carrying heavy weights, climbing up an upright bar, running, jumping, etc.

What the ultimate results have been in many cases I know not, for the people who come to us are birds of passage, and we seldom see them again. I can only say that the record made at the time is a *bonâ fide* one. Many of Mr. Wood's cases, it is said, have been exhibited in King's College Hospital years after the operation free from hernia. I can at the present moment lay my hands on only four cases, in or near Calcutta, operated on by me more than two years ago, and still under observation.

One is that of a gentleman now in Calcutta. I append a memorandum by his Medical adviser.

Another is an *employé* of the E. I. railway, who frequently writes or comes to say that, notwithstanding hard work, he remains perfectly well. He was operated on in February, 1865.

The third is the case of a French sailor, who was killed by a fall from the top of a house some time after the operation. I had the opportunity of examining the body after death, and found the internal ring completely closed. This man had been exposed to everything that might have caused a return of the infirmity. The parts have been preserved, and are in the museum of the Medical College Hospital.

The fourth case is that of a gentleman now in Calcutta. He was attacked by dysentery during the treatment for hernia, and the rupture returned during the severe straining of the disease. I have heard of, but not seen others, and therefore cannot speak with certainty as to their results. I have carefully recorded all failures that occurred whilst the patients were under observation. I confess that I have never felt very sanguine about the ultimate success of any of the operations for the radical cure of hernia; but I feel quite as confident about the efficacy of this as of any, and I am not, as your correspondent delicately suggests, ignorant or unmindful of others.

An operation that has the approval of one of the first among living Surgeons, Professor Syme, cannot be altogether unworthy of confidence, nor can any Surgical proceeding that is simple and moderately successful be justly stigmatised as unscientific or fallacious.

In conclusion I would suggest that in future, before indulging in adverse criticism, it would be well that your correspondent should make himself acquainted with the subject he wishes to criticise.

Case 1.—Mr. C., aged 43, slight but muscular and healthy, was operated on for inguinal hernia of the right side, on February 17, 1867. The plug was removed on the fourth day, and on March 3 he was to all appearance perfectly cured. This is the most rapidly successful case I have known. Under treatment fifteen days. The following is a memorandum furnished to me by the courtesy of his Medical adviser, Dr. Waller:—Canal appears quite closed. No impulse in coughing more than on the left side. On a hot day wears no truss. Can go up and down stairs without any inconvenience. Wears the truss more from unwillingness to risk anything than any other cause. Feels as comfortable without as with it. Has been on the trapeze without the truss, and felt nothing. This is his condition two years and six months after the operation.

Case 2.—R. M., railway guard, aged 40, admitted February 6, 1865. Operation on February 8, plug removed on the fourth day. Discharged apparently cured, March 5. Under treatment twenty-five days. I have seen the patient frequently since, and he is perfectly well.

Case 3.—Mr. S., aged 26, operated on January 23, 1866. Plug removed on the fourth day. Was attacked by dysentery while under treatment; the hernia came down during the severe straining of the disease. This was a failure.

Case 4.—J. B., aged 20, a French sailor, operated on January 1, 1866. Plug removed on the fourth day. Discharged cured on the twenty-first day. Three months later, whilst leading the most dissipated life and never wearing a truss, he died from injuries received in falling from the roof of a house, fracturing his skull and thigh. The body was examined and the parts most carefully dissected. The inner ring was found to be completely closed by firmly organised connective tissue.

The following are the brief notes of the case No. 2, W. B., mulatto, aged 25, operated on in King's College Hospital.

W. B., West Indian, steward of a ship, admitted February 15, 1867, with hernia of the right side. Operation performed on February 27, according to Dr. Chisholm's plan, that of tying the pillars of the ring with silver wire. The wire was left in—it excited very profuse suppuration; this subsided, and the wound healed. He left the Hospital on April 5, the canal obstructed by a mass of exudation. I doubt whether this will prove permanently successful. I am, &c.

J. Fayrer, Surgeon Medical College Hospital,
Calcutta, August 9. Calcutta.

NEW BOOKS, WITH SHORT CRITIQUES.

History and Working of the Irish Poor-law Medical System. Printed by McGowan, Great Windmill-street.

*** An excellent account of the Irish Medical Poor-law system, embracing an account of the dispensary, the duties of the Medical officer, the expenses, average population, and all other particulars relating to the subject.

Stricture of the Urethra: Its Safe and Rapid Cure by a New Screw Dilator, etc. By Charles O. Aspray, M.D., F.R.C.S.E., etc. Renshaw.

*** This pamphlet is a contribution to the treatment of stricture of the urethra by a new instrument, which may be thus described. From the cases recorded by the author, the new dilator appears to be most efficient in very severe cases. The instrument, which is first passed into the bladder, is like an ordinary No. 1 silver catheter, with the exception that the handle can be removed to allow of its being used as a guide to the other part of the apparatus. The dilator, which is passed over the guide, is very like the straight part of a silver catheter, having an ivory handle at one end, by which the instrument is rotated, and a very smooth conical screw at the other. Between the two is a silver cylinder, of the same diameter as the base of the screw, which is freely movable over the other part of the instrument. There is also a gum catheter, with the eye at the extremity, so that it may be passed over the guide, and allowed to remain in the bladder after the operation. The instrument is rotated until the whole of the screw has passed through the stricture, when the rotation is reversed, and the dilator is withdrawn. The operator knows immediately the screw has passed the stricture by the handle becoming freely movable, while the cylinder is firmly held by the contracted portion.

MEDICAL NEWS.

Apothecaries' Hall.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, September 30, 1869:—

Allen, Matthew Septimus, Dudley.
Davies, Henry Naunton, Cymer Pontypridd.
McEvoy, Francis, Eastcote, Pinner.
Yates, Walter Peel, Nottingham.

The following gentlemen, also, on the same day, passed their First Professional Examination:—

Ray, William Joseph Richard, Westminster Hospital.
Walford, Edward, St. George's Hospital.

APPOINTMENT.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Gloag, George, Esq., Dublin, Resident Surgeon to the Bristol Dispensary.

NAVAL APPOINTMENTS.

Thomas T. Riordan, Assistant-Surgeon, to the *Royal Oak*.

BIRTHS.

Lyle.—On September 29, at 2, Marlborough-terrace, Harrow-road, the wife of William Vacy Lyle, M.D., of a son.

Miller.—On October 3, at 463, St. Vincent-street, Glasgow, the wife of Hugh Miller, M.D., L.F.P.S. Gl., of a son.

Peacocke.—On September 30, at Dublin, the wife of George Peacocke, M.A., M.D., Army Medical Department, of a daughter.

PIKE.—On October 3, at Weyhill, near Andover, Hants, the wife of Thelwell Pike, M.D., of a daughter.

PRALL.—On September 27, at West Malling, the wife of Samuel Prall, M.D., of a daughter.

RAUD.—On October 2, at 15, The Avenue, Blackheath, the wife of J. Raud, Surgeon, of a daughter.

STEPHEN.—On September 28, at 44, Victoria-road, South Kensington, W., the wife of Dr. Stephen, of a son.

MARRIAGES.

BUZZARD—WASS.—On September 30, at Dethick Church, near Matlock, Derbyshire, Thomas Buzzard, M.D., of 56, Grosvenor-street, to Isabel, youngest daughter of Joseph Wass, Esq., of The Green, Lea, in the parish of Ashover, Derbyshire.

CHURCHILL—PHAYRE.—On October 2, at St. Paul's Church, Cheltenham, Alex. F. Churchill, M.B., Army Medical Staff, to Ellen Louisa, youngest daughter of Fred. Phayre, Esq.

HOLTHOUSE—NICOL.—On October 2, at St. Saviour's, Haverstock-hill, Carsten Holthouse, Esq., of Old Burlington-street, to Martha, daughter of the late John Inglis Nicol, M.D., of Inverness.

LEVER—PHILLIPS.—On September 30, at Christ Church, Lancaster-gate, Reginald Croft Lever, M.B., 7th Hussars, of Norfolk-crescent, Hyde-park, to Florence, second daughter of the late Charles Valentine Phillips, H.E.I.C. Civil Service, late of Lantern House, West Malling.

RICHARDSON—CROSSMAN.—On September 23, at the parish church, Berwick-upon-Tweed, Henry Richardson, M.D., R.N., to Margaret, second daughter of Robert Crossman, Esq., of Cheswick, near Beal, Northumberland.

RUDD—WRIGHT.—On September 30, at Christ Church, Ealing, Mr. Robert Rudd, of London, youngest son of the late Lancelot Rudd, M.D., of Hawes, Yorkshire, to Elizabeth King, niece of George Linton Wright, Esq., Spring-villa, Ealing.

SKRIMSHIRE—FINCH.—On September 30, at St. Mary's, Morpeth, John Truscott Skrimshire, M.D., of Holt, to Elizabeth, youngest daughter of the Rev. Thomas Finch, of Morpeth.

STEWART—MACFARLANE.—On September 30, at St. Matthew's Church, Bayswater, Hinton Daniel Stewart, younger son of the late Colonel Alexander Stewart, of Strathgarry, Perthshire, N.B., to Lucy, only child of Donald Macfarlane, M.D., late of the Madras Medical Establishment.

DEATHS.

BIRCH, WM., F.R.C.S., at Barton-under-Needwood, Staffordshire, on October 3, aged 68.

DUNDERDALE, SUSAN MATILDA, wife of W. Dunderdale, M.D., at 25, Neville-terrace, Hornsey-road, on September 30.

FIELD, WILLIAM SEWARD, Esq., of the Kew-road, Richmond, and St. Dunstan's House, E.C., only surviving son of the late James Field, M.D., of the Kew-road, Richmond, on September 28.

GUTCH, ELIZABETH FRANCES, relict of the late John Wheeley Gough Gutch, M.R.C.S., and fourth daughter of the late Robert Daffray Nicholson, Esq., of Ranford, County Down, on September 27, aged 57.

HUMPHRY, CLARA ANNIE, the beloved wife of J. Humphry, M.R.C.S.E., at Stone, near Aylesbury, on September 30, in the 35th year of her age.

JOHNSTONE, THOMAS, youngest son of the late James Johnstone, M.D., of Leamington, in the Mussoorie Hills, India, on August 6, aged 19.

LAYCOCK, ANN, wife of Thomas Laycock, M.D., Professor of the Practice of Medicine University of Edinburgh, at York, on October 4, aged 47.

RICHARDSON, JOHN ASHTON, late House-Surgeon of the Hull General Infirmary, and Bridlington Quay, on September 16, aged 24 years.

ROPES, FRANCIS C., M.D., son of the late William Ropes, Esq., of Boston, U.S.A., at Boston, on September 15.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

HULL GENERAL INFIRMARY.—Resident House-Surgeon; must be M.R.C.S., and unmarried. Applications and testimonials to Henry Gibson, Esq., on or before October 18.

KIDDERMINSTER INFIRMARY.—House-Surgeon and Secretary; must have a Surgical qualification and be registered, and unmarried. Applications and testimonials to the Secretary on or before the 12th inst.

ROYAL HOSPITAL FOR DISEASES OF THE CHEST, CITY-ROAD.—Physician; must be F. or M.R.C.P. Eng. Applications and testimonials to the Secretary, on or before the 11th inst. Election on November 1.

ST. MARYLEBONE GENERAL DISPENSARY.—Physician; must be F. or M.R.C.P.L., and not practising midwifery or pharmacy. Personal attendance will be required at the Dispensary, 77, Welbeck-street, W., on October 20, at 11 o'clock a.m.

SUSSEX COUNTY HOSPITAL.—House-Surgeon. Applications and testimonials to A. Veysey, Esq., Sec., Brighton, on or before November 24.

SWANSEA NEW HOSPITAL.—House-Surgeon; must be legally qualified. Applications and testimonials to the Secretary, 23, Gower-street, Swansea, on or before November 24. Election December 1.

TIVERTON UNION.—Medical Officer for the Thorverton District. Candidates must be qualified in accordance with the regulations of the Poor-law Board. Applications and testimonials to Mr. C. M. Hole, Tiverton, on, or before October 11. Election on the 12th.

WIGAN UNION.—Medical Officer and Public Vaccinator; must be registered, and have both Medical and Surgical qualifications. Applications and testimonials to Henry Ackerley, Esq., Wigan, on or before the 21st inst. The duties will commence on December 25.

WORKSOP DISPENSARY.—House-Surgeon; must have both Medical and Surgical qualifications, and be unmarried. Applications and testimonials to the Committee, Dispensary, Worksop, Nottinghamshire. The duties will commence on November 1.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Williton Union.—Mr. C. Williams has resigned the Williton District; area 16,602; population 5670; salary £79 per annum. Also the Workhouse, salary £35 per annum.

Wycombe Union.—Mr. C. R. Price has resigned the Eighth District; area 3464; population 2409; salary £29 per annum.

APPOINTMENTS.

Blackburn Union.—William G. Cort, M.R.C.S., L.R.C.P. Edin., to the Blackburn District.

Hemel Hempsted Union.—George P. Bernard, L.F.P. and S. Glas., L.R.C.P. Edin., to the Flamsted District.

Wirral Union.—Joseph Snape, M.R.C.S.E., L.R.C.P. Edin., to the Upton District.

MEDICAL INSPECTORSHIP TO THE PRIVY COUNCIL.—We learn that this post is vacant by the resignation of Dr. Wiltshire, who purposes resuming practice in town. Dr. Wiltshire was Physician to the Islington Dispensary, and is well known as having once practised ovariotomy under great difficulties, in the most plucky manner. We refer to a successful case of ovariotomy during peritonitis. We understand that the duties of the appointment Dr. Wiltshire resigns are of a somewhat onerous and arduous character, and we congratulate him on his return to the practical work of the Profession, for which we have reason to believe he is singularly well fitted.

OVARIOTOMY IN A GIRL TWELVE YEARS OLD.—Dr. Jouon, of Nantes, has removed an ovarian tumour weighing twenty pounds from a girl only 12 years old, who had never menstruated. A long narrow pedicle was secured by a clamp, and the patient recovered. The case is reported in the *Gazette Hebdomadaire*. This is probably the youngest patient on whom ovariotomy has been performed, as Mr. Spencer Wells's youngest patient was 14. She had not menstruated, and also recovered. Mr. Wells has had three successful cases in girls of 17.

UNIVERSITY OF CAMBRIDGE.—The Professor of Anatomy gives notice that the lectures on Practical Anatomy will commence on Monday, October 11, in the old anatomical schools, at 1 p.m., and be continued daily. The course of lectures on Anatomy and Physiology will commence on Tuesday, October 19, at 1 p.m., in the new museums, and be continued on Tuesdays, Thursdays, and Saturdays. This course is intended for students of natural science as well as for Medical students. Members of the University not requiring certificates are at liberty to attend without fee.

KING'S COLLEGE.—The newly elected Professor of Physiology, Dr. W. Rutherford, gave his introductory lecture in the large theatre of King's College on Monday last. There were present several members of the Medical Staff and a great many students. The lecturer spoke chiefly of the history of the various views held by the ancient philosophers, and, tracing the subject down to our own times, mentioned briefly the great men who had laboured in this country and in Germany. After speaking in high terms of his predecessors in the Chair, he reviewed the three divisions of Physiology—Physiological Anatomy, Physiological Chemistry, and Physiological Physics. The labours of the last few years had principally been devoted to the anatomical division; but as that had now been fairly worked ont, he thought that those who now wished to advance the science should direct their attention to the chemical and physical aspect of the question. Dr. Rutherford then considered the materialistic views of the present day, and appeared an advocate of them; without discussing whether man had a spirit or soul (for that was another part of the question), he showed that the tendency of advanced thinkers, and the facts which recent observation has displayed, all were in favour of materialism. The Professor concluded a very able lecture amidst the hearty applause of a very large audience.

KING'S COLLEGE MEDICAL SOCIETY.—The annual general meeting of this Society will be held on October 14, when Dr. R. S. Smith, one of the Vice-Presidents, will read the inaugural address. The President, Dr. Kelly, will take the chair at eight o'clock.

A SAUSAGE-MAKER, named George Hiller, of Sheffield, has been convicted of having in his possession a quantity of horribly diseased horseflesh that was intended for human food, and sentenced to three months' imprisonment. The presiding magistrate said it was the worst case that had ever come before him, and expressed his regret that the Act of Parliament did not give him the power to commit for six months instead of three.

A *conversazione* was held in the Board Room of St. Mary's Hospital after the Introductory Address, which was largely attended by old and present pupils and visitors entertained by the Medical staff and lecturers).

TESTIMONIAL TO DR. MOORE, OF LANCASTER.—On Friday evening last, October 1, the opening lecture of the Lancaster Science Classes for the session 1869-70, was delivered by the Secretary, Dr. Moore, F.L.S., "On the Scientific Principles involved in the Illusions practised by Modern Magicians." At the close of the lecture a handsome timepiece with suitable inscription was presented by the students to Dr. Moore in appreciation of the valuable services he had rendered to the Science Classes as secretary to the committee, and the assistance he had afforded to the students in their studies.

MUNIFICENT GIFT TO THE ROYAL INFIRMARY, MANCHESTER.—We have much pleasure in announcing another act of characteristic munificence on the part of Mr. Robert Barnes, formerly mayor and for many years alderman of this city. The paragraph which has already appeared on this subject in other papers is in some respects inaccurate. Our readers are aware that the trustees of the Manchester Royal Infirmary have for some time past had in contemplation the purchase of Cheadle Hall, with the surrounding grounds, and of adapting it to the purposes of a Hospital for convalescent patients. The carrying out of this admirable design would, of course, have involved a serious charge upon the funds of the institution, which are not more than adequate to its ordinary needs. In these circumstances Mr. Barnes has placed at the disposal of the trustees, as a free gift, the sum of £10,000. It is more than will be necessary to purchase the Cheadle Hall estate, and the surplus will cover the outlay requisite to render the new Hospital thoroughly suitable for the reception of patients.

THE FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.—At a meeting of this Corporation, held on the 4th inst., the following office-bearers were elected for the ensuing year, viz.:—Andrew Anderson, M.D., President; Harry Rainy, M.D., Visitor; John Coats, M.D., Treasurer; J. D. Maclaren, M.D., Honorary Librarian; James Dunlop, M.D., Vaccinator. *Councillors:* The President, *ex officio;* the Visitor, *ex officio;* John Coats, M.D.; Eben. Watson, M.D.; William Weir, M.D.; Robert Scott Orr, M.D. *Board of Examiners:* James Morton, M.D., Surgery and Surgical Anatomy; Robert Perry, M.D., Chemistry; R. D. Tannahill, M.D., Midwifery and Medical Jurisprudence; J. B. Cowan, M.D., Medicine and Materia Medica; Andrew Fergus, M.D., Chemistry; George Buchanan, M.D., Anatomy and Physiology; Robert Scott Orr, M.D., Medicine and Materia Medica; Wm. Leishman, M.D., Midwifery and Medical Jurisprudence; Wm. Lyon, M.D., Surgery and Surgical Anatomy; Eben. Watson, M.D., Anatomy and Physiology. *Clinical Examiners in Medicine:* The Physicians of the Royal Infirmary. *Clinical Examiners in Surgery:* The Surgeons of the Royal Infirmary. *Examiners in Arts:* John Coats, M.D., and James Steven, M.D. *Clerks:* Laurence Hill, LL.D., and William Henry Hill. *Librarian and Secretary:* Alexander Duncan, B.A. *Officer:* John M'Farlane.

COMPOSITION AND QUALITY OF THE METROPOLITAN WATERS IN SEPTEMBER, 1869.—The following are the returns of the Metropolitan Association of Medical Officers of Health:—

Names of Water Companies.	Total Solid Matter per Gallon.	Oxygen required by Organic Matter, &c.	Nitrogen.		Hardness.	
			As Nitrates &c.	As Ammonia.	Before Boiling.	After Boiling.
Thames Water Companies.	Grains.	Grains.	Grains.	Grains.	Degs.	Degs.
Grand Junction	19·37	0·074	0·076	0·000	13·5	3·2
West Middlesex	17·40	0·062	0·066	0·000	13·4	3·4
Southwark & Vauxhall	17·63	0·055	0·076	0·001	13·4	3·1
Chelsea	17·49	0·079	0·091	0·001	13·3	3·4
Lambeth	18·04	0·051	0·129	0·002	13·7	3·1
Other Companies.						
Kent	29·39	0·019	0·182	0·000	20·4	5·6
New River	17·33	0·043	0·076	0·000	13·8	3·3
East London	16·33	0·067	0·076	0·001	13·2	3·2

The average quantity of water supplied daily to the metropolis in the month of August was, according to the returns of the Water Companies to the Medical Officers of Health, 106,414,863 gallons, and the number of houses supplied was 467,577. This is at the rate of 33·5 gallons per head of the population daily. According to the last returns of the supply to Paris, it was only at the daily rate of 23·6 gallons per head of the civil population, and this included the water for ornamental purposes.

Note.—The amount of oxygen required to oxidise the organic matter, nitrites, etc., is determined by a standard solution of permanganate of potash acting for three hours; and in the case of the metropolitan waters the quantity of organic matter is about eight times the amount of oxygen required by it.

THE Leeds Infirmary has become entitled to £2000, under the will of Mrs. Burton, of Roundhay.

LEPROSY is said to be spreading very fast in Polynesia.

THE ADELAIDE HOSPITAL, DUBLIN.—A department for the treatment of diseases of women has just been established in the above institution, and has been placed under the superintendence of Dr. Lombe Atthill, formerly Assistant-Physician in the Rotundo Lying-in Hospital, and Examiner in Midwifery in the Queen's University in Ireland.

IN a case of painful neuroma connected with a peroneal nerve, Dr. Richardson's instrument for producing local anæsthesia by means of projected ether spray, completely demonstrated the advantage of this method, in conjunction with the internal exhibition of chloroform. The disease, of which this was a most aggravated instance in a woman who had suffered many things, not from doctors, but from Buddhist nuns and Tauist old wives, is attributed by the Chinese to the driving of a nail into the flesh, by the god of thunder as a direct punishment for past sins. In a deep chloroform-sleep, the very approach of the knife seemed to arouse the patient, so that without the additional advantage of the local deadening of the spray, the tumour of eight years' growth could not have been removed. The styptic ether, and the ethereal preparation of iodine, invented by the same friend of humanity, have yielded most excellent results in the practice of the Hospital.—*Report of the Hankow Medical Mission Hospital*, 1868.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

A. J. W.—In the Students' Number, September 11.

Zero.—If possible, next week.

Dublin.—As the inquest is adjourned for the purpose of having a post-mortem examination of the body, we postpone our report of the case until next week.

Barnsley.—After a careful examination of the case we cannot think blame is to be attached in any way to Dr. Smith. The woman, when admitted into the Workhouse Hospital, was suffering great pain from an ulcerated leg, and was most anxious that the leg should be amputated. After a consultation with Mr. Wainwright this was determined upon, and accordingly the leg was removed on August 23. The second operation was undoubtedly necessary, and there is no evidence of want of skill in any way. The woman died of lock-jaw. We think it doubtful whether the ulceration round the thigh was produced by the pressure of the tourniquet.

Parkstone.—We know nothing of the supposed new *cure*, but of the *curer* we know enough to say *cave canem*. We know of unfortunate ladies who, after being advised by eminent and conscientious Surgeons to submit to palliative treatment only, have rashly placed themselves in the hands of nostrum-mongers; but the event has always been tragical. What we hear of the person in question gives us no confidence that his treatment would be an exception to the rule.

Corrigendum.—By mistake it appeared in four columns last week that Liston's Operative Surgery had only gone through one edition; in reality the work has gone through four.

CORRIGENDUM.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—My name is incorrectly entered as *Davy* in your paper of the 2nd inst. under the head of "Appointments for the Week," Clinical Society. It should be Dr. W. H. Day, &c. If you will acknowledge this error in the next issue of your journal, I shall be much obliged.

I am, &c. W. H. DAY.

10, Manchester-square, W., Oct. 2.

PAROCHIAL VACCINATORS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In reply to your correspondent "Alpha" on the above subject in the *Medical Times and Gazette* of September 18, I beg to say that such conduct in this neighbourhood is as rare as it is unprofessional. I have had charge of a country poor-law district for the last twenty-three years, and have carefully watched the progress of vaccination and the laws relating to it during that time. I think every Medical man should vaccinate the children whom he brings into the world, and that the parents should pay him; but if he has any patients who are unable to pay half a crown, then the public vaccinator is the proper person to apply to. I have not found the feeling of pride to exist as described by your correspondent. In one of my villages are two respectable farmers (not my patients), whose wives always ask me to let them know when I am going to vaccinate, that they may bring their infants down to the school. Possibly they may do it for the sake of economy, but certainly they have the advantage of seeing from whom their child is vaccinated. Their own Medical man is a friend of mine, and the affair is well known to him, and he cannot, and does not, accuse me of "touting."

As regards the certificate, which "Alpha" criticises as cumbrous, I consider those at present in use a decided improvement on the old ones; and

the trouble must be less, as there is only one now required where formerly there were two.

To revert to the subject of this letter, the Registrar was evidently wrong; and I cannot but think that some little Professional jealousy or misunderstanding may to a great extent account for the annoyance which "Alpha" has been put to. I do not see that the Vaccination Act, which has done so much good already, is in any way to be blamed for this annoyance.

I am, &c.

A Public Vaccinator of Twenty-three Years' Standing.

The Best Fillet.

"A Ten years' Subscriber" would feel much obliged if the editor of the *Medical Times and Gazette* would inform him in his next publication where he could obtain the improved whalebone loop or fillet used as a substitute for the midwifery forceps in certain cases, notice of which appeared some time back in this journal, as well as the cases to which this instrument is more especially adapted. It would seem it is very successfully employed by Practitioners in the east-end of London.

*** The best whalebone fillet is that described by Dr. Westmacott at the July meeting of the Obstetrical Society. It is adapted for lingering labour with head-presentation, the head being in the pelvis; it is especially useful in fronto-anterior face positions to bring down the occiput. It may be obtained of Mr. Russell, bandagist, 58, George-street, Portman-square. Dr. Westmacott's paper with diagrams will appear in the next volume of *Obstetrical Transactions*.

COMMUNICATIONS have been received from—

Dr. A. Davidson; Mr. Arnott; Dr. C. Meymott Tidy; Dr. Yeo; Mr. J. Chatto; Dr. Cheadle; Mr. C. F. Maunder; Mr. Spencer Wells; Dr. C. B. Fox; Dr. Day; Mr. Joseph Walker; Dr. Walker; Dr. Courtenay; Mr. James Bruce; Dr. Renaud; Dr. W. H. Day; Mr. Patterson; Dr. Foot; Mr. H. Terry; Dr. G. Reid; Dr. J. Daniel Moore; Mr. G. W. Jones; Mr. Alex. Duncan; Mr. W. W. Reeves; Dr. J. J. Phillips; Mr. John Colam; Mr. Seaton; Dr. Games; Dr. Hugh Miller; Mr. J. Raud; Mr. Gaskoin; Dr. Dudgeon.

BOOKS RECEIVED—

Niemeyer's Text-book of Practical Medicine—Meyer's Electricity in its Relations to Practical Medicine, translated from the German by Dr. Hammond—British and Foreign Medico-Chirurgical Review, October—Pharmaceutical Journal, October—Journal of Mental Science, October—Quarterly Journal of Microscopical Science, October—Edinburgh Medical Journal, October—Practitioner, No. 16—Journal of Science, No. 24—Foot on Chromidrosis—Monthly Microscopical Journal, No. 10—Westminster Review, No. 72—Gray's Anatomy, 5th edition—Ellis's Practical Manual of the Diseases of Children—Harcourt and Madan's Practical Chemistry—Jones's Plan of Universal Penny Railways—The Chicago Medical Investigator, September—Suggestions for Legislation with a view to the Suppression of Drunkenness—Annual Report of the Peking Hospital.

NEWSPAPERS RECEIVED—

The Constitution—Liverpool Mercury—Barnsley Times—Bristol Daily Post—Hornet—Medical Press and Circular—Philadelphia Medical and Surgical Reporter.

VITAL STATISTICS OF LONDON.

Week ending Saturday, October 2, 1869.

BIRTHS.

Births of Boys, 1076; Girls, 1043; Total, 2119.
Average of 10 corresponding weeks, 1859-68, 1936·3.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	694	701	1395
Average of the ten years 1858-67	607·5	591·3	1198·8
Average corrected to increased population	...	...	1318
Deaths of people above 90	...	...	...

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-cough.	Typhus.	Diarrhœa.	Cholera.
West	463388	...	6	16	1	4	6	16	...
North	618210	1	2	33	1	10	8	22	...
Central	378058	...	...	28	...	8	7	7	...
East	571158	1	6	101	4	14	7	12	...
South	773175	4	6	60	...	15	14	19	...
Total	2803989	6	20	238	6	51	42	76	...

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·613 in.
Mean temperature	58·8
Highest point of thermometer	75·1
Lowest point of thermometer	46·6
Mean dew-point temperature	52·9
General direction of wind	W.S.W., S.S.W., & S.S.E.
Whole amount of rain in the week	0·81

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, October 2, 1869, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the year 1869.	Persons to an Acre. (1869.)	Births Registered during the week ending Oct. 2.	Deaths. Corrected Average Weekly Number.	Deaths. Registered during the week ending Oct. 2.	Temperature of Air (Fahr.) Highest during the Week.	Temperature of Air (Fahr.) Lowest during the Week.	Temperature of Air (Fahr.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3170754	40·7	2119	1462	1395	75·1	46·6	58·8	0·81	82
Bristol (City)	169423	36·1	107	76	*70	71·8	47·8	58·2	2·31	233
Birmingham (Boro')	360846	46·1	230	175	137	73·0	46·1	57·3	1·27	128
Liverpool (Boro')	509052	99·7	349	295	272	66·3	49·0	56·1	1·94	196
Manchester (City)	370892	82·7	283	210	*164	68·5	45·8	56·8	1·46	147
Salford (Borough)	119350	23·1	80	60	69	69·1	45·5	56·7	1·46	147
Sheffield (Borough)	239752	10·5	186	126	114	68·0	46·2	55·9	0·95	96
Bradford (Borough)	138522	21·0	125	71	57	68·8	49·5	56·1	0·60	61
Leeds (Borough)	253110	11·7	210	129	123	73·0	48·0	57·4	0·60	61
Hull (Borough)	126682	35·6	72	59	62	...	...	...	...	...
Newcastle-on-Tyne, do.	130503	24·5	109	69	57	...	...	...	...	...
Edinburgh (City)	178002	40·2	111	86	75	63·7	44·0	53·2	1·50	151
Glasgow (City)	458937	90·6	322	268	217	63·9	44·6	53·7	2·02	204
Dublin (City, etc.†)	320762	32·9	144	158	147	65·2	44·4	56·0	1·92	194
Total of 14 large Towns	6546587	35·5	4447	3244	2959	75·1	44·0	56·4	1·40	141
Paris (City)	1889842	...	...	...	713	...	...	...	...	...
					Week ending	Week ending Sept. 25.				
	(1863)				Sept. 25.					
Vienna (City)	560000	...	...	...	296	...	...	59·7	...	...

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·613 in. The barometrical reading decreased from 29·88 in. on Monday, September 27, to 29·37 in. on Wednesday, Sept. 29.

The general direction of the wind was W.S.W., S.S.W., and S.S.E.

Note.—The population of Cities and Boroughs in 1869 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous.

* The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

† Inclusive of some suburbs.

APPOINTMENTS FOR THE WEEK.

October 9. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m. King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 1½ p.m.

11. Monday.

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 1½ p.m.; St. Peter's Hospital for Stone, 2½ p.m.

12. Tuesday.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.

13. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.

Hunterian Society. 7½ p.m.: Council Meeting. 8 p.m.: Mr. Hutchinson, "On some of the Principal Diatheses and their Mutual Relations."

Royal Microscopical Society (King's College), 8 p.m. Lieut.-Colonel Woodward, U.S. Army, "On Immersion Objectives and Nober's Test-plate." Mr. Carruthers, F.L.S., "On the Plants of the Coal Measures."

14. Thursday.

Operations at St. George's, 1 p.m. Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

15. Friday.

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

CHOCOLAT-MENIER.

(Manufactured only in France.)

ANNUAL CONSUMPTION EXCEEDS 5,000,000 lb.

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P. & P. W. SQUIRE,

CHEMISTS IN ORDINARY TO THE QUEEN AND THE PRINCE OF WALES.

Mr. Squire introduced into Medicine (*Vide* "Lancet," March 4th, 1839)

SOLUTION OF BIMECONATE OF MORPHIA,

Which has been employed by all branches of the Medical Profession.

Dr. Roots thus writes of it:—"I have taken it myself daily now for very nearly four years, and during that period I have frequently prescribed it in my private practice. The result of my observations on its effects on myself and others amounts to this—namely, that it disturbs the head less, that it distresses the stomach less, and that it constipates the bowels less, than any other preparation of Opium. I have taken every other preparation of Opium, but from none of them have I obtained the same degree of quiet rest that I have enjoyed from this Bimeconate of Morphia."

ASTRINGENT RED GUM LOZENGES,
Taken for Relaxed Throat.
In Bottles 2s. each.

MURIATE OF AMMONIA LOZENGES
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See **THE LANCET, Feb. 22nd, 1868**:—

"In the Mustard Leaves of Mr. Rigollot we have, it is believed, a reliable and very ready means of obtaining the epispastic effects of mustard."

See **MEDICAL TIMES, Feb. 8th, 1868**:—

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CLINICAL SURGERY.—No. IV.

ON HIP DISEASE.

By THOMAS BRYANT, F.R.C.S.,
Assistant-Surgeon to Guy's Hospital.

ON THE TREATMENT OF HIP-JOINT DISEASE AND ON EXCISION.

PART IV.

THE general inference that would be deduced from the perusal of the papers on hip disease which have just been published must certainly be in favour of the curability of the affection; for although examples of hip disease have been quoted illustrating every stage of the disease and nearly every complication which is met with in practice, nothing but a good result has been recorded—nothing but a cure by natural processes. It is not my intention in the present paper to bring forward anything to indicate that such an inference is in any way incorrect; indeed, I am strongly convinced that it is perfectly sound, for the more I see of joint, and particularly of hip, disease, the more impressed I am with the idea that in the majority of cases a natural cure may fairly be looked for and obtained, and that it is only in exceptional and neglected instances that a fatal result ever takes place.

When the disease is recognised in its first or early stage, before suppuration has set in, unless its progress be unusually rapid or acute, this opinion is certainly correct, and the cases that have been given in the first part of this communication may be accepted as fair samples of what might have been brought forward had it been deemed necessary. To recognise the disease in the beginning is the essential point of practice, and having done so, the prognosis is, as a rule, favourable, and the treatment simple.

In the second series of cases which have been given, similar remarks are also applicable, for in all the examples quoted, suppuration failed to show itself, although to a certain extent disorganisation of the joint must have occurred; for anchylosis was the form in which the natural recovery took place, and for such a result the more or less complete disappearance of the articular cartilages seems to be an essential process.

In one instance, dislocation of the head of the femur complicated the case, yet a natural cure followed without external, or indeed any local, sign of suppuration.

Now what, it may well be asked, were the Surgical means employed in these cases to help the cure? What were the duties of the Surgeon to hasten on a natural recovery? I take it that the Surgeon's highest duties are always most beneficial when working to that end. On reading over the cases it will be seen that the practice adopted was very simple. The general as well as the local treatment was based on general principles, and nothing very special has had to be recorded.

The idea upon which the practice was based was always that nature's own processes were perfectly competent to cure the case, and that the Surgeon's office was to see that nothing interfered with the natural recovery.

To keep the limb quiet by some mechanical contrivance, where absolute rest was needed, and in every case to forbid most stringently any downward pressure upon the affected joint, or any pressure of the opposite inflamed bones or membranes, were the main local means employed, together with fomentations to the part frequently repeated. Tonic treatment was, as a rule, combined with this; the general or tonic treatment aiding the natural powers, and the local treatment soothing and removing such sources of irritation as would be produced by movement and interarticular pressure.

It may also be remarked that no mercury or other special medicine was ever given, nor were moxas, cauteries, or other painful local measures applied; for the former plan of general treatment has been fairly discarded as useless, if not injurious, and the latter local treatment has failed to prove of sufficient value to neutralise the local objections to which it is open. In the hands of some Surgeons they are still employed, but I have never been able to make out that they are of any decided value.

In the third part of this communication, in which examples of hip-disease have been given associated with suppuration, a very different set of questions come before the Surgeon, for he has fairly to determine the probability or even possibility of natural processes being able to perfect a cure; and if these questions are answered in the negative, he has to decide whether his own art be capable of aiding natural processes or of removing the source of mischief which prevents recovery.

In a pathological point of view there seems to be little doubt that in a large number of cases of suppurating hip-joints natural processes are amply competent to procure a natural cure by anchylosis or otherwise—the exceptions to this general rule including the cases of necrosis of some part of the bones entering into the formation of the joint, and the extreme feebleness of the powers of the patient who may be the subject of the disease, whether associated or not with visceral disease. Under the former circumstances natural processes are prevented from pursuing their welcome offices by the constant presence of a foreign body—for such dead bone must be regarded—and under the latter the powers of the patient are incompetent to supply the demand made upon them for the repair of such an affection as a suppurating joint.

It need hardly be said that the Surgeon has no slight difficulty in some cases, and responsibility in all, in coming to a conclusion upon the points thus placed before him. The life of many a patient rests upon his decision, for it may unquestionably be asserted that in a large number of cases of suppurating hip-joint, unless Surgical art steps in and removes necrosed bone, which by its presence interferes with recovery and keeps up suppuration, a cure of the disease can never take place, and the gradual decay of the patient's powers will naturally follow; and when necrosed bone does not exist the same result may follow from the unavailing efforts that nature makes to cure the disease she is clearly incompetent to bear up against for a sufficient period.

And this leads the Surgeon naturally to the question of excision.

In every case, therefore, of suppurating hip-joint the Surgeon has to decide whether locally there are any conditions present that may pathologically prevent a natural recovery from taking place, and if so he has to decide upon the plan of treatment by which these conditions may be altered or removed. If locally he can find no such pathological cause to interfere with a natural cure, he has to determine whether the patient's powers are competent to meet the demand that must necessarily be made upon them to secure such a result.

It would be impossible by any description to convey in words the knowledge and discrimination that are required to determine these points in any individual case. Every instance of disease must be judged upon its own points, and the acts of the Surgeon guided by its special wants; but this may be said—that, in any case of hip disease in which necrosed bone can be recognised, whether extensive or limited, repair will proceed much more rapidly, certainly, and satisfactorily, when the foreign body has been removed, than when by its presence it is keeping up constant irritation and preventing recovery; that in every case of diseased hip-joint associated with suppuration in which diseased bone cannot be made out after a careful examination, probabilities certainly point to its cure by natural processes, if the Surgeon rightly employs his art in removing sources of irritation, such as mobility and interarticular pressure, soothes pain, secures a free vent for suppuration, and keeps up the power of the patient by good food, good air, and tonics.

Between these two extreme links in the chain of cases as seen in practice innumerable others are met with, all showing different phases of the same conditions under varied circumstances; each, however, must be judged, as I have already stated, by itself. No rule of practice can be laid down which is generally applicable.

We now come to consider the different means the Surgeon has at his command in the treatment of these cases of suppurating hip-joint, and, in a general way, they differ but little from those already alluded to in the treatment of the less severe cases to which attention has been already drawn.

Immobility of Joints.

The great principle of practice is the same in all classes of cases, and more particularly in these last, and that is the maintenance of perfect immobility of the joint, with the removal of all interarticular pressure; and these ends may be secured either by the long splint—interrupted or otherwise—the leather, wire, felt, or gutta-percha casing, surrounding the pelvis, and including the thigh and knee of the affected limb, leaving vent openings for sinuses, or the weight suspended from the foot over a pulley, as already illustrated in a general way, or in a special way, as seen in Case 34.

The principle of treatment embodied in any of these plans of practice is alike, but the selection of the method must depend upon the individual case with its special wants.

Incision into Joint.

In the treatment of a suppurating hip-joint, as of any other articulation, it is a most important point of practice to insure a free vent for all discharge; pent-up matter is always injurious in any articulation, whether connected or not with diseased bone, and it is a point of practice of considerable importance for the Surgeon to look to. A free incision into an abscess connected with the hip, or the free opening of a sinus through which pus slowly flows, rarely if ever does any harm, and, as a rule, does much good; it should always be adopted when pus exists, and its free discharge is not allowed. In a former paper this plan of treating suppurating joints was freely discussed, and Cases 27 and 28 well illustrate this point.

On Excision of the Hip-joint.

When dead bone can be made out to exist in a suppurating hip-joint, there can be no question about the propriety—nay, necessity—of its removal, and as it is generally in or about the head or neck of the femur, it seems tolerably certain that the best practice lies in its decapitation. When the bones entering into the formation of the hip-joint in its pelvic aspect are also involved, there seems to be no strong reason against their removal, should they be necrotic; for it is certain, as long as they remain to keep up irritation, a cure by natural processes is impossible. An operation undertaken upon the hip-joint, under these circumstances, is scarcely more than any severe operation for necrosed bone, and, in all probability, is not more dangerous. The joint as a joint has to a certainty disappeared altogether, and a free incision into it will hardly add to the dangers of the case. An operation undertaken under these conditions should be classed with those for dead bone. When the acetabulum is only superficially affected or stripped of its cartilage, there is no reason why the diseased head of the bone should not be removed; for the disease in the pelvic portion of the joint is probably secondary to that in the femur, and will undergo a natural repair as soon as the source of its disease has been removed.

When the disease in the pelvis is extensive, the operation of excision may certainly be an open question—that is, of excision of the head of the femur alone; for if the pelvic bones are necrotic or irreparably diseased, it is quite certain such an operation will be of little use. If the necrosed pelvic bones can, however, be removed (and there is no limit to the capabilities of Surgery in this respect), there is no reason why the operation should not be followed by a good result; for operations for necrosis, however extensive, are, as a rule, successful, and when performed upon the disorganised hip-joint, there is no reason why they should not be attended with a like success. Extensive gouging of inflamed or so-called carious bone, whether about joints or otherwise, I always look upon with disfavour. The gouging, I am disposed to think, does as much harm as good when applied to any other than dead bone. The removal of dead bone is always a good practice, but the gouging of inflamed bone I hold to be unnecessary, if not injurious.

When the presence of dead bone cannot be made out, or evidence exists that no such complication seems to interfere with a natural recovery, it is still a disputed point amongst Surgeons whether excision of the head and neck of the femur be a necessary or even justifiable operation, for those who argue against its adoption assert, and with some truth, that all these cases of hip disease are capable of a natural repair in patients who have good or even tolerable reparative powers; and that in those that have not, the operation of excision would naturally fail, for as much power is probably needed to effect a cure after excision as is demanded for the natural cure of an uncomplicated suppurating or disorganised joint.

To these latter remarks, however, I am disposed to demur. I am ready to admit—indeed, I sincerely believe—that, in all cases of disorganised hip-joints in which disease of the bone does not exist to interfere with recovery, a natural cure may fairly be looked for at no distant date, as long as the powers of the patient keep up their strength, and no signs of failure make their appearance. But when these signs show themselves in a decided way—when evidence exists that in the battle of disease the reparative processes yield to the morbid, and that treatment fails to turn the scale in their favour, it becomes an open question, which we will appeal to facts to decide, as to the expediency of performing excision, although I may at once admit that I believe the operation, under such circumstances, to be not only justifiable, but highly advisable. The removal of the source of irritation decidedly acts beneficially upon the patient, and many a case has doubtless gone on to recovery after the operation of excision that would, unoperated upon, have eventually succumbed to the disease, worn out by suppuration and exhaustive efforts of repair.

For facts in reference to excision of the hip-joint I have gone to Hodge's work, and to a recent paper by Dr. R. R. Good, of Paris, the former author giving us a statistical table of cases up to 1861, and the latter from 1861 to 1868. Hodge gives us 111 cases, 56 of which recovered, and 53 died. Good quotes 112 cases, 52 of which recovered, and 60 died; a little more than half of the whole number of cases have thus proved fatal.

Mr. Holmes also, in his excellent work on children's diseases, gives us nineteen cases, of which, in a general way, one-third died from the operation, another third recovered with useful limbs, and the remaining third, although not recovering, derived great benefit from the operation.

On analysing, however, these cases a little closer, and more particularly inquiring into the influence of age upon the operation, some valuable facts come out; for of 100 cases as given in Hodge's work, in which the age of the patient was reported, and in which amputation was not subsequently performed, I found the following results:—Out of 46 cases operated upon under 10 years of age, 15 died or 33 per cent.; out of 37 cases operated upon between 11 and 20 years of age, 21 died, or 57 per cent.; out of 12 cases operated upon between 21 and 30 years of age, 7 died, or 60 per cent.; out of 6 cases operated upon over 30 years of age, 5 died, or 83 per cent. The analyses of Good's cases indicate the same truths, for of cases operated upon under 12 years of age, 40·6 per cent. died; between 12 and 20 years of age, 60 per cent. died; between 20 and 58 years of age, 76 per cent. died.

In young life, therefore, in which hip disease is usually met with, excision of the head of the femur is by no means a fatal operation, as two out of three get well; from 10 years to 30 years of age, something less than half recover, and after that period it is full of danger. Excision of the hip-joint is clearly more dangerous as age increases, and in this it is like amputation, lithotomy, or any other great operation. Children beyond infancy bear these severe measures well, and it is important that this fact should ever be before us.

It is, however, of equal importance to remember that it is in young life we meet with the best success in the treatment of disease—in hip-joint as well as in other joint affections.

Recognising the fact, therefore, that excision of the head of the femur is not only a justifiable, but a good operation in selected cases, let us briefly consider under what circumstances it should be performed.

From the general facts as learnt from statistics two great results clearly come out:—

That in childhood this operation is attended with success, two patients out of three recovering, and

That in adult life it is attended with great danger, two out of three patients at least dying.

In the former case, consequently, the operation may be entertained under circumstances which in the latter would render it clearly unjustifiable.

With these two broad truths before us, let us enter a little into particulars in our endeavour to determine the question, When should excision of the hip be performed? And, first of all, when should it not be performed?

It should certainly never be performed in cases in which suppuration or disorganisation of the joint has not taken place; for as long as this condition is kept off, by Surgical as well as Medical skill, a sound hope exists that a cure of the disease, although by anchylosis, may be secured. The cases I have already quoted on previous occasions clearly illustrate this fact.

It should not be performed when all evidence tends to show that the bones entering into the formation of the joint are not extensively involved, or necrotic wholly or in part, and the general condition of the patient under proper treatment is fairly maintained.

It should not be entertained for disorganisation of the hip-joint as the result of synovial disease, unless it is clear that the general health of the patient is gradually yielding to the disease.

It should never be performed for acute suppurative disease.

On the other hand, it should always be entertained where it is clear that extensive bone mischief exists, or partial necrosis; for it is tolerably certain that, under such circumstances, a cure by natural processes is highly improbable.

It should always be entertained where the general health of the patient is clearly giving way under the influence of the local disease, whether that disease be in the bones or synovial membranes, or both.

I believe these general conclusions respecting excision to be based on a fair interpretation of the clinical and pathological

facts which I have been able to gather upon the subject. They can only be given, however, as general guides for practice. The discussion upon the propriety of an operation in any given instance must rest invariably upon the particular facts of the individual case. The accumulated experience respecting excision which has been given to the Profession is certainly enough to prove that excision of the hip is a very valuable operation under certain circumstances, and it would be a pity to bring it into disrepute by performing it in cases which are capable of a cure by natural processes. I have performed the operation in two instances only. One has been already published in my "Lettsomian Lectures on the Surgical Diseases of Children." I reproduce it, however, in this place, with a drawing of the member and proportions. The second case is now convalescent, and will be briefly detailed.

Case 38.—Disease of the Hip-joint—Excision—A Sequestrum found in the Neck of the Femur—Recovery with a Sound and Useful Limb.

Henry F., aged 5 years, came under my care in July, 1861, with a disease in the right hip-joint of two years' standing, suppuration in the part having been present for one year. It was quite clear that total disorganisation of the joint had taken place, and that dead bone existed, as it was readily felt upon passing a probe down the sinus situated behind the trochanter. Regarding the case as one of disease of the joint, secondary to inflammation and necrosis of some portion of the femur, I proposed an operation for the purpose of its removal, and on August 27 I carried out the practice.

Upon making my incision behind the trochanter, a piece of dead bone within the hollow of the trochanter was at once observed, and on further examination it was found that the head of the femur had separated at its line of junction with the neck, and was lying loosely in the acetabulum.

The following drawing well illustrates this condition :—

Fig. 1.

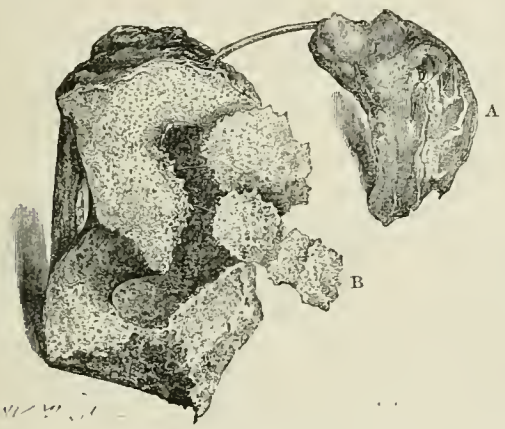


Fig. 1.—A, head of femur lying loose in the acetabulum; B, sequestrum in neck of femur.

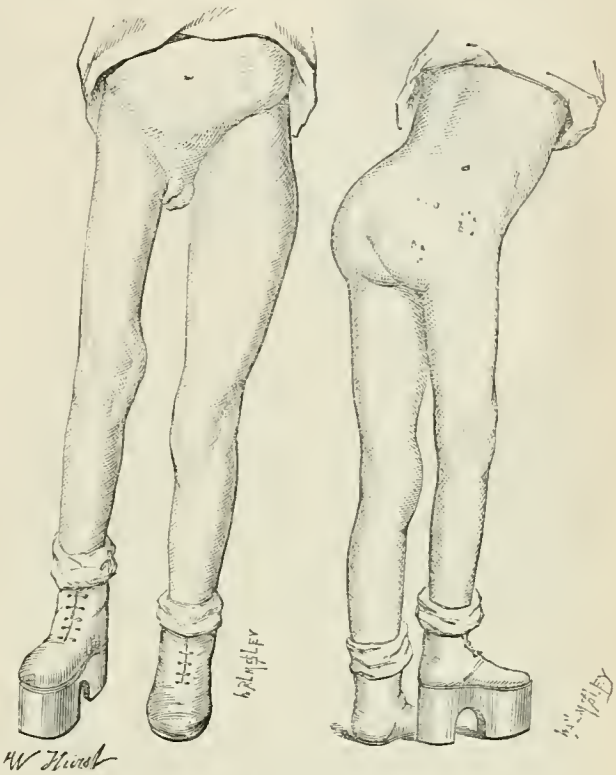
I therefore thought it best to excise the head and neck of the femur below the trochanter. I may add that the acetabulum had been deprived of its cartilaginous covering, but was otherwise healthy. The only local treatment after the operation was the application of wet lint to the wound. The limb was simply allowed to rest upon a pillow; no splint was ever used. Convalescence rapidly followed the operation, and in three months the child got up and was able to stand upon and flex the limb without pain. The wound also had quite healed. He left the Hospital and unfortunately contracted measles, which reduced his powers extremely; a large abscess also formed as a consequence in the right thigh below the seat of the original disease. For this he was readmitted, and, after good feeding and tonics, this gradually disappeared, and he left with a good useful limb.

In 1863, two years after the operation, the boy was quite well. The limb was about *one inch* shorter than its fellow, but otherwise it was quite sound. The boy could walk and run freely without the assistance of any stick. He could stand upon the limb without support, and bend or rotate it in any position. The shortening of the limb was indeed the only inconvenience, for he could do as much with the affected side as with the sound one.

In May, 1869, the boy again came under my observation, having become weak. He had grown much during the last six years, but the right lower extremity had not grown equally with the left; it was now two inches shorter than the sound side, and was comparatively more wasted. The boy could, however, get about upon it well, and had every movement.

The two drawings, which were taken in May last, will illustrate the boy's present condition.

Fig. 2. Fig. 3.



Disease of the Hip-joint—Suppuration—Excision of the Head and Neck of the Bones—Recovery.

[Reported by Mr. Barrow.]

Ann W., aged 7, a delicate-looking child, was brought up from Nottingham and admitted into Guy's Hospital on August 5, 1868, under the care of Mr. Birkett. She had been the subject of disease of the hip for two years, and for one suppuration had clearly existed. The child had suffered much from pain, and her powers had been exhausted by discharge.

The limb, on admission, was partially flexed on the pelvis, and the pelvis was tilted up on the affected side. The soft parts about the foot were much swollen, and three or four openings existed—one in front of the foot, another above and behind, and a third below, the trochanter; they all discharged pus.

A splint was applied and tonics given. In September the case passed into Mr. Bryant's hands, during Mr. Birkett's absence from town, and, as the child clearly made no way and the probe passed down to diseased bone, excision of the head and neck of the bone was determined upon.

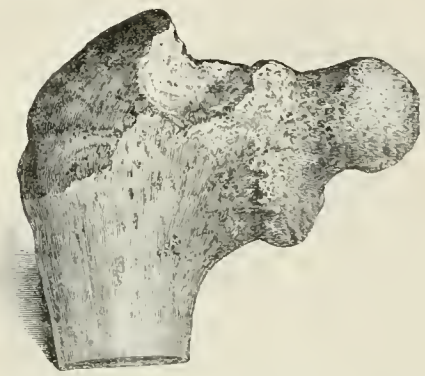
The operation was performed on September 11. The child was placed under the influence of chloroform, and a long incision made behind the trochanter. The head and neck of the bone were readily turned out and removed. They were found to be much altered in shape. This will be well seen in the drawing (Fig. 4). The acetabulum, although bare of its cartilage, appeared to be healthy. A long rectangular splint was put on after the operation, and the wound dressed with carbolic acid lotion.

Everything went on well. The child's health rapidly recovered, and she took food kindly. The wound healed satisfactorily. In one month the parts had nearly closed, and in two the wound was represented by a small sinus. The child was then allowed to get up. By Christmas the child moved about the ward by means of a crutch, and in February she returned home, one small wound alone remaining open. There was fair movement in the part.

My friend, Mr. Arthur Mickley, of the General Hospital,

Nottingham, who kindly undertook to watch the case for me on June 22, sent me the following report of her present condition:—Her general health is excellent; she is in very good condition; she eats and drinks well, and suffers no pain—in fact, the friends say they can hardly believe it is the same

Fig. 4.



child. She gets about the house without the aid of a stick, and is able to enter into and enjoy the various amusements which the other younger members of the family indulge in. The limb is shorter than the sound one, but the foot touches the ground, and she can walk upon it without distress. She can swing the leg backwards and forwards with the greatest facility. The thigh can be flexed upon the pelvis, although not perfectly. When sitting on a chair, a casual observer would scarcely be able to detect any difference between the two limbs. The only treatment she has followed has been good living, fresh air, and iron, in the form of the syrup of the iodide, with gradually increasing exercise.

The Operation of Excision of the Hip.

There seems to be a general consent amongst Surgeons that the best incision for the operation is one long one passing for about two inches above the trochanter downwards, along its posterior border for another three or four inches. This incision gives abundance of room, and allows of the rapid exposure and enucleation of the head and neck of the bone. In this step the aid of a skilful assistant is of great value. There seems also an equal unanimity amongst those who practise excision that the head, neck, and trochanters of the bone should be removed; the latter, when left, acting as a constant irritant against the soft parts and pelvic portion of the articulation, and retarding recovery. In this step the chain saw is of great use when operating upon adults—at least, I have found it so when practising the operation on the dead subject. In children the ordinary saw answers every purpose.

The treatment of the case afterwards is very simple. A splint for a short period till repair has fairly progressed is of use, although it is not essential. In one of the cases I have given, in which so admirable a result followed, no splint was ever used. This point must be determined by the wants of the individual case; if the splint gives comfort, it should be employed; if the weight and pulley answer the purpose, they should be used.

As soon as the parts have fairly healed, passive movement should be allowed; otherwise a stiff joint may be obtained, and although such a result is not a bad one, it is not so good as a movable articulation.

Symmetry of Disease.—As a rule there is not so much pain or offensive smell from an open cancerous mass in Chinese patients as in European subjects. It may be also observed that out of some eight or ten cases of extirpation of in breast, only one has been met with on the right side. This diseast proneness of the Chinese female breast of the left side treatm exclusively affected with cancerous disease, is as likely open qurable to the invariable tendency of Chinese patients the expedi other to the Hospital, when disease of a precisely admit that I behind situation has been clearly shown to be to be not only jnsidious affectations of disease for symmetrical of the source of irri to be suspected as to their universality. patient, and many a *Medical Mission Hospital*, 1868. after the operation of

ORIGINAL COMMUNICATIONS.

DRUNKENNESS IN INDIA, AND ITS REPRESSION.

By C. A. GORDON, M.D., C.B.,
Deputy Inspector-General of Hospitals.

The vice of drunkenness has unfortunately ever been the bane of the British soldier, whether on foreign service or at home. Much has of late years been effected with a view to mitigate this great evil, but nowhere more than in India, and it is satisfactory to know that the result has been an improvement in the habits of the men, so great that intoxication, far from being of common occurrence, is now comparatively rare among them. I would desire in the following remarks to indicate some of the measures by which this happy consummation has been attained, but, in so doing, must allude to the condition of the vice from time to time to the mitigation of which the measures in question were directed.

Beginning my observations with the year 1833, I take as an example what is recorded in regard to the 31st Foot, then stationed at Kurnal. It is stated that such was the extent to which drunkenness prevailed in that regiment at the period in question that "no rule, regulation, or order issued on the subject appeared to have the effect of putting a stop to it." The quantity of spirits which by clandestine means was obtained from the canteen—then an establishment but recently instituted—was but "a mere trifle as compared with what was obtained from other quarters."(a) For example, we find it expressly stated that many of the married women sold brandy, rum, gin, and arrack, in a manner publicly, "and, moreover, that those liquors, some of the most deleterious description, were always to be had in the bazaars, and also in the cantonments of the Company's European artillery." In fact, the custom of mixing narcotics and other deleterious drugs with liquors clandestinely sold to the troops had existed for many years. It attracted the attention of the authorities in 1827, and probably there may be readers of these remarks who remember the time when old soldiers in India, to increase the pungency of otherwise hot and irritating liquor, added red peppers to their arrack.

At some stations the facilities for obtaining spirits clandestinely were peculiarly great. At Chinsurah, for example, it was reported(b) that "the new barrack, which is one long line of building 750 feet in length, with an open verandah all round, being without enclosure of any kind, it was quite impossible to prevent men from rambling abroad at any hour of the night or day." It was, however, recorded that the barrack was situated in the centre of the cantonment, with two very extensive bazaars in its close proximity, in each of which are several shops licensed by Government for the sale of arrack, dharoo,(c) and other deleterious spirits, which are sold at so low a price that a soldier may on any one of them get drunk for two or three annas, the average balance of his day's pay. At this time a number of old soldiers who had but recently volunteered from the 14th Foot, were temporarily detained at Chinsurah, and with reference to them Dr. Burke remarked that, with such opportunities and facilities as he had just described, "it cannot be considered matter of surprise that old soldiers, separated from the head-quarters of their corps, should indulge liberally in their favourite habits of intemperance."

Dinapore was another station noted in those days for the facilities it afforded the soldiers for indulging in drunkenness. Adverting to them, Dr. McLeod observed that it was by no means extraordinary that the station should be remarkable as an unhealthy and drunken quarter for troops, adding that "everything has been done that zeal and ingenuity can devise" to check the evil, but without success. "All commanding officers," he further observed, "who have had the misfortune of being quartered there, have failed to limit the evil, and even the Brigadier-General is not privileged to interfere. His authority extends only within military bounds, and the bazaar and several villages are so close to cantonments that preventing the introduction of forbidden articles is perfectly hopeless," because "the whole control beyond their limits is exercised by the civil authorities," who are *bound to protect* the sale of spirits, and will, of course, support the vendors against the

(a) General Report for 1833, pp. 212—219.
(b) Report 1830, p. 309.
(c) Obtained from the petals of the *Bassia latifolia*, N.O. Sapotaceæ.

representations and complaints of officers, who are therefore powerless.(d)

At the period of which I write it is evident that to be intoxicated was the rule, to be sober the rare exception. Dr. McLeod reported(e) with sorrow that "a system of drunkenness among the men and their wives prevails to a most appalling degree, and is the very fertile source of disease." To check it was impossible, for it "seemed to have extended to those whose station in society should have induced them to set a better example to their military inferiors"—a sentiment which shortly afterwards found confirmation in the views expressed by Sir C. Napier.(f) "The great disease with officers and men," so he wrote, "is *drink*, but," he adds, "the soldiers drink more liquor" than the officers—a circumstance which would seem to imply that this was the only difference between them.

As already observed, a quantity of rum, varrying according to station from one-tenth to one-twentieth of a gallon, was then issued to the soldier in India as a portion of his daily ration, one-half being usually consumed in the early morning, the other at midday. The former was for the most part given before going to drill, or during the prevalence of foggy weather,(g) under the impression that spirits acted as a prophylactic against malaria. There were, moreover, occasions when indulgence in drink was rather encouraged than otherwise, as, for example, when volunteering of men to other regiments was taking place, when prize money was issued, and during the prevalence of an epidemic. Let us, for example, observe what is recorded of the 14th Foot, when that regiment gave its volunteers in 1828. On that occasion,(h) "a scene of drunkenness and consequent irregularities ill calculated for the preservation of health took place." "The men continued for five or six days to drink, it is understood, at the rate of about 100 gallons of arrack per day"—that is probably at the rate of an eighth of a gallon of the spirit while the carnival lasted. This quantity, however, was probably not large, considering the capability of the soldier of the period for his potations. Thus, it is recorded of James Spilman, 38th Regiment, that he could drink at a sitting eleven quarts of fœtid toddy, and, moreover, that he had won wagers by so doing; but the exploit was as nothing compared to that of two soldiers of the 13th Foot, who, between them, drank at Dinapore thirty-two quarts of the same liquor in one day.(i)

"Periods of issue of batta to the troops," so wrote Dr. Clarke so lately as 1847, "are invariably times of disease and mortality. The Sutlej batta also could count its deaths," and he then alludes to one commanding officer who, hopeless to prevent intemperance, directed its course with the best consequences. He persuaded his regiment "to get drunk like gentlemen on champagne," by which means, to quote the words of the report, a short-lived, exhilarating, but expensive debauch was substituted for a protracted course of intoxication.(k)

The responsible Medical officers were not slow to urge upon the military authorities the many evils in the form of disease and crime that arose from the prevailing drunkenness. In 1827, Dr. Burke adverted to the pernicious results of issuing a ration of spirits to the soldier, and in his report for 1830 he commented severely upon the facilities at Chinsurah for soldiers quartered there to indulge in habits of intoxication, adding that "scarcely a man came to Hospital for many months who had not been drinking without a pause for some days;" (l) while many acknowledged that they had not been quite sober for a fortnight, for a month, or for three months. He remarked that "the individual who lives in a tropical climate, and is in the habit of drinking spirits, will sooner or later die of an abscess in the liver, and if he be much exposed to the sun, the more certain and the more early will be his end, probably by fever, or affection of the head, or inflammation of the bowels, before the abscess has had time to form;" (m) and in the same report he expressed himself as satisfied that if ardent spirits were withdrawn altogether throughout the army in India and elsewhere, the health of the soldier would be more improved by the measure than by all the other means that could be devised.

(d) Report for 1836.
(e) Report for 1835, page 301.
(f) "Conquest of Scinde," page 530.
(g) Report for 1830, page 314.
(h) Report for 1828, page 56.
(i) Inspector-General's Report, 1829, pages 59, 60.
(k) Ditto, 1846-7.
(l) Report for 1830, page 309.
(m) Report for 1832, page 46.

It is recorded that in 1833(n) four-fifths of the disease in the 31st regiment was attributable to drink, and that of fifteen men of the corps who died during the quarter ending Sept. 30, ten had been, previous to their illness, in a state of constant and excessive intoxication. Nor was it alone to long-continued heavy drinking that injury to health was at all times attributable; quite as much, if not more, actual danger having then, as more recently, been found to arise from the habit of tippling. "The maxim may be held as almost established," so wrote Dr. Burke, "that a certain indulgence in the constant use of spirits will prove fatal by delirium tremens, liver complaint, and dysentery, and the mode of drinking that most readily gives rise to the former disease is the constant dram-drinking, which keeps up a state of excitement short of drunkenness, not wholly inconsistent with the performance of common duties. This system of tippling, when connected with mental anxiety or irritation, is considered much more dangerous than a fit of drunkenness which is followed by nausea and vomiting, general debility and collapse, by which nature throws off the accumulation of poison that oppresses her, and gives time for the establishment of healthy action."(o) In 1836, Dr. McLeod recorded his views that intemperance and recklessness were the banes of Britons in India, and were in a peculiar manner the destruction of the British soldier. "The Government," he added, "will not see this, and they issue spirits to the troops to bring about" the state of mortality and inefficiency on which he was commenting. "I am quite willing to believe," he added, "that the unfortunate practice of Government issuing the dram had its origin in the best intentions, and from a mistaken idea of its effects on health; but it has long been known that spirits are prejudicial under most circumstances, and under all unnecessary. The evil," he continues, "is not so much in the immediate effect of the dram as in that it lays the foundation of habits which lead to destruction of the soldiers as men, and to their utter uselessness as defenders of their country." But he went further than this; he pointed out to the local authorities that the Imperial Government had discontinued the use of spirits to troops on board ship, they receiving in lieu beer or porter, "which is not only more wholesome, but is preferred by a large majority, by all, in fact, but the old soldiers;"(p) nor should the fact pass unnoticed that among the measures recommended by a Royal commission twenty-three years after the date of Dr. McLeod's report was "that no spirits be issued to troops on board ship (between England and India) except on the recommendation of the Medical officer in charge." The recommendation of Dr. McLeod had doubtless long before passed into oblivion.

One more extract must here suffice. The Surgeon of the 16th Lancers, in his report for 1836-7, observed that, as in all other corps, "drunkenness was the cause of two-thirds of the diseases admitted into Hospital; it is more general among the old soldiers and those who have volunteered from other corps than among the younger men." Let us now briefly allude to some of the measures proposed from time to time with a view to mitigate the conditions above described. Dr. Burke, in his report for 1827, adverted to various circumstances which according to his view acted prejudicially on the health of the soldiers, observing that he had brought them under the notice of the military authorities, and then expressed himself thus: "I still more strongly represented the bad effects of the ration of spirits to the soldier, and the necessity of substituting an equivalent of money for it, and urged the establishment of canteens to be strictly conducted on approved rules and regulations; that it was necessary they should be always provided with a sufficiency of wholesome wine and malt liquors which the soldier might purchase and drink there at cheapest possible rate, for if they could be once induced to relish wine or malt liquor I thought they might be got to relinquish the use of spirits altogether." Three years afterwards, however, this Medical officer had to express himself thus: "It is well known that drunkenness, the besetting sin of the British soldiery, has hitherto resisted every attempt to keep it within bounds, and will most probably continue to do so until the soldier becomes a better instructed man, until he imbibe some little portion of the improving spirit of the age, and hold a more elevated rank in the scale of moral and intellectual beings."(q) Dr. Burke was in his views far in advance of his time. Four more years pass over, and he reverts to the theme. "It is to be lamented," so he wrote, "that excessive drinking should continue to be the prevailing vice of the men;" and referring especially to the

(n) General Report, page 219.
(o) Report for 1834, page 64.
(p) Report 1836.
(q) Report 1829, p. 239.

38th Regiment, he added, "Most of the men have been some years in the country, and the habits of intemperance are too well confirmed to admit of a change by any species of restraint or variety of punishment," adding that they "see their comrades daily suffering from disease originating in drunkenness, and sinking into premature bodily imbecility from no other cause, but they see this with indifference, and pursue the same destructive course, unchecked by any fears for the future consequences, or utterly regardless of them."

"Much has been done by Government," so wrote Dr. McLeod in 1836, "to protect the soldier from injury by climate and weather, and, so far, his condition is in a progressive state of amelioration. But to cure the old soldier of his bad habits, or to prevent the young one from acquiring the vices of his predecessor, little aid has been or is given." Perhaps these remarks were somewhat too sweeping, considering that schools, libraries, and saving-banks had already been some years in operation in India; but it must be confessed that these alone were inadequate to diminish the prevailing vice of the army. One measure that was recommended, however, was so peculiar in its character as to deserve to be specially noticed. "In one regiment(r) the Surgeon invited all the convalescents in Hospital to attend in the surgery, where he showed them the inflamed and diseased stomachs of several of their comrades who had died by illness induced by drink."

When the measure was first contemplated of withdrawing the ration of spirits from the soldier in India, giving him a money allowance in place of it, fear was naturally enough entertained that the money so given would be expended in the purchase of native bazaar liquor of a very deleterious kind. Canteens were therefore in 1828 instituted, with a view to avert this anticipated evil. In those regimental establishments it was intended that the men should obtain a limited quantity of good spirits for the sum allowed in lieu of that taken from them; and one of the first effects produced was that a stop was put to the system that had prevailed in every corps of men saving their spirit ration and disposing of it at a high rate to those who had money. But, on the other hand, it was found that some few men laid by the money they received in lieu of spirits, and, when it had accumulated to a considerable sum, spent it in a regular bout of drinking.(s) Thus the measure was attended by some evils which are worthy of notice in remarks such as these.

Among the regulations under which canteens were originally established was one which, however, seems only to have been observed in a few regiments, that they should be open only from 6 to 8 o'clock p.m. daily. Every attention was to be paid to the men who resorted to them, rum, brandy, and wines being obtainable in moderate quantities, also bread, biscuit, cheese, cigars, etc., etc.; and with reference to the 13th Foot, then at Cawnpore, the circumstance was recorded that in 1834 the canteen, as conducted, "added much to the comfort of the men," they being supplied at it with tea, coffee, and various articles of groceries, all of wholesome quality and at moderate prices. A large room fitted up with tables and forms was set apart in the canteen where the men might sit and enjoy themselves; but no man was permitted to have a sufficient quantity of liquor to render him intoxicated,(t) and it is further recorded that from the time when canteens were first established arrangements were made in connexion with them for supplying hot tea or coffee to men before morning parade. These facts are important in connexion with questions of sanitation, and no less so some others recorded at the time—as, for example, that in some regiments, the soldiers having preferred wine to spirits, supplies of the former of good quality were obtained for their use to the absolute exclusion of the latter.(u)

But we learn that a similar measure had really been introduced into a portion of the army many years before that time. Thus, our troops employed in Egypt in 1801 had a daily ration of wine given to them, a practice which was continued at some if not all the Mediterranean stations, especially Gibraltar. "In the West Indies, the Mediterranean, and on the Continent of Europe," so Dr. Burke wrote, "the soldier is supplied by the commissariat with one pint of wine daily, and only in great emergencies is he ever served with spirits." "Government," he added, "ought to spare no expense in endeavouring to discourage the use of ardent spirits in the army, and in substituting a more wholesome beverage."

In 1832 (v) an attempt was for the first time made in the 11th Hussars and 26th Regiment, both stationed at Meerut, to introduce beer into the canteens of those corps; but as a supply from England was unattainable, a quantity was obtained from a brewery shortly before established at a hill station not far distant. Towards the end of that year and in the following good English beer was issued to the soldiers at Calcutta and Berhampore at a cheap rate, the men of the 49th Foot at Fort William paying about 3¾d. per quart for what they used; and so favourable were the results at both places that "not only did the prevalence of drunkenness decrease, but so did the number of serious accidents, of drowning, apoplexy, and delirium tremens."(w)

The profits of canteens soon became considerable, and they were partly dispensed for the general good of the regiment, as for the support of the school and of orphans, for the supply of tablecloths and delf for the use of the men, books for the library, in gratuities to deserving men of long service, in prizes for children, in the purchase of cricket-balls, quoits, etc., and sometimes in sending sickly men short trips on the river.(x) But the direct effect which the establishment of canteens had upon the rate of mortality and the number of punishments was of so marked a nature that the then Inspector-General specially dwelt upon it in his report. This is indicated in the following table:(y)—

Year.	Deaths to Strength.	Number of Punishments.
1826	9·7 per cent.	158
1827	6· „	135
1828	6·2 „	94
1829	6·6 „	136
1830	3·8 „	122
1831	4·3 „	88
1832	3·9 „	93
1833	Not stated.	74

Notwithstanding the results here shown, it is undeniable that certain circumstances interfered materially with the full benefit that should have been obtained from canteens. Among them Dr. Burke(z) enumerated the inferior nature of the liquor issued at some, and the too great surveillance exerted over the men frequenting them. Government in a measure directed the sale in them of ordinary rum of the country supplied by the commissariat—a liquor which the soldiers liked on account of its cheapness, but which in the quantities allowed to be issued—namely, two drams daily—speedily induced its pernicious effects; and it was distinctly stated that, in consequence of the imperfect management of some, drunkenness and other vices had actually increased after canteens were first established. For example, that in the garrison of Fort William was in 1836 described by Dr. McLeod as having been the worst conducted establishment he had ever seen; in it any man could have as much liquor as he could pay for. The scenes witnessed there were in consequence "beyond belief," but the officer commanding invalids in the fort had no power to interfere; the establishment was entirely under the orders of the Indian officers, and "the efforts of the Brigade Major Queen's troops to prevent the invalids from resorting to it gave great offence to the authorities of the fort" at the same time that they failed in their object. It moreover so happened that this establishment, situated at the seat of government, was that to which the higher officers had readiest access, so that its failures were erroneously considered as indicating a general want of success in the scheme, whereas at the more distant stations, as already mentioned, canteens, when properly managed, had been productive of much benefit. Dr. McLeod endeavoured to represent matters as they really were, and accordingly thus expressed himself:—"That it would be very desirable that no canteens were required as an appendage to a barrack, I readily grant; but I have known barracks before canteens became a part of their regular establishment, and I have known them since, and I have no hesitation in asserting that the canteen is a benefit, and that a well-regulated one is an improvement on the old system, although falling short of what it ought to be."

Among the measures adopted with a view to check the prevailing drunkenness to which allusion has been made was the formation, in some regiments, of temperance societies. The first mention of such institutions occurs in the reports for 1828, by which it appears that reading-rooms, provided with books, newspapers, and coffee, were available in connexion with them, the expenses being defrayed by a small monthly subscription from members. Five years afterwards—namely, in 1833—Dr. Burke alludes to them as being an attempt among the soldiers "to deliver themselves from their malignant enemy the use of spirits," and he specially refers to the success with

(r) Report for 1834, p. 65.
(s) Report for 1828, p. 310, *et seq.*
(t) Report 1834, p. 60.
(u) Report for 1833.
(v) Report for 1832, page 48.
(w) Report for 1833, page 238.
(x) Ibid. page 241.
(y) Report for 1833, page 236.
(z) Report for 1831, pp. 465—467.

which a society of this nature was conducted in the 26th Cameronians.(a) Its establishment only dated from 1832; yet, within a year from that time, two hundred men of the corps had become members, and they were the healthiest in the regiment; the amount sent home by the men to their friends had increased from £1183 to £1416, and, in the two years succeeding, no corporal punishment was inflicted in the regiment.(b) In this particular instance very much of the influence for good exerted by the society was due to Dr. Bell, at the time Surgeon of the Cameronians. Adverting to it, Dr. Burke observed that "it would be a tedious and difficult matter to explain in what his system of discipline consists, as it appears to depend upon a certain moral influence of the individual over the minds of the men rather than on any peculiarity of orders for their management. It is too much the fashion," he further observed, "to consider soldiers as mere machines, and devoid of those qualities that enable them to conduct themselves like reasonable beings, and to treat them accordingly. To all such opinions the above is an answer."

Among other regiments in which about the same time temperance societies were established, special mention was made of the 11th Light Dragoons, the Buffs, the 16th and 31st Regiments. Various degrees of success seem to have attended them in these corps, but that in the 26th still maintained its pre-eminence; and when, in 1838, statistics were drawn up with a view to indicate the ratio of sickness among the men who belonged and those who did not belong to the societies, the following results were arrived at, namely:—

Per cent. in Hospital daily.

Month.	Temperance men.	Non-temperance men.
January	2·54	8·05
February	2·27	8·27
March	2·94	8·63
April	5·47	10·28
May	5·24	10·66
June	4·55	10·35

But in the face of such facts as the above and other tables exhibit, a strange indifference was shown by the Indian Government not only to the extension of the societies, but also, as recorded by Dr. McLeod, "to other measures having reference to the social and physical well-being of the soldier." The natural result followed in due course. Institutions which did not obtain the support of the higher authorities languished, and in 1841 they were in a decaying condition. Three years afterwards they may be said to have ceased to exist, and Dr. Clarke wrote in regard to them, that they received no patronage from commanding officers, at least with very few exceptions; they still existed in some corps, and seemed to tend much to the health and good conduct of their members, but "by recent orders from His Grace the Duke of Wellington, commander-in-chief, they are forbidden."(c) So ended for a time some of the measures devised with a view to suppress or moderate the prevailing vice of drunkenness in India. It is almost unnecessary to observe that of late years temperance societies in connexion with institutes have been reintroduced into the portion of the army serving there, and that they receive from Government the support which their importance merits. By these and other measures recently adopted, vice and intemperance among the soldiers in that country have been reduced to a standard little, if at all, beyond what prevails in the United Kingdom. Public opinion has enforced the measures of repression which years ago Medical officers proposed.

REMARKS ON CLINICAL THERMOMETERS.(d)

By CORNELIUS B. FOX, M.D.,

Member of the Royal College of Physicians, London.

Amongst the many instruments employed by Medical men to aid their senses are to be found thermometers, which are clinically useful in the determination of—

1. The temperature of the human body.
2. The temperature of the air that surrounds it.
3. The amount of moisture in this air, and
4. The temperature of baths, etc.

To an instrument for ascertaining solely the temperature of the mouth, axillæ, rectum, and other parts of the body, the name of clinical thermometer has, however, been applied.

The study of the temperature of the human body, in health and disease, having been proved by the researches of Wünderlich to be conducive to accuracy in diagnosis and prognosis, and consequently to a more intelligent treatment, every practical Physician has doubtless, ere this, made a thermometer as much of a companion as a stethoscope. The clinical thermometer, unlike the laryngoscope, ophthalmoscope, and all the other -scopes which are so useful to us, requires neither education nor practice in its use to enable the merest tyro to employ it efficiently. Exactitude and punctuality in taking observations, and a thermometer of unquestionable veracity, are, however, indispensable. The following remarks may be conveniently arranged under four heads:—

a. The Accuracy of Clinical Thermometers.
b. The Different Kinds of Clinical Thermometers.
c. The Stethoscope and Clinical Thermometer combined.
d. Suggestions to the Purchasers of Clinical Thermometers.

The Accuracy of Clinical Thermometers.

Precision in the indications of those instruments which are constructed for diagnostic purposes is of vital importance. Of what service would be the observations made with the sphygmograph, if this ingenious piece of mechanism was not exact in its writings? The possession of a thermometer which indicates with accuracy the temperature, or of one whose errors are known, is of the greatest moment to those who work with this instrument.

Partly owing to the difference in the diameter of the bore of thermometers throughout their entire length, which defect seems, at present, almost unavoidable in their manufacture, the majority of them indicate a temperature sometimes higher, sometimes lower, at other times higher in one part of the scale, and lower in another part than is correct. Here, for example, is a certificate of verification from the Kew Observatory, which belongs to a thermometer in my possession.

At 32°	0·0
„ 42°	0·0
„ 52°	+0·1
„ 62°	—0·1
„ 72°	+0·1

N.B.—When the sign of the correction is +, the quantity is to be added to the observed scale reading, and when —, to be subtracted from it.

They may, in truth, be likened to human faces, for scarcely two are to be found very closely resembling one another. Dr. Prior, of Bedford, in a paper on "The Thermometer in Disease," read before the South Midland Branch of the British Medical Association in 1867, relates an experiment of comparison which he made with five thermometers, three of them being Medical instruments. He placed them all in water at a temperature of 105° or 106°, and allowed it gradually to cool. The result is here given in his own words: "No two of them precisely corresponded at any time."

A mercurial maximum thermometer was some time ago purchased by a friend of each of the most eminent meteorological instrument makers. They were compared together, and all found to differ from each other.

Mr. Alex. Buchan states (a) that he recently compared a number of first-class high-priced thermometers, every one of which was from 1·2° to 1·7° too high. The want of a complete agreement between the observations of Physicians on temperature is, doubtless, partly due to the difference in the readings of the thermometers employed. Another cause may possibly be found in the fact, that all observers do not take the temperature of the same part of the body. (b)

The conclusions of Professor Wünderlich, as to the normal temperature of the body, do not seem to thoroughly harmonise with those arrived at by Dr. Sydney Ringer, brought forward in a paper recently laid before the Royal Society. Again, the observations of Dr. Prior, of Bedford, on the temperature of the body in disease, as described by him in the *British Medical Journal* of May 9, 1868, do not seem to agree perfectly with those of the German Professor, who, by the way, has made

(a) Report for 1833, page 237.
(b) Report for 1844, page 73.
(c) Report for 1844.
(d) With the exception of a few additions and corrections, this paper is a verbatim copy of that read by the author at the annual meeting of the British Medical Association, recently held in Leeds.

(a) "Handy Book of Meteorology." Blackwood. 1867.

(b) The means of a few observations, recently made by myself, on the temperature of the mouth, axillæ, groin (in the neighbourhood of the scrotum), and rectum of a male, aged 30 years, would seem to show that the rectum is about two-fifths of a degree warmer than the mouth, and the mouth about four-fifths of a degree warmer than the axillæ and groin. It is of course necessary to make a large number of observations, in order to be enabled to speak positively as to the difference in the temperature of the various parts of the body.

half a million of thermometrical observations. Wünderlich, for example, informs us that a rising of the thermometer above 99·5° Fahr., or a depression below 97·3° Fahr., are sure signs of the existence of disease, if such increase or depression be persistent; also, that temperatures above 105° indicate imminent danger. Dr. Prior writes:—"Continuous temperatures above 100° are not strictly compatible with health, and temperatures above 105° are always attended with danger."

Meteorologists have now, for some time past, seen the importance of employing those thermometers only which have been verified, by means of a comparison with the standard instruments in the Greenwich or Kew Observatories. If thermometers for taking the temperature of the air are now always verified, of how much greater importance is it to use thoroughly accurate instruments for the determination of that of the body! When we know the errors of thermometers, if they possess any, nothing is easier than to make the proper corrections.

My attention was first drawn to the subject of the inaccuracy in the indications of clinical thermometers by the knowledge of the following circumstances. A Medical friend, who was connected with a large Hospital, employed himself for many months in making observations on the temperatures of various diseases. The fruits of his toil and labour were finally prepared by him for the Medical world in the form of a paper. Soon after its completion, he discovered that his thermometer was inaccurate. Before its errors could be ascertained by verification, the instrument was accidentally broken. The observations made with it were now of course valueless. The time and work expended were literally thrown away, so far as correct observations were concerned.

Some clinical thermometers have been offered to the public with the assurance that "every instrument is carefully verified by a Kew Standard thermometer," which simply means a well-made thermometer that has been verified at the Kew Observatory—one, in fact, whose errors are known. A clinical thermometer, which had been thus verified, has recently been sent by me to this observatory. The certificate returned with it contained the following corrections:—

At 90°	—0·2
„ 95°	—0·2
„ 100°	—0·1
„ 105°	—0·0

This thermometer belongs to a Physician who was about to commence a series of observations on the temperature of children, believing that his instrument could not be otherwise than correct in its readings, as its accuracy had been guaranteed by the manufacturer. Here is another clinical thermometer sent out by a different maker, "guaranteed accurate in its indications, having been compared, degree by degree, with a standard thermometer verified at Kew." It is about ·4 of a degree in one part of the scale, and ·5 in another part, higher than is correct.

Here is a third clinical thermometer, which was supposed to be perfectly accurate, before returned from the Kew Observatory with the following certificate:—

At 85°	—0·3
„ 90°	—0·4
„ 95°	—0·5
„ 100°	—0·4
„ 105°	—0·4

You will notice that its errors vary from ·3 of a degree to ·5 or half a degree.

It is not by any means an easy matter to verify thermometers with precision, as I very well know from experience. The verification can only be satisfactorily conducted by means of instruments specially adapted for the purpose, such as are to be found in the great observatories.

It should be done, moreover, with the greatest care by men who are accustomed to the work. All who already possess clinical thermometers should either send them to their makers, or to a man whom I shall presently name, with a request that they be transmitted to Kew for verification. The instrument will be returned to them, accompanied by a certificate, containing the corrections to be applied to the readings, if any are requisite, and by a demand for 2s. 6d., which is the verification fee.

The Different Kinds of Clinical Thermometers.

The principal forms of clinical thermometers with which I am acquainted are about half a dozen in number:—

1. Inconveniently long German thermometers, not graduated on the glass, but furnished with a piece of paper inserted in the outer tube.

2. Thermometer about a foot in length, not self-registering, with curved bulbous extremity to facilitate its introduction into the axilla.

3. Self-registering maximum thermometer, on Phillips's principle, rather more than ten inches long.

4. Pocket maximum thermometer, on the same principle, about six inches long. Stem of instrument somewhat thick and clumsy, with bulb of small diameter.

5. Pocket maximum thermometer, on same principle, about six inches long, well proportioned, with bulb of larger diameter. The degrees are closer to one another than is desirable in an instrument which is to be read to the one-tenth of a degree.

6. Small toy instruments about three or four inches in length, which are of very little service.

The thermometer of form (1) is an extremely inconvenient instrument, which is especially prone to inaccuracy. The forms (2 and 3) are very liable to fracture, when employed in private practice, on account of their great length.

Some thermometers have the Centigrade as well as the Fahrenheit scale marked on the glass stem, whilst others have the Centigrade scale divided on the wooden tubes which enclose them. The Reaumur scale would have been far more useful, since Germany is the head-quarters of this department of scientific Medicine. Loving simplicity, and finding that the presence of two scales on the stem of the thermometer is somewhat perplexing, I convert the Fahrenheit into the other scales, when needful, by means of the table commonly employed for this purpose, which is contained in almost every good work on chemistry or meteorology.

Of all the clinical thermometers which I have examined, I consider that the instrument supplied by Hawksley, of Blenheim-street, London, is the best.(d) It is six inches long, about five inches of which are divided into 20° Fahr., thus allowing nearly a quarter of an inch of space for each degree, which is again subdivided into five parts. It is read to the one-tenth of a degree with the greatest facility. I cannot, however, shut my eyes to four faults in this the most convenient clinical thermometer which has been hitherto introduced.

α. It is not correct, although the accuracy of its indications is guaranteed.

β. The bulb is too small, and does not consequently expose a surface sufficiently large to the part of the body whose temperature is to be ascertained. It is sometimes, in certain cases, very difficult to take the temperature of the axilla correctly, especially in the emaciated, when the bulb is so small as it is now generally constructed.

γ. There is not a sufficient amount of space between the commencement of the scale and the bulb; hence arises a danger of jerking the index back into the bulb when the thermometer is set.

δ. The black material, employed for rendering the divisions of the scale clearly perceptible to the eye, does not withstand the action of soap and water.

It is my intention to have a clinical thermometer made which will be free from the last three faults. This instrument, when accompanied by a certificate of verification from one of the observatories, will be as near perfection as anything in this world can possibly be.

The Stethoscope and Clinical Thermometer Combined.

As the thermometer is, like the stethoscope, quite entitled to the appellation of a *vade-mecum*, it should always accompany the Physician in his Professional visits, the associate of that valuable aid to auscultation.

A trifling addition to the ordinary tubular stethoscope suffices to convert it into an excellent protecting sheath, in which the thermometer can be carried. The bulb rests in the bell-shaped extremity of the stethoscope, where it is maintained by the superposition of a cap. This cap is made either of leather with an elastic ring or of vulcanised india-rubber, the former material being preferable. It is removed and readjusted with the greatest facility. Sometimes a little india-rubber washer is desirable at the neck of the thermometer to prevent any vertical motion of the instrument, when violent exercise on horseback is taken. The diameter of the tube of the stethoscope should correspond with that of the thermometer in order to prevent all lateral motion.

If Mr. Eve, of 18A, Featherstone-street, City-road, London, be furnished with the following measurements of any stethoscope for which a cap is desired, he will transmit one by post as soon as possible.

1. Diameter of the bell-shaped extremity.
2. Diameter of its neck at half-inch from measurement No. 1.

(d) Harvey and Reynolds, of Leeds, have recently brought out one which very nearly equals it.

The same philosophical instrument-maker is willing to undertake the safe conveyance of thermometers to Kew, and will return any that may be sent to him for verification promptly with their certificates from that observatory.

Suggestions to the Purchasers of Clinical Thermometers.

There are two or three suggestions which may prove useful to the purchasers of clinical thermometers. I will not give any advice in the matter, believing fully in the general rule laid down by Lord Derby that "advice unasked for is rarely valued."

a. Mercurial thermomcters which are two or three years old are always to be preferred.

b. A clinical thermometer should be a very sensitive mercurial maximum, self-registering, on Phillips's principle, six inches long, with graduations marked on the glass stem, extending from 90° to 112° Fahr. The degrees should be divided into fifths, and be one-fifth of an inch apart from each other. It should be free from the faults already adverted to. It may be enclosed in a stethoscope, furnished with a cap for its protection, or carried in a boxwood case, the former mode being by far the more convenient and portable arrangement.

c. No instrument should be purchased without a certificate from an observatory of its *recent* verification.

Mercurial thermometers are liable to read higher than is correct, through age, and this change especially occurs during the year or two immediately succeeding the period of their construction. The bulb, having been formed by the action of heat, undergoes contraction after its manufacture, the fibres of the glass taking some little time to assume their permanent position. Hence it has been usual amongst some makers of meteorological instruments to lay down their thermometers, like their port, for improvement with age, before engraving the scale on their stems. "By quite a recent discovery in the manufacture of these instruments," writes one who sells clinical thermometers, "the glass bulb of the thermometer is reduced to its ultimate degree of contraction before the stem is divided, thus obviating the necessity of keeping the tubes filled for the space of one or two years before dividing them, and rendering it possible to make an absolutely accurate instrument in a week." With the object of ascertaining the truth of this statement, I made a careful examination of one of these thermometers, and discovered that it was incorrect. Its readings were about two-fifths of a degree too high.

It must be remembered that the verification of a two- or three-year-old mercurial thermometer at an observatory should not be relied on as a guarantee of the perpetual accuracy of an instrument. The authorities of the Kew Observatory consequently append to their certificates the following amidst other notes:—"This instrument ought, at some future date, to be again tested at the melting point of ice, and, if its reading at that point be found different from that now given, an appropriate correction ought to be applied to all the above points."

We none of us, I hope, now require such an unpleasant stimulus as that conveyed in the reproachful remark of Wünderlich. He observed that a Medical man who practised without employing the thermometer as an aid to diagnosis resembled a blind man endeavouring to distinguish colours by feeling. I entertain some doubts as to the dissemination of many thermometers amongst, and as to their employment by, the country Practitioners of this kingdom. Surely this instrument has ere this passed completely through the three stages of (1) derision, (2) examination, and (3) acceptation or rejection, to which ordeal Stuart Mill tells us that every new thing is subjected. The clinical thermometer can hardly be said, however, to be a novelty, since it was employed by De Haen and Currie. It has, like many other good things, been revived, after having suffered for a season from forgetfulness and even abandonment.

In conclusion, I trust that the preceding remarks will tend to create an interest in the employment of the thermometer amongst those who have hitherto felt none, and will, moreover, intensify the interest of all who study such an exceedingly important subject as "the thermometry of disease."

The deaths of 2095 persons were recorded in the eight towns of Scotland during September, 1057 males and 1038 females. This is the greatest number registered for September since the Act came into operation in 1855; and, increase of population being allowed for, is 193 deaths above the average of the month for the past ten years.

ON THE WORKING OF THE CONTAGIOUS DISEASES ACT AT DEVONPORT.

A PAPER READ BEFORE THE SOCIAL SCIENCE CONGRESS AT BRISTOL, OCTOBER 4, 1869.

By W. P. SWAIN,
Surgeon to the Royal Albert Hospital, Devonport.

(*Concluded from page* 430.)

I wish now to call your attention to the results we have obtained at Devonport under the Acts I have just reviewed.

The health of the Army and Navy with respect to enthetic disease previous to the passing of the "Contagious Diseases Act, 1864," was truly appalling.

In speaking in committee of the House of Commons early in that year, Lord Clarence Paget said in reference to this subject: "The hon. member for Bedford (Mr. Whitbread) and several other gentlemen have looked into this matter, and have made a report; but I dare not place it before the committee. I will, however, show it to any hon. gentlemen who may desire to see it."

Sir Morton Peto, on the same occasion, said—"The evidence of the Deputy Inspector-General of Hospitals showed, that although in foreign services the proportion of men suffering from these causes extended to 60 or 70 men per 1000 per annum, in the British Service it was not less than 442 per 1000 annually;" in other words, 44 per cent.

These figures refer to the Navy, but similar ones might be adduced with regard to the Army. They were, of course, a general return; but to come to special places, there was no port on the home station which enjoyed a worse repute than Plymouth in this matter; it was looked upon almost as a plague-spot, to be avoided as much as possible.

To meet this state of things, the lock wards of the Royal Albert Hospital were opened on December 1, 1863, with a provision of 25 beds. In 1865 the number was increased to 38, in 1866 to 62, and since the completion of the building in 1868 to 162, the present number.

From December 1, 1863, to March 31, 1865, the detention of women was voluntary; but from the passing of the "Contagious Diseases Act, 1864," it has been compulsory, additional powers having been given by the "Act of 1866," and more recently by the "Amended Act of 1866," just passed. Upwards of 3500 cases have been treated in the Lock wards up to the present time, and an abstract of the cases treated up to March 31, 1869, shows that out of 2854 cases admitted, 899 were cases of syphilis. One of the most striking facts connected with our work is this:—that the percentage of syphilitic cases treated in our wards has steadily diminished. Thus from December 3, 1863, to March 31, 1865, the percentage of syphilitic cases was 57·45, whilst from October 1, 1868, to March 31, 1869, the percentage was only 17·72. This striking diminution in the prevalence of a disease so horrible in its consequences, not only to the unhappy patient affected with the primary disease, but to her children's children, is a result we hardly hoped for, and affords the strongest possible argument in favour of the extension of an Act which has to such an extent (within the area where it is in force) stamped down this dreadful scurge of the civilised world.

But still further to demonstrate the benefit of the Act, I will now refer to the effect it has had in checking disease in the Army and Navy. I have already stated that prior to the passing of the Act of 1864, 44 per cent. per annum of men in the Royal Navy suffered from contagious disease. The return for twelve months ending March 31, 1866, including not only the men in the Royal Navy, but also in the Army and Marines, shows a percentage of 19·529 only, of men admitted to Hospital with contagious diseases. The return for the last twelve months, ending June, 1869, shows that out of an average strength for the year of 10,656 men, the admissions to Hospital of men affected with contagious diseases was 13·00 per cent.

Thus we have reduced enthetic diseases in the garrison from 44 per cent. to 13·00 per cent. But out of this 13·00 per cent., we gather from our returns that only 9·76 per cent. contracted disease within the Devonport district. Comparing our district with Portsmouth, Aldershot, and Chatham, all of them large garrisons, we find that Devonport stands lowest, as the following table shows:—

	Annual ratio of men admitted into Hospital.	Ditto for disease contracted within the district.
Plymouth .	15·67	9·76
Portsmouth .	21·67	14·66
Aldershot .	20·35	10·89
Chatham .	24·00	15·73

Hand in hand with the above facts is this other one, that as the disease amongst the men in garrison has diminished, so the vacant beds at the Royal Albert Hospital have increased, as shown in the following table :—

Quarter ending	Annual ratio of Men contracting Disease in the District.	Vacant Beds for Women in Royal Albert Hospital (average)
Sept. 30, 1868 .	11·960	9·23
Dec. 31, 1868 .	9·228	27·60
March 31, 1869 .	8·900	15·10
June 30, 1869 .	7·112	43·00

These results, good as they are, are yet capable of improvement. The periodical examination of women is as yet carried out very defectively. It was lately stated by the Visiting Surgeon, Mr. Sloggett, before a committee of the House of Commons, that there are in the Devonport district 770 known prostitutes. I shall refer to this again presently, but taking it, for the moment, that this is the correct number, and deducting from that number an average of, say, 120 in Hospital, it follows that 325 should be brought up every week for their fortnightly examination. From the returns, however, which are weekly made to us, we find that during the twelve months ending August 28, 1869, a weekly average of only 182 women attended for examination. Thus 143 women, known and registered as prostitutes, managed somehow to evade their periodical examinations every week. In connexion with this fact, we meet with constant and angry complaints from the women, that some of them are brought up for examination much oftener than others, and, in corroboration of this, cases of contagious syphilitic disease are from time to time admitted into the Lock wards, which, from their very nature, must have existed for a considerable time, and consequently escaped examination for that period.

Upon the very important subject of police information, I would reiterate what we have already stated in a letter to the Lords of the Admiralty :—

"The system of obtaining information against women from men in the naval and military Hospitals who have contracted disease in the port, still obtains to a great extent. While we think that this may be a very good way of obtaining evidence as to who are prostitutes, and of thus adding new names to the register from time to time, we nevertheless strongly deprecate it when used as a pretext for hurrying a girl up for immediate examination, and fastening suspicion upon her. We believe such informations to be both valueless and mischievous. They are valueless, because our soldiers and sailors are not particular in confining their attentions to one woman, and therefore are often unable to tell with truth by what woman they have been infected. They are further proved to be valueless from the fact that many women so accused are found by the Visiting Surgeon free from contagious disease. These informations are mischievous because they give men the opportunity of paying off a grudge against a woman; they open the way to partiality and favouritism on the part of the police, and their natural tendency, if much relied upon as a means of bringing women up for examination, is undoubtedly towards bribery and corruption. They are further quite an unnecessary waste of time; for, provided the police bring up every woman for examination once a fortnight, we believe nothing more is required. We contend that the exertions of the police would be far better directed to obtaining a more regular attendance of women, and increasing the numbers on the register."

Both at Plymouth and Portsmouth, the staff of police employed is furnished from the Metropolitan force, and numbers only five men. This number is quite inadequate, and explains to a great extent the reason why the periodical examination of the women is at present so defective. The question of police will be, no doubt, one of the great difficulties we shall have to contend with in any extension of the Act to the civil population. To obtain a staff of men who shall be above the wily solicitations of the class with whom they have to deal, is indeed difficult. I think the opinion which has been expressed, that the borough police are not trustworthy, is correct. I have no doubt that in large towns the borough police will be found as incorruptible as the metropolitan, and if the Act is to be extended they must be employed. You will have to place at the head of each police organisation a man of superior talents and position, who will supervise the whole external working of the Act. I think such an officer is to be found in the Visiting Surgeon, who should have conferred upon him complete control over the police with whom he works. But whilst giving him this power, there is another he possesses in some places, and with which it is sought to vest him at Devonport, against which I strongly protest, in company, I believe, with an influential portion of the press, and with many gentlemen well acquainted with the working of the Act.

This is the power to interfere in any way, directly or indirectly, with the treatment or detention of a woman after she enters Hospital. To give him this power is to confer on him the attributes of prosecutor, judge, and gaoler, and opens the door wide to great abuse of police power. We do not protest thus strongly without good grounds, and we do insist that if the Act is to be extended, it must be done with every possible regard to the protection of the women from unjust detention. I have yet to learn that because a woman is a prostitute, she is therefore to be refused that just protection which the law concedes to every other subject in this land. If she be dangerous to the population, let her be secluded as the law provides, until the danger be passed. So long as she is dangerous, her liberty is forfeited for the good of the State, but in all other respects she has equal rights of liberty with every other subject. The Surgeon who treats the case after admission to Hospital should be in no way connected with the Surgeon outside, who certifies that she is diseased. The one should be a check upon the other, and such a check would render the improper seclusion of a woman in Hospital almost impossible.

Having thus dealt with the Medical results of the working of the Act at Devonport, I now wish to say a few words upon the moral effect which it has produced amongst the women who have come under its control.

This aspect of the question is one which, I am aware, is looked on by very many persons as worthy of the first consideration. Without going the extreme length to which many such persons go, I would say this :—That any attempt to secure immunity from physical disease for the population, without at the same time the most strenuous efforts being made to cure that horrible moral canker which is eating into the very vitals of English society, I should regard with the utmost abhorrence.

It appears to me, however, that the cure of these unhappy women of their bodily disease is so naturally connected with the attempts to reclaim them from the course of life on which they have entered, that it is almost impossible in a country like England to dissociate the one from the other. Accordingly at Devonport, the Government have made provisions for the spiritual welfare of the patients in the Lock wards. An annual allowance is made of £100 towards a chaplain's salary, and of £150 towards a Samaritan Fund, which is used to assist women in their efforts to leave their life of infamy, and commence a new career.

The question how these women are to be dealt with from a religious point of view is one which requires much more time to answer than I can afford here. I would just state my strong conviction, that this is a field of labour especially laid out for women. I believe that the good influence of a woman upon her fallen sisters is enormous, provided she be a person skilled in the arduous work she has to do. I may say that I am certain that anything like promiscuous visitation of the women will fall short of what is required. One good, self-denying, persevering, clever woman will do more to get hold of them than all the district visitors that were ever born, backed up by all the tracts that were ever printed. She will gain their confidence first, and their love after, and will retain a hold upon them in after life wherever they may be. Such a woman is not to be met with every day, or in every place, but there are now to be found in England, thank God, women who have devoted themselves to this labour of love, and who some day or other, when prejudice is smoothed down, will no doubt be employed to do the work for which they are trained by long practice and experience.

So with the chaplain; he should not be picked up at haphazard. You may as well set a ploughman to perform a delicate operation in Surgery, as appoint a clergyman to do Lock work on the simple ground that he is a hardworking, energetic, self-denying, holy man. All these gifts are needful, but he must have, in addition, peculiar aptitude for the work, such as is seldom to be gained but by long familiarity with it, and an almost natural instinct as to what is the right thing to do at the right moment.

However good may be the instruments which you employ, there is no more discouraging work than the reclamation of fallen women, and any attempt to claim success from a mere statistical record is in my opinion most unwise. It is better to look the evil fairly in the face and grapple with it manfully, than to gloss it over, or even allow oneself to look at it through too rosy a medium. Thus we have been lately told (a) that the

(a) *Vide* Mr. W. H. Sloggett's evidence, p. 7. Minutes of evidence before Committee of the House of Commons, June, 1869.

number of prostitutes in our neighbourhood has diminished from 2000 in 1864, to 770 at the present time. We have also been told, as a proof that vice has materially diminished, that clandestine prostitution has much lessened. Now many people who are well able to judge assert that there never were so many as 2000 public prostitutes in the three towns, and although there are only 770 names now on the police register, it is believed impossible that that number represents the entire body of women who practise prostitution at the present time. As far as Devonport is concerned, I know, on the best authority, that the number of women has slightly increased during the last two years. It is thought that the gentleman who made this statement has been wrong at both ends, in overstating the number of prostitutes in the towns in 1864, and in understating the numbers at present practising this vocation. But to go on to assert that, with this enormous decrease in the number of public prostitutes, clandestine prostitution has also diminished is really to state a fact which runs counter to the experience of every one who has studied the subject, which is that clandestine prostitution invariably increases with the decrease of the number of women who gain their livelihood as public prostitutes.

What I believe to be really the case is this—that the effect of the Act upon the women generally has been to render them more orderly and quiet in their demeanour. I have no doubt that a visit to the Hospital has a humanising effect upon a woman's mind. She is treated with a kindness and consideration to which she is unaccustomed outside. Moreover, she is withdrawn, if only for a time, from the vortex of dissipation into which she has plunged, and is surrounded by influences which are nearly all for good. When she leaves she does so with certain aspirations after a more decent life, and I believe this materially affects her conduct out of doors.

But at the Royal Albert Hospital we have a lady at the head of the nursing establishment, who is peculiarly fitted to deal with these women, and in the early working of the Hospital, our success in reclaiming women was very great. From April 1, 1865, to September 30, 1867, we either sent to refuges or returned to their friends 38 per cent. of the women who came under our care.

Of these women who have been reclaimed, the matron writes me as follows:—"I have satisfactory accounts from the London, Exeter, Bovey Tracey, and Plymouth Homes. I can speak with certainty of many still doing well who left the Hospital in 1864, having remained two years in a Home, and three years in service. One sends money to her mother every month, and has money in the bank. Many sent to their friends are doing well—one went to Australia, I have good accounts of her."

Our present excellent chaplain gives me the following report:—From April 1 to September 30, this year, 19 have been sent to reformatories; 12 have gone to their homes; 1 has been married; total 32 reclaimed. So far, with two exceptions, all of them are doing well, and are likely to continue to do so.

The conduct of the women whilst in Hospital has been on the whole very good. Now and then we get an unruly patient, disappointed at not obtaining her discharge as soon as she expected. Out of 2937 women who have passed through our wards since 1866, only 30 have been sent to prison for misconduct.

I trust enough has been said to show that at any rate no pains are spared to rescue these women from a life of shame, and that to some extent God has blessed our labours. This much is certain, that owing to the Act a vast number of women have been brought under a good influence, who would under no other circumstances have come within its sphere.

Royal College of Surgeons.—The vacancy in the Council caused by the resignation of Mr. Swan will not be filled up until the annual meeting in July next.

Malformation and defect are not so common in China as in England. Chinamen have well-formed limbs in general, and they doubtless derive benefit from the free exposure of these parts of the body to the beneficent influence of that glorious light which floods all their land. Harelip, cleft palate, and many other diseases of development might have been expected to be met with more frequently amongst a people who have "bred in and in," have seldom derived any benefit from that forced commingling of race which is known to be favourable to the preservation of a good type of physical constitution, and frequently suffer from the evils of insufficient food, overcrowding, and the turmoil of chronic rebellion.—*Report of the Hankow Medical Mission Hospital*, 1868.

REPORTS OF HOSPITAL PRACTICE

IN

MEDICINE AND SURGERY.

ST. BARTHOLOMEW'S HOSPITAL.

OPERATIONS.

To attend the several large Hospitals from time to time on the days devoted to Surgical operations, must always be as instructive as it is interesting. To note the differences in the style of the various operators, the peculiarities of the schools, the amount of oral teaching accompanying the manual display, and the extent to which many of the only half-accepted modes of treatment—as, *e.g.*, torsion, acupressure, the use of carbolic acid, and other disinfectants — are practised and approved of, is so full of interest to the observer, that such notes may well occupy a place amongst the more carefully selected accounts of cases which usually form the bulk of the "Hospital Reports" in the journals.

We were at St. Bartholomew's Hospital to witness the operations on Saturday, October 9. The theatre was well stocked with attentive students, in spite of the troubles which are now attracting to this Hospital so large a share of public attention. The practice of not publishing a list of the operations to be performed may serve to stimulate the curiosity of the students, and to prevent the rush from the theatre at the close of the last "good" case on the list, so well known elsewhere. Two points which would attract the notice of a stranger visiting this theatre are, first, that the patients are removed from the table and placed upon what looks like an ordinary stretcher, with the usual stout straps—a strong contrast to the luxurious spring-table on high wheels used at King's College Hospital; and, secondly, that the dresser who takes charge of a limb to be amputated is muffled from head to foot in a large sheet. On the present occasion, the gentleman who held the leg during a thigh amputation first went aside whilst one of the nurses pinned round his neck a large white sheet reaching to the ground, and in this ghostly guise he took his seat and held the limb with his carefully protected hands, just as one holds the newspaper whilst undergoing the miseries of hair-cutting.

The first case was one of necrosis of the femur in a man, aged 60. Mr. Paget stated that forty years ago dead bone had been removed from the lower part of this man's thigh, but that, after a lapse of twenty years, the old sinuses had re-opened, and remained discharging ever since. It was possible, said Mr. Paget, that the cavity in the bone whence the sequestrum had been removed had inflamed, and an abscess had resulted, in which case the treatment would be to enlarge the opening and remove any dead or gouge away any carious bone; but if a mere abscess were found, it must be opened in another position to allow of a free draining away of the discharge. "The man is himself quite prepared for amputation if necessary, which he confirms in this merry way" (as the patient broke out into a fit of boisterous chuckling under the chloroformed lint), "but he fears amputation less than I do, and it becomes necessary for me to protect him against himself." Mr. Paget then proceeded to make a long curved incision over the lower third of the femur on the inner side. There was free hæmorrhage, for which a horse-shoe tourniquet was applied over the femoral artery whilst dead and carious bone was removed, the wound being lightly filled with lint soaked in carbolic acid lotion after the vessels had been tied, and a bit of lint with carbolic oil bandaged over all.

The next case was also one of necrosis of the femur—this time of the popliteal surface of the bone—in a man aged about 26, in whom a discharging sinus had existed in the inner side of the lower part of the thigh for eight years, at a point just between the vastus and adductor muscles—the invariable position of such abscesses in connexion with disease of this part of the bone, as Mr. Paget pointed out. Lately a second opening had formed on the outer side; but as no dead bone could be felt with the probe the diagnosis was necessarily deferred for a more complete examination under chloroform. Mr. Paget now enlarged the openings, and, having carefully explored the part, found neither dead bone nor diseased periosteum. He said that it might be that a bursa had suppurated and discharged in this way, but that, whatever the cause, the case must be treated as an ordinary abscess, and a drainage tube put through the thigh.

*

Mr. Savory next removed a cancerous tumour from the breast of a woman a little over 30 years old. The tumour was the size of a walnut, situated in the upper and inner margin of the right breast. Mr. Savory removed the tumour alone, dissecting up the skin from over it, and then cutting the mass out of the breast, afterwards cutting away two small bits of cancerous skin by the side of the incision. Ligatures were used, and sutures put loosely in, but the wound was not at once closed. Commenting upon the case, Mr. Savory pointed out to the students the characteristic signs of cancer present, which were well marked, at the same time handing round the specimen for their inspection; and he mentioned the absence of lymphatic gland enlargement and of pain as suggestive of the diagnosis of chronic mammary tumour before commencing the operation. He said that he had not at once brought the edges of the wound together, as there would be more chance of primary union if all blood were cleared away before closing it permanently with pads on either side, so as to get pressure upon the deeper parts. Mr. Savory said that he would not then discuss the question of his reasons for not removing the whole breast when once the cancerous nature of the disease was established. The question was one of great interest, but he would not enter into it on the present occasion.

The last operation was also by Mr. Savory—amputation of the thigh for disease of the knee-joint. Both anterior and posterior flaps were cut from without inwards, hardly more than skin being dissected up. A circular sweep of the knife divided the muscles higher up, and, the bone being found softened when sawn through, two inches more were taken away before bringing the flaps together. Thread ligatures and wire sutures were employed, and oiled lint placed over the face of the stump, which was then covered with a double layer of dry lint and a bandage. Mr. Savory then laid open the joint—a beautiful specimen of disease extending through the pulpy synovial membrane and softened eroded cartilage to the head of the bone, which was carious—and pointed out its pathological features to the students. Mr. Savory also explained why in this case he had resorted to amputation rather than to excision. He said that the patient, a girl, aged about 16, had been making steady downward progress during the weeks in which she had been in the Hospital; her health was bad, and there had been evidence before the operation of disease implicating the bone some distance above the joint in deep tenderness and abscesses—evidence which was confirmed at the time by the softened condition of the sawn end of the bone, and by the readiness with which its periosteum could be peeled up. He had therefore given her the best chance of restoration to health by removing the limb.

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Medical Times and Gazette.

SATURDAY, OCTOBER 16, 1869.

SCARLET FEVER.

A week or two ago the Registrar-General suggested that probably the metropolitan health officers might discover some method of placing a check upon the spread of scarlet fever. The public may rest assured that an energetic body of men such as these are will not be found folding their hands in listlessness in the present emergency. But we doubt if it is generally known how small their actual capabilities are. We propose to show briefly what they can do and what they cannot. Perhaps we may thus be giving hints that may be of service to those who may be contemplating an extension of their powers.

1. They may obtain from union Medical officers, Hospitals, and Dispensaries information of cases of scarlet fever in the families of the poor. But they cannot require such information to be given them as a right, and are entirely dependent upon the good nature of the officials, parochial or otherwise, who possess the information. By the courtesy of the Registrar-General they are enabled to hear of every death from the disease that has been registered the previous week, and of its locality. But as these death certificates only come in a week or ten days after the death has taken place, it may happen that the disease has spread extensively in a house before the health officer has any intimation of its existence. Now and then, if a panic occurs in a respectable neighbourhood, private Practitioners may apprise him of the existence of the disease; but otherwise he never hears of cases under their care until they prove fatal—in fact, it is their policy to keep things quiet.

2. They may do something in the way of diffusing information as to the contagiousness of the disease and the mode of preventing its extension by distributing printed instructions to every family in an infected house. But they cannot insist upon their vestries paying the expense, or even sanctioning the distribution. Some of these wiseacres have a notion that, by thus recognising the presence of a severe epidemic, they may risk the extension of the disease by producing a panic. Neither can they compel the heads of poor families to read such handbills—or, if they do read them, have they any means of enabling them to carry out the more important items of advice? Thoughtless, reckless, ignorant people will still permit their children to enter infected rooms, or to play with infected children. As the poor are lodged in London, we do not see how that communication can well be prevented, which is the most potent of all causes of the spread of scarlatina.

3. They may recommend the removal of sick to the Fever Hospital, but unfortunately the poor have a great objection to separate their offspring from their own care, and, were it otherwise, the London Fever Hospital could not afford the accommodation. Where a poor person is without proper accommodation or lodged in a room where more than one family resides, a removal may be compelled, but then valuable time must be lost by application to a police magistrate.

4. They may advise the vestries to make provision other than public conveyances for moving patients to the Hospital. But they cannot compel these bodies to follow their advice. No one can as yet, and hence cabs are commonly used for this purpose. It is true the Sanitary Act requires that these shall be disinfected afterwards, but no one seems to see that this is done. The late Chief Commissioner of Police was once written to by a health officer about a cab in which a small-pox patient was conveyed from the south-east of London to Highgate, and the letter was not even acknowledged.

5. Day schools are about the most active means for promoting the spread of scarlet fever among the children of the poor. It would be well if all the health officers followed the example set in Islington, and addressed a letter to the masters or managers of all the church and chapel schools, calling attention to this fact, and recommending the utmost care in receiving children from infected houses. The absence of a child from school should be made the subject of an inquiry. Much good might be effected could such co-operation be obtained.

6. They may put in force the provisions of the Sanitary Act, 1866, for the disinfection of rooms, houses, bedding, clothing, etc.—that is to say, so far as their several vestries have thought fit, or may think fit, to make such arrangements as will enable

them to do so. Unfortunately, when scarlet fever occurs in the single room of a poor family, these disinfections can only be carried out at the termination of the family attack, and then nearly all the possible mischief has been done. The poor resolutely object to the overpowering odour of the most effectual of the disinfectants, chlorine and carbolic acid, and will not use them thoroughly; and even if they did, it is questionable whether any such means would prevent children catching the disease when they are permitted to lie on the same bed with the sick person at night, or play about on it by day. We do not know of any instance, with the exception of one parish (Hackney), where the local authority has thought it right to provide proper means of disinfecting bedding or clothing. Some of these are so filthy and old that destruction by fire is alone applicable to them. In these straits all that a health officer can do is to see that they are soaked in some disinfectant solution, that the paper is stripped from the walls of the room, and chloride of lime or carbolic acid washed upon the floors, ceilings, and walls, and meanwhile that the infected rooms are closed. In the last case the difficulty is, what shall be done with the poor family turned out. There are ten chances to one that they will carry the infection somewhere else.

7. In the case of dead bodies, again, health officers have actually little power of interference, except where a dead body lies in a room where persons live and sleep. They can then, *if* a proper mortuary house is provided, require its removal and early burial. But it is not every parish that is thus furnished. In other cases they may advise the closure of the room in which the body lies, and see that it is covered with some disinfecting matter, such as chloride of lime, or linen soaked in carbolic acid, and screwed down in the coffin till the funeral.

8. We need scarcely add that it is in their power to require all ordinary sanitary amendments to be made in a house and adjoining premises, to disinfect closets and drains, and to prevent the reletting of any room until they or some other Medical man are satisfied that it is no longer dangerous.

Now, looking over the list of possibilities and impossibilities, and taking into account the very short incubation of scarlet fever and its intense contagiousness, can it be wondered at that the disease should spread widely under the very eyes of the men who are supposed to be supplied with the means of checking it? In truth, we believe that the metropolitan health officers are doing all that the law and the facilities afforded them permit them to do, and in some instances are going out of their way, trying to do much more than the law either enjoins or sanctions. But for all this, relying as they are obliged to rely so much upon the co-operation of others—the poor, private families, private Practitioners, Hospital and Union authorities, and vestries who grudge every penny bestowed in the direction of health-preservation—we have no expectation of seeing a check put upon scarlatinal extension until the cold weather sets in. Not a very agreeable prospect certainly.

THE WEEK.

TOPICS OF THE DAY.

Dr. Nicholson, D.L., who was shot at and wounded the other day at Balrath, County Meath, is a registered Medical Practitioner, though, we believe, he never practised. He is M.B. and Lic. Med. Cantab., and M.B. *ad eundem* Dublin. He is a man of large property, and son-in-law of the late Dr. Alexander, Lord Bishop of Meath. It appears from the papers that as Dr. Nicholson was driving in an open barouche, accompanied by Miss Staples, an assassin from behind a wall fired at Dr. Nicholson. The shot struck the breast of the coachman, who is since dead. Dr. Nicholson received wounds from slugs in the side. He is going on favourably. Dr. Kellett has extracted two slugs from the arm.

The Birmingham Board of Guardians, to their credit, support their Medical officers against the charges brought against them and others by Dr. Heslop. After a somewhat animated debate at the last meeting of the Board, it was agreed that the following motion should stand as an amendment to the adoption of the report of the Out-door Medical Relief Committee.

"That the minutes of the Out-door Medical Relief Committee now read be received and adopted, and that the district Medical officers be informed, in reply to their letter of the 20th ultimo, that the guardians have no hesitation in stating that nothing whatever has taken place since their appointment to alter the confidence then reposed in them as district Medical officers of this parish, and the guardians are fully satisfied with the zeal and ability which they have shown in the discharge of their duties, and with the manner in which they have been hitherto performed."

Several of the guardians spoke in strong terms of Dr. Heslop's "sweeping and untruthful charges," and stated from personal observation and inquiries that the Medical officers of the Birmingham Union had performed their duties in every way satisfactorily, and that they were equal to the Medical officers of any other union in England.

It has been decided that the ladies' conference shall be continued at future meetings of the Social Science Association. Looking at the very respectable position the ladies took in the affairs of the Association, no one will question the propriety of this step. Several papers of much importance were read at the late meeting, all bearing directly on social science. We would refer particularly to a paper on nursery reform, which contains some most valuable hints on the subject from the pen of a mother of long and great experience.

Dr. Whitmore, in his monthly report of the health of St. Marylebone, has an important paragraph respecting the "foot and mouth disease." Out of 464 cows kept in the parish, 310 have been attacked by the disease, to which may be added some 35 or 40 others that were removed either on the first appearance of the symptoms or soon after recovery. The disease is highly contagious, easily treated, and seldom fatal. Dr. Whitmore has not been able to ascertain that any evil has followed the use of milk from diseased cows, but says—"I have, however, felt it my duty to urge the wisdom and policy of always throwing away the milk from infected animals, and this the cowkeepers generally have promised to do in future."

"Jurors," it is notorious, "are not conjurors," but we had hoped that the time of passing absurd verdicts was gone by. Not so, however. A burglar met with an awfully sudden death last week at Rochester. He had, with two or three men, broken into a public-house in that city, and, while in the very act of robbery—the stolen property clutched in his hand—dropped suddenly dead upon the floor. An inquest was held on the body, and, after hearing the evidence, the jury returned a verdict of "Died by the visitation of God." Of course, we conclude that no post-mortem examination was made. This was a case probably of disease of the heart, terminating life suddenly under the influence of strong excitement. It would have been well that a sensible verdict should have been returned. In the case in which one old man of 82 shot another of 81, the jury found the assassin guilty of murder, therefore sane when he shot his victim, but insane when he shot himself a few minutes later.

Five cattle dealers were fined on Saturday last £5 each for exposing a number of diseased sheep for sale at Southall market.

The accounts referring to the safety of Dr. Livingstone are more cheering. Sir Roderick Murchison said, with respect to a recent report of his arrival on the eastern shore of the Lake Tanganyika—"If the news rests upon a true foundation, our suspense will soon be relieved, for the same letter informs me that a caravan from Ujiji was expected to reach Zanzibar in a month." We now hear of his arrival at Ujiji.

The guardians of St. Pancras are pretty well supported by a section of their constituents in their opposition to the erection of an Infirmary at Highgate. A number of the ratepayers of the parish met at the site of the Infirmary on Saturday last. A rather exciting scene followed. One of the ratepayers moved a resolution solemnly pledging the meeting to resist the erection of the "monster Infirmary," and to stick to the guardians through thick and thin. This was duly seconded and carried. Mr. Watkins said a few words, and the assembly broke up amid great applause.

The Marylebone vestry have exercised the powers vested in them under the Artisans' and Labourers' Dwellings Act, and have peremptorily ordered some miserable houses in York-court to be demolished, on the ground that they are utterly unfit for human habitation. Disease, it appears, is very rife in this filthy locality. The summons has been adjourned for a few days, but the vestry have right and might on their side, and the houses will be pulled down. The example set by the Marylebone vestry is worthy of imitation. Will it be imitated generally? We fear not until some amendment of the Act is made.

Cholera still prevails to a fearful extent in India. It has been shown that, at fifty stations of the army, the water is of a filthy description.

A committee of the guardians of St. Pancras, as the late inquiry had terminated in the virtual acquittal of Dr. Harley and the guardians from the charges imputed to them, recommend that the lawyer's bill for their defence should be taxed and at once paid. The amount is £210.

It is not true that scarlet fever has been very prevalent in the Children's Hospital in Great Ormond-street. During the past three months "only one patient in every 246 had indisputable scarlatina, and one case in every sixty-three was either a doubtful case or one of the sequelæ of the disease."

The inquest in the alleged poisoning case at Dublin has been again adjourned for a week.

There is no doubt but that the exposed mud of the Serpentine is offensive, and bubbles of gas might have been seen rising from the shallow water near the bridge on Sunday morning. Still, some of the very terrible accounts which are sent to the papers must be a little tinted by hysteria. Moreover, if the exposed mud of the Serpentine, and its bubbling with gas, are so very deleterious to delicate people, why do not they cry out about our standing chronic nuisances, infinitely greater in amount and intensity? There is the filthy mud of the streets, carefully watered under the summer sun; there are the gullyholes that bring up delicious whiffs of sewer perfume, the ventilating openings from which a hot steam may be seen to rise visibly from the sewers in cold weather; there are the filthy accumulations of dust hearded in every area. If people are in earnest about the Serpentine once in their lifetime, why do they not attack every-day nuisances nearer home?

KING'S COLLEGE.

The Warneford Scholarships awarded to Medical students on their entrance into the College, have been this year given to Messrs. Batterbury and Gibbings.

DR. RICHARDSON AT BIRMINGHAM.

Dr. B. W. Richardson has accepted an invitation from the President and Council of the Midland Medical Society to deliver an address in Birmingham on Thursday, the 21st inst. Upwards of 400 invitations have been issued to members of the Medical Profession in the midland counties; the *réunion* will take place in the large public room of the Great Western Hotel. Coffee at 7.

ST. BARTHOLOMEW'S HOSPITAL REFORM.

Arrangements have been made for lessening the number of casualty patients, and for sifting them, so that such as require more prolonged examination may go to the Assistant-Physicians.

LONDON UNION SOCIETY.

The annual general meeting of the London Union Society will be held in the large theatre of King's College on Wednesday next, October 20, at half-past seven in the evening. The officers will be elected for the ensuing year, and the annual report will be read.

SCARLATINA IN THE PORTSMOUTH GARRISON.

Reports have gone abroad that scarlatina is prevalent in the 2nd Battalion of the 2nd Foot in garrisen at Portsmouth. In point of fact the disease has only appeared in one family—the quartermaster's—and in the instance of one officer. Prompt measures for limiting the disease by isolation and other means have been adopted, so that doubtless it will not extend widely.

DEATH FROM BICHLORIDE OF METHYLENE.

The first recorded death (as far as we are aware) from the inhalation of bichloride of methylene occurred this week in Charing-cross Hospital. The patient, who had been greatly reduced by malignant disease of the jaw, was about to be operated on by Mr. Canton. The anæsthetic agent was being administered by Mr. Peter Marshall, who has had great experience in its use, and only a very small quantity had been given, when the fatal collapse occurred.

THE REPRESENTATION OF THE UNIVERSITIES OF GLASGOW AND ABERDEEN.

It is now generally understood that the contest for this seat will be between Mr. Gordon, Q.C., the Conservative candidate, and Mr. Smith, F.R.S., of Jordan-hill, the Liberal candidate. Mr. John Stuart Mill, although backed up by the mysterious body which pretends to preside over Scotch university matters, and has its dark abode in London, has failed to secure the interest of a much more important party, those who have the power to elect. The claims of Mr. Gordon rest chiefly on the diligence and ability with which he performed the duties of Lord Advocate in the late Conservative administration—a post which he filled in such a way as to secure the respect of both Conservatives and Liberals. Mr. Smith is a man of a different stamp. He is a Chancery barrister, it is true, but his reputation has chiefly been made by his mathematical discoveries. He has long been one of the principal supporters of the *Cambridge Mathematical Journal*. He was senior wrangler, and is a F.R.S. If the Universities desire to be represented by a distinguished mathematician, Mr. Smith is precisely the man to suit; but if the constituents hold that a good mathematician is good for little else than mathematics, then Mr. Gordon is a tried man of business, a thorough gentleman, and one in whose hands the interests of the University may be safely entrusted. A general feeling of regret has been expressed that no Medical candidate has appeared.

THE CHAIR OF SURGERY IN GLASGOW.

We are pleased to hear that the Home Secretary, after long delay and apparent hesitation, has bestowed the chair of Surgery in the University of Glasgow, vacant by the transference of Professor Lister to Edinburgh, on Dr. G. H. Macleod. Undoubtedly the claims of this gentleman were high. For many years he has been a teacher of Surgery in the Andersonian Institution in Glasgow, and he has earned for himself a high name not only as a didactic, but also as a clinical teacher. His published works on Military Surgery and on Surgical Diagnosis are known and esteemed. His

principal opponent, Dr. Buchanan, himself a skilful Surgeon, reaps the advantage of an hereditary name. We suppose there were always Buchanans in Glasgow, but the present distinguished Professor of Physiology has given an authority to the name which it did not previously possess, as far as Medicine is concerned. Dr. Macleod is to be congratulated on his appointment, and we cannot also avoid congratulating the Government authorities in not having permitted party feeling to keep the right man out of the right place.

OPENING OF THE SESSION OF THE CLINICAL SOCIETY.

THE session of this Society was opened on Friday last by one of those speeches Mr. Paget knows so well how to make. He selected the work of the Society as his theme, and urged on the members the necessity of making their work clinical—neither anatomical, physiological, nor pathological. He complained that men put too little trust in purely clinical research, and tried to bolster it up by other sciences. He showed how much purely clinical work yet remained to be done, how wide the field was in tracing out both clinical coincidences and clinical sequences, to say nothing of the natural history of disease, rare cases and suchlike, and amply illustrated each department from his own wide experience. His remarks on therapeutics were especially worthy of attention; he showed that, as matters now stand, therapeutic facts were ultimate facts, that our physiological explanations might and did vary, but the facts remained the same. He showed how the discovery of *cures* for disease was rare, but that much might be and had been done to improve the management of disease. In another direction he pointed out a wide field for research in examining into the results of others, as in such a disease as epilepsy, where numerous cures were on record, showing that a number of diseases were probably grouped under a common name. The address, which gave that due place to philosophical empiricism which we have always contended for, elicited the warmest approbation of all who heard it.

THE EDINBURGH INFIRMARY.

THE difficulties of this institution are not yet over; it is said that the proprietors of Watson's Hospital are reconsidering the bargain proposed to them, but apart from this another bone of contention has arisen. The question is now what shape to give the Hospital. Is it to be on the palatial or on the cottage system? The building now occupied as Watson's Hospital lies near the centre of its grounds; it is rather a fine building, and it would be a pity to destroy it, as it would serve admirably for lecture halls and the apartments necessary for administrative purposes. Round it might be grouped the wards on the pavilion system. Those who desire to see a palatial edifice oppose this scheme, and maintain that any difficulties in the way of purifying the air of the wards might be obviated by the use of disinfectants. This means, practically, the use of carbolic acid. Now, that the use of carbolic acid will in any way make up for imprefect hygiene we emphatically deny. No doubt it makes a nice, clean, wholesome lotion, but it does nothing more in the hands of most men. This, we believe, is the conclusion of most metropolitan Surgeons. Undoubtedly, as Sir James Simpson has said, "the great disinfectants and antiseptics we should depend on are abundance of space, abundance of light, and, above all, abundance of fresh, pure, and ever-changing air to every patient in every ward of the Hospital."

ON THE SUPPLY OF SUBJECTS.

THE unusually scanty supply of bodies for dissection, now that we are well advanced in the winter session, again calls for some notice from us. From information we have obtained from a personal visit to the Hospitals it would appear that in the eleven schools where anatomy is taught, eight bodies only have been received, but we cannot form any idea from this number how many of them were supplied from the offices of the Inspector of Anatomy, as in many schools the dissecting-room is helped by the unclaimed bodies of patients who die in the wards, and who afterwards receive decent burials. Suffice it to say that four schools have no material at all. The larger schools are of course entitled to the first of the supply, as they have more students on the point of going up for examination, and more who were unable to obtain the requisite materiallast year, and so we notice the distribution, as far as it goes, has been made in all fairness.

We find, as we have already stated, that the workhouse authorities are becoming daily more and more unwilling to supply us, and for a reason which we have already given. An understanding exists amongst the masters, and they refuse to undergo any annoyance and trouble without remuneration or assistance.

It is mournful to reflect what the result of this want of subjects will be if it continues. The examinations must be at a standstill, for no pupils will present themselves unless they have had material to work on, and teachers cannot sign their schedules. Moreover, the army, navy, and fellowship examinations will suffer, as the candidates will be unable to take courses of Operative Surgery. Public prejudice is always being urged as a reason, but surely, by careful management and a straightforward and generous way of going to work with the workhouse masters, the difficulty might be at once considerably mitigated. The Government inspector of course objects to be regarded as a "purveyor" of bodies; but really it seems to us that this is somewhat of the position he should hold, keeping up a due regard to public feeling. Why cannot the foreign system be adopted? There pupils have no difficulty in obtaining material, and at very slight expense. If this scarcity continues, we shall have our students migrating to the Continent to obtain that instruction which, with improved management, they might readily get at home. We may state that the number of subjects we have given as under dissection was correct up to the time of going to press.

ASIATIC CHOLERA IN EUROPE.

WE had thought the Isthmus of Suez abolished, but lo! here are two of them, and one of them is a newspaper or flying sheet *L'Isthme de Suez*. We cut through it with the greatest pleasure. Let us see what it has to say.

"There has just taken place a circumstance which cannot fail to prove most interesting to all European communities, as showing that our maritime canal will be not only useful for mercantile relations between countries and peoples, but also in regard to public health. Already there have passed in vessels of the canal company, returning from Mecca by Djeddah, as many as 3928 pilgrims. They had come to the Mediterranean by the Red Sea in convoys of five hundred or six hundred each; twenty-four hours was the term of passage, comprising all periods of rest. The transport was effected with facility, and was marked by security and confidence. We are now expecting from Medinatal Nabi 4000 pilgrims or so who will traverse the isthmus in the same manner. For the future Europe need no longer be in apprehension as to the spreading of cholera to her territories. The pilgrims coming from Mecca and Medinat were subjected on their arrival at Suez, on presentation of a clean bill of health, to an observation of eight days; and as the task of supervision is far more arduous in great cities, such as Cairo and Alexandria, the viceroy has given his *fiat* that, instead of traversing Egypt, they should confine themselves to the route of the canal, and re-embark at Port Said, where they might hope to find steam-vessels to convey them in direction homewards.

"During the transit through the canal the sanitary condition of the pilgrims is cared for by Physicians of the Egyptian Government conjointly with those of the canal company, so as to have a double guarantee. Thus we have formed the most complete series of sanitary precautions which have ever yet been instituted as regards Asiatic cholera. In Mecca, too, there is a commission of health which makes known the health conditions during the whole period of the pilgrimage. In the port of Djedda and Yambus, before embarkation thence, members of the same

commission make an individual inspection of every Mohammedan pilgrim. Again, on arrival at Suez they are placed under observation for the space of five days, regulated by Physicians of the Government, which, assisted by a Turkish Medical commissary, has undertaken to inspect all pilgrims previous to their admission into Europe.

During the passage through the canal, Physicians of the Egyptian Government, assisted by those of the service of the Suez canal, maintain throughout a strict inspection. Once again arrived at Port Said, before embarking finally for their native homes, the pilgrims are inspected on board ship."

All this is gratifying, and shows that if Mohammedan governments do not always secure perfection, they know at least in what path it may be found.

MILK AND FOOT AND MOUTH DISEASE.

The prevalence of foot and mouth disease among our dairy cows has caused the question to be revived as to the wholesomeness of the milk produced by the animals attacked. It is scarcely likely, from what we know of dairymen in general, that any consideration of public health would deter them from mixing the milk of diseased cows—such, at least, as it may be possible to get from them—with that of the healthy cows. They are not likely to follow the advice which it is said has been tendered them in Marylebone, and throw it away. In point of fact, we may assume that at the present time an experiment on a large scale is now in progress as to the wholesomeness of such milk. We have not heard as yet of any outbreak of disease amongst the children in the metropolis which could be referred to the use of it, neither do we expect to hear of any such catastrophe. Foot and mouth disease is no new malady either here or elsewhere, and Continental experience, so far as it has gone, demonstrates this—that animals, such as swine, as well as the human species, who drink the milk warm from the cow suffer in consequence from an allied disease affecting the mucous membrane of the buccal cavity, but no such disease is communicated when the milk is allowed to become cold. We should be glad to receive any observations confirmatory or in contradiction of these experiences. So far as we know now, the milk of cows thus diseased is not unwholesome as distributed in London.

From information forwarded from Tunbridge Wells, we learn that the foot and mouth disease is extremely prevalent in that neighbourhood, and that the children and others who use the milk undiluted from diseased animals become affected with an eczematous state of lips, tongue, and palate. We saw this ourselves during the last epidemic in London, in the case of the children of a family which kept a cow for their special supply.

LAKES AND PONDS.—THE SERPENTINE.

Common water exposed to the atmosphere soon becomes mixed with organic matter, from the droppings of birds and beasts and the decayed leaves and other vegetable matter washed into it. What next happens depends on the fact whether the water is in motion or at rest. If in motion, as in a rapid river or a lake, the bottom may be swept clean; for a *lake*, be it observed, is a body of living moving water—an expansion in the course of a river, not a mere motionless *pond*. If at rest, the organic matter sinks and accumulates, and undergoes changes which may be detrimental to the health of the neighbourhood. Then the question comes—What is the scientific mode of treatment?—bearing in mind that some ponds, like the London Serpentine, require not only to be made free from noxious emanations, but to be safe means for bathing and skating. One summary mode was adopted with the ornamental water in St. James's Park. It was made universally shallow, with an impervious bottom, so that it may be at times emptied and cleansed. The results are not good. The colour is frightful, the water offensive, and the bottom becomes covered with black mud. The eye gets none of the natural gratification and repose which it expects, the water is shallow and therefore heated, and the accumulation of organic *débris* considerable. In the Serpentine the colour was better, the water full of minute green threads of confervæ. On keeping a jar of water from the Serpentine and one from St. James's Park in the window for many months, the former yielded abundant bubbles of oxygen in the sunshine, and no unpleasant odour. But the fact remains that, in this and all other water with no outlet, organic matter accumulates, and each successive crop of organisms falls to the bottom as it dies, and forms *mud*; for the true mud of ponds is not clay or common mire, but the accumulation of decayed vegetable matter. Even when the Serpentine bottom is remodelled, this will require some provision to prevent its accumulation. Our plan would be to encourage the growth in it of plants which absorb the "previous sewage contamination," and which, unlike the microscopic confervæ, can be themselves easily removed. Such a plant is the *Anacharis*, of speedy growth, greedily using up all impurity, and converting it into oxygen-breathing vegetable tissue, and capable of being fished out easily once a year, thus representing a certain quantity of organic impurity removed from the water. The edges of the Serpentine—at least in Kensington-gardens—should be fringed with a belt of those most beautiful of English plants which inhabit our rivers—the showy *Caltha palustris*, the *Menyanthes trifoliata*, *Butomus umbellatus*, the *Epilobia*, *Lythrum Salicaria*, the *Sagittaria*, *Nymphæa*, *Nuphar*, and the like—so that the crowds who haunt the banks may get a glimpse of nature, however slight. We may say one word to calm the agitation of the public mind. At least fifty men were at work on October 12 in that part of the Serpentine which is contained in Kensington-gardens. Mud cannot be dealt with easily, and the only plan is to cut trenches in it and let the water soak away.

FROM ABROAD.—M. HUSSON ON CRÈCHES—M. BERTILLON ON THE FRENCH MEDICAL SERVICE.

During the discussion which is now going on in the Académie de Médecine upon the mortality of young infants, and the regulations to be enforced respecting hired nurses, M. Husson, the Director of Public Assistance, made some observations on the *crèches* of Paris, which, as there is an effort being made to introduce these establishments here, may be usefully borne in mind. He thinks a great distinction should be made, in considering their utility, between the merely taking care of young children already weaned, and of those who are still sucking. Founded in Paris in 1844, the number of *crèches* gradually increased to 31; but, at the present time, notwithstanding the assistance of Government, there are only 21, and most of these are in wealthy quarters of the town, the poorest districts being entirely without them. In the 21 *crèches* there were 780 places, though which 2335 children passed in 1868, and, if these places had been occupied the whole year, 428 would have sufficed. The mean duration of the child's residence was fifty-six days, or less than two months, showing that the mothers did not continue long to resort to the *crèches*. The total expense was 94,027 francs, making the cost of a place occupied the whole year 222 francs 48 centimes, and the price per diem 72 centimes. The mothers' contributions amounted to only 19,544 francs. Most of the *crèches* have been established in ordinary apartments insufficiently prepared for the purpose. Recently M. Sainte-Claire Deville has made some curious researches on the air of crowded localities. He has found, on analysing the mephitic gases produced in assemblages of men or women, two descriptions of odorous substances—butyric acid or the acid of rancid butter, and valerianic acid, the acid of rotten fish—ammonia, and an ammoniacal compound like that found in the decomposed liquor of salt herrings. Of these substances he has found no more in a female cholera ward than in a female Surgical ward, but in schools, and wherever young children are assembled together, and in proportion to the

closeness of such assemblies, he has found these gases in larger quantities. In the *crèches* every one must be struck with, however clean they may be, the smell of rancid butter, and this, together with the emanations from the excretions, gives rise to epidemics of ophthalmia and measles, whatever precautions may be taken. Fortunately infants at the breast constitute only a third of the admissions, for no one can doubt the mischief of transporting them long distances in all weathers and leaving them in the *crèches* for twelve or fourteen hours a day. The mothers seldom come twice a day to suckle them as they are required to do, and frequently send them to the *crèches*, although they are working at home, to get them out of the way. It is to older infants between the time of their weaning and their going to school that these establishments would prove most useful. The following are M. Husson's conclusions :—

"1. It is the duty of the mother to suckle her infant. 2. Every healthy child less than five months of age, all weakly children older and unweaned cannot be submitted to the mixed regimen of the breast and the sucking-bottle without mischief. 3. When the mother cannot suckle, a nurse of good moral character and sufficient milk should be chosen. 4. The *crèche* should under no pretext receive children suckled by their mothers when these are able to obtain work or assistance at home. It ought also to reject children weaned before the ninth or tenth month, and those whose mothers can furnish only impoverished milk, unless a nurse on the premises can be found. 5. The typical *crèche* is that which is established at the door or in the very midst of a factory employing a great many women. It should be well ventilated and provided with sufficient attendance to prevent the infants being left motionless in their cradles. The mothers should, under Medical direction, be compelled to suckle their children every two or three hours; and for those for whom mixed suckling is suitable, the purest milk and constantly cleaned sucking-bottles should be provided. I recognise distinctly enough that most of these conditions cannot be fulfilled by *crèches* as they are now constituted, and that children that have not been weaned cannot be thence excluded; but there remains a great task for associations to fulfil—viz., the gathering up the children of the working classes from ten or twelve months to three years of age."

In an analysis which M. Bertillon, the well-known Medical statistician, has just published of M. Chenu's colossal "Statistique Médico-Chirurgicale de la Campagne d'Italie," he points out forcibly how different is the position occupied by the Medical officer in the French army to that which he holds in the English and American armies, and does not hesitate to attribute much of the greater mortality that is observed in it to this circumstance. In the French army he is impeded on every side by administrative regulations, and finds all his efforts to overcome these ineffectual. During the Italian campaign it required his high position and immense exertions on the part of Baron Larrey to prevent disastrous overcrowding in the Hospitals. Certainly matters have even mended there since the Crimean war, a chapter concerning the fearful mortality of which is supplied by M. Chenu, supplementary to his former account of the Crimean campaign. The important fact is strongly brought out that while during the first winter the English army lost 58 per 1000 of its effective and the French only 23, during the second winter the English lost only 2 per 1000, the French lost 27, or rather more than the first year, although hostilities had ceased—*i.e.*, fourteen times more than the English. After dwelling upon the means adopted in the English and American armies, M. Bertillon goes on to say :—

"With us, in the civil as well as in the military Hospitals, the Medical officer is kept at a distance. As little use is made of him as possible, and that only for prescribing. Amputation and purging constitute the strict limits of his duty. The business of erecting Hospitals according to the rules of hygiene, of disposing of the various parts of the service, the choice and quality of the aliments, the regulation of the furniture and proper number of the beds—in a word, the due regulation of the life and discipline of the patients—are removed from his control, these having no connexion with their treatment. Yet must we loudly declare and incessantly repeat, until public opinion has become sufficiently aroused, that in the present state of Medical and biological science the recovery of patients depends little upon pharmaceutical applications, but immensely on the daily observances of hygiene; and I maintain that a sound system of expectation, surrounded by all the hygienic conditions supplied by modern science, would save infinitely more men than the whole pharmacopœia employed amidst the present administrative systems. . . . . If I were writing for the public I might stop here, but as Medical men will read what I am saying, some facts regarding our *confrères* of the army will not be uninteresting to them. And first I will say to my younger *confrères*, Do not lightly enter this thankless profession of a military Medical officer. Before doing so, read and meditate on these volumes of an eminent military Surgeon who has grown old in harness. Recognise well the fact that this subalterned profession is deceitfully assimilated to that of the officer, for it is worse rewarded and more laborious, although infinitely more dangerous. Meditate well the following figures, for their signification is terribly clear :—From 1846 to 1865, the annual mortality of the officers of our army has been 6·1 per 1000, but that of the Medical officers has been 15 per 1000! Whence comes this enormous excess? Is it from difference of age? By no means. Many of our *confrères* quit early so unhealthy a profession; and, in fact, while in the army, one year with another, there are but 2·3 resignations in 1000 officers, among the Medical officers there are as many as there are deaths, 15 per 1000. In time of war the mortality is not less. During the Crimean campaign, the English army, which, for an effective that did not reach a third of ours, had 448 Medical officers, had the good chance not to lose one of them, while of our 450 we lost 82, or more than 18 per cent. Thus, prolonged studies, greater danger, miserable pay, a subaltern position assimilated to that of the commissariat and paymasters—a long preparation and the incessant danger incident on visiting patients, remunerated and esteemed on the same scale as the keeping of books—such is the practice of the profession which it behoves our young *confrères* to meditate before joining."

ROYAL COLLEGE OF SURGEONS.

The proceedings of the Council of this institution have just been suspended in the Hall of the College for the information of its members. From this we learn that the recommendations of the Museum Committee were adopted that such cases should be provided in the upper gallery of the western museum for the display and preservation of the models of skin diseases presented by Professor Erasmus Wilson, F.R.S. This work has been executed in a most creditable manner by Mr. Sage, of Gray's-inn-road, during the past collegiate recess.

Permission was given to Sir Trevor Lawrence, Bart., to inspect the minutes of the Council during the time of his father's period of office, with a view to the publication of his memoirs.

Letters were read from Mr. C. H. Hawkins, Dr. Acland, Dr. Parkes, and Dr. Hawkins, in reference to the proceedings of the General Medical Council at its last session, and it was resolved that the same should be taken into consideration at a special meeting of the Council, which meeting took place on the 7th inst.

A letter from Dr. Hawkins reported that the name of John Pattison was erased from the Register, and also the qualification of Mr. Lima Abraham La'Mert as a Licentiate of the Royal College of Physicians of Edinburgh.

Mr. Erasmus Wilson was unanimously elected Professor of Dermatology for the ensuing year.

Mr. Spencer Smith, in pursuance of his notice, moved that a committee, with power to seek such legal advice as may be necessary, be appointed to advise this Council as to the desirability and the practicability of instituting one conjoint board for conducting joint examinations upon which qualifications to practise Medicine, Surgery, and Midwifery may be obtained. The motion, which was seconded by Mr. Humphry, was carried.

Mr. Charles Hawkins, in pursuance of his notice, moved that the Council, at their next meeting, will take into consideration the question of the present mode of conducting the examinations for the membership of this College as to the examination of candidates at the bedside of patients. The motion, having been seconded by Mr. Humphry, was carried.

Mr. Curling, in pursuance of his notice, moved that previous to the notices for the meeting of Council for the election of professors and lecturers at the College being issued, the

secretary be directed to apply to each professor and lecturer to ascertain whether he desires to be nominated, and in the event of his declining nomination, the same shall be mentioned in the notices of the ensuing meeting of the Council. And the motion having been seconded by Mr. Holden, and the votes taken thereon, was carried.

LETTERS FROM ST. MORITZ IN THE ENGADINE.

(*By our Special Correspondent.*)

I have reserved for my third and last letter a few additional remarks on the climate of St. Moritz, as well as such trustworthy facts as could be gathered on the spot of cases of pulmonary disease which have been benefited by a prolonged residence in this locality. I am not about to enter now upon the general question of the influence of mountain air as a curative agency in cases of tubercular consumption; but I must confess that, considering the confident statements that have been made in certain quarters on this subject, I was somewhat surprised and disappointed at the extreme meagreness of the data which are obtainable here on the spot. General statements one gets in abundance, as well as marvellous stories, but well-authenticated cases where the physical diagnosis has been rigorous and unquestionable, and where the reports of the cases in detail are accessible, are not common.

There appears to be no doubt whatever that certain cases of disease of the respiratory organs do improve considerably after a residence of some months in the higher Alpine valleys, as at Davos and at St. Moritz. But as much and even more may be said of many other localities which possess advantages of other kinds, which cannot be met with at these great altitudes.

One hears of one or two well-known cases where severe and repeated attacks of hæmoptysis have been arrested, and of other cases where troublesome coughs accompanied with considerable emaciation, and supposed to have a tubercular origin, have disappeared; but of the arrest of genuine cases of tubercular consumption, of the nature of which there could be no manner of doubt, the information to be obtained is, as I have already said, meagre and unconvincing.

The following extract from an entry in the visitors' book at Herr Badrutt's Engadiner Kulm Hotel will afford your readers some idea of what a winter at St. Moritz is like. The writer is a young gentleman in delicate health, who passed the last winter (from October to the end of March) in this place in company with three English ladies.

"We spent five and a half months at Herr Badrutt's, and feel ourselves much indebted to the great kindness of himself, his wife, and the whole family. They made our winter quarters so comfortable that we were loth to leave them when spring came. Any doubts we had entertained as to the possibility of keeping warm indoors in a locality where, in the open air, the temperature was often below zero Fahr. in the shade, were speedily dispelled. Owing to the extreme dryness of the air, we never found our sitting-room comfortable above 56° Fahr., a temperature that would be unbearable in winter in the more humid climate of England. The rooms are warmed by means of stoves, not open fire-places, consequently the chief difficulty is to ventilate them properly; to do this effectually, we left our sitting-room for five minutes every two hours, opening all the doors and windows. A pan of water kept on the stove is also indispensable to prevent the already dry air of St. Moritz becoming overdried. On an average we were out four hours daily, walking, skating, sleighing, or sitting on the terrace reading, this latter two or three hours at a time; twice in January we dined on the terrace, and on other days had picnics in our sledges; far from finding it cold, the heat of the sun is so intense at times that sunshades were indispensable, one of the party even skating with one. The brilliancy of the sun, the blueness of the sky, and the clearness of the atmosphere quite surprised us. The lake affords the opportunity, to those who love the art, of skating without interruption for five months. The ice has, to a certain extent, to be artificially maintained. To do this, we, with other English friends, formed a small club—1st, for keeping a circle clear of snow; 2nd, for renewing the surface whenever it became impaired by turning a stream on to it.

"I must state, having spent part of the winter of 1867-68 at Mentone, that I derived far more benefit from that of 1868-69 spent at St. Moritz. The change from England to Mentone did me good at first, but latterly I experienced great lassitude; whilst at St. Moritz I was far stronger at the end of the winter than at the commencement. During the whole time I had neither cold nor cough, though I was out all weathers. I give these health details in the hope that they may be useful to people who, like myself, have delicate lungs. . . . .

"There is always a great amount of ozone in the atmosphere, and without that damp which is necessary to its existence in a place where the winter is not severe. The daily mean of March is 18·47 (21 being the greatest possible amount). By the hygrometer the degree of moisture in the air is very rarely registered as high as 90, being frequently as low as 20. One or two days the sun heat was remarkable, the thermometer reading 142° Fahr.; on the other hand, the greatest cold was 18·5° Fahr.—viz., 50½° below freezing point—during the night.

"We left St. Moritz for Lugano and Cadenabbia at the end of March, to escape any damp the spring thaw might create; but experience taught us that the uncertain spring weather of the plain causes far more injurious damp than the mere thawing of the snow at such a height as St. Moritz. There the disagreeable effect of a temporary and most unusual thaw in February (brought on by a warm wind and great sun-heat) appeared to be confined only to the melting of the snow on the roads and mountains, off which it ran as rapidly as it thawed, imparting no perceptible damp to the air. In the plain we had plenty of rain, snow, and mist, and on fine days it soon became too warm and relaxing. We thought to better ourselves by spending May on Monte Generoso, where there is a good well-managed hotel in a charming situation about 4000 feet S.M.; but that is too uncertain a month for this mountain. Although we have had some fine days we have been most frequently in the midst of clouds, rains, or storms. The group of mountains of which Monte Generoso is the most southern seems to attract the clouds that rise from the vast Lombard plains, over which to the Apennines the view is unbroken. St. Moritz, being so much higher, is above the ordinary cloud level, and consequently gets less rain; most of the clouds, of which there are not a few in summer and autumn (I do not know it in spring), seem to be carried rapidly over the Engadine by strong currents of wind. May, we hear, has been drier in that district than here. I would recommend others to profit by our experience, and pass the whole spring at St. Moritz, or if they leave it, to do so only for a fortnight or so whilst the roads are disagreeable."

I need not point out that this account is evidently written by an enthusiastic partisan, and that some of the statements contained therein will not bear criticism—such, for instance, as the one which pronounces that a temperature of 56° Fahr. "would be *unbearable* in winter in the more humid climate of England!" It is also very evident that but few invalids could hope to command the comfort which must have attended the companionship and care of three of his countrywomen—an advantage which this gentleman appears to have had, and without which I doubt greatly if a winter at St. Moritz would have passed so agreeably. In truth, during this very last winter, when the writer of the above statements found St. Moritz so pleasant and enjoyable, some patients who had intended passing the whole winter there, found it so insufferably dull and in many respects so uncomfortable that they broke through their resolution, and left the place before the winter was much more than half over.

The final impression left on my own mind with regard to St. Moritz as a *winter* health resort is that it is an *experiment*, and one that I should not, for my own part, feel greatly disposed to submit to. I cannot contemplate a winter's residence in this valley, practically almost shut off from communication with the rest of the world, the ground covered the whole time with several feet of snow, shut up in a stove-heated room for all but four hours a day (and that on fine days), from which, however, one has to make periodical flights "for five minutes every two hours" for purposes of ventilation, without regarding it as a modified form of penal servitude.

The cases which would most probably be benefited by making the experiment of residing here from October to April are those of laryngeal irritation, of chronic catarrh in young persons, and perhaps some cases of incipient phthisis.

I must not omit to mention that the resident Medical men here declare that many cases of true tubercular phthisis amongst the natives of the lower parts of Switzerland have been arrested by migration into the Engadine. They assert that large masses of tubercular deposit have disappeared

(certain portions of which, they say, are absorbed, and what is not absorbed dries up), and that large cavities have contracted and healed. But without the published details of easily authenticated cases, these statements are vague and unsatisfactory.

A far greater number of persons with pulmonary complaints have wintered of late years at Davos. This is situated in a valley running parallel with the Engadine, at a somewhat lower elevation, 5105 feet above the sea. It is reached by diligence from the Landquart station, close to Ragatz, through the valley of the Prættigau, in about six hours. It is also connected by several mountain passes with the Engadine, one of which, the Fluela pass, is traversed daily by diligence. This also is about a six hours' journey—*i.e.*, from Süs, in the Lower Engadine, to Davos Dorfli, in the Davos Valley. At the time of my visit to Davos I was informed that there were nearly a hundred and fifty patients undergoing the "cure" there. Now, one would imagine that, with such a large number of resident patients, the detailed histories of a considerable number of well-marked instances of tubercular consumption which had been cured or arrested by the influence of mountain air might be obtained. But here again one is struck with the dearth of detailed information upon which one can rely—I mean upon which one can rely with that amount of confidence as to induce one to send phthisical cases which come under one's own observation to this place.

I have now before me a list of seventeen cases tabulated and appended to a pamphlet written by the Resident Physician at Davos, and recommending that place as a "cure" for tubercular consumption. Now, of these seventeen cases—which, be it remembered, *have been selected for publication*—thirteen appear to have remained at Davos from July to September only, and during that time they all appear to have gained a few pounds in weight—from two to twenty. This is the only *fact* of any importance to be gathered from this table. Three of the cases are described as "catarrh of the apices," one of which was cured and the other two "left better!"

One cannot resist the conviction that the wideawake and enterprising Swiss are endeavouring to turn the "mountain-air cure" to good account, and to persuade the gullible Englishman to pass his winters as well as his summers in their mountain valleys. That we shall hear a great deal more of phthisical patients passing the winter in mountainous districts there is no manner of doubt, and the sooner those who have it in their power to supply the Profession with reliable information and fully detailed cases do so the better. But confident statements and hasty generalisations founded on insufficient data will be received with caution.

Finally, of St. Moritz itself I have little more to say at present. As a summer resort, it will always, in my opinion, have much to recommend it. Its pure, dry, bracing air; its charming scenery, its rich flora, the absence of that oppressive heat, even in the hottest weather, which makes the lower valleys almost unendurable; the increased capacity for muscular exertion which the freshness of the air induces—all these attractions will commend the Upper Engadine to those who seek health and not excitement during their summer vacation. St. Moritz has also its drawbacks. In no place that I know of is fine weather so essential to enjoyment. A few wet days, and every one is cold, discontented, and unhappy, for little or nothing is done at the hotel here to render indoor life attractive. But a continuous rain, such as we are too familiar with in this country, is rare in the Engadine, and I have scarcely known a day this season when a few hours' exercise in the open air could not be taken by persons in health. As I have before stated, old people and young children coming up into the Engadine for the first time often suffer inconvenience from the diminished atmospheric pressure (the barometer ranges from 24 to 25 inches). Young people soon get over this, but not so persons advanced in years.

Ice in Chloroform Accidents.—In cases of syncope from inhalation of too large a quantity of chloroform, there is no means upon which I should more rely to restore the movements of respiration than the introduction of a *good-sized lump* of ice into the rectum. This is much more easily effected than one would suppose. A little pressure with the ice being made over the sphincter causes it to relax, and the ice slips in, followed almost immediately by a prolonged inspiration, the precursor of natural breathing and restoration of the heart's action. This measure, but with a *small* bit of ice, would doubtless answer equally well with still-born children.—*Dr. Baillie, Indian Medical Gazette*, September 1.

OPENING OF THE MEDICAL SCHOOLS.

ST. MARY'S HOSPITAL.

The Introductory Address was delivered by Dr. Cheadle.

The lecturer commenced by offering a cordial welcome to the new students, and after remarking that the task which he had to fulfil was one which necessarily becomes more difficult every year, since the number of addresses annually delivered at the various Hospital Schools must have already exhausted the subject, and rendered it impossible to say anything novel regarding Medical education, he proceeded to speak of the waste of time and opportunity which resulted from the students being generally destitute of any previous scientific instruction. In the usual course of what is called a liberal education, men grew up ignorant of the simplest facts connected with the phenomena of the material world, and notably so with regard to the working of their own bodies. "I should not, I think, exaggerate if I said that nine out of every ten men of ordinary education would be found unable to explain the doctrine of chemical equivalents, or the function of respiration or the circulation of the blood. The truth is, and it has been stated over and over again by other men long ago, men come here to learn what they ought to have been taught at school. When I began the study of Medicine towards the end of my University career, having enjoyed all the advantages of education under the guidance of able men, I found myself utterly destitute of such knowledge as could be directly of service to me in my new studies. For anything I had been taught to the contrary, earth, air, fire, and water were the four elements. Why the food I swallowed should not enter my lungs, or the air I breathed my stomach, I had no information. I knew something, indeed, of French, but of German, which I soon perceived would be of the greatest use to me, I could not read the alphabet. I found myself bewildered by strange words, strange ideas, incomprehensible explanations—lost in a new country where I met no friends and could discover no landmarks. At an age when I ought do have gone through all the drudgery of elementary work, I had to commence anew with the veriest rudiments. I think we are bound to teach every man a reasonable amount of precise knowledge of the world in which he is appointed to live, where the phenomena take place according to fixed laws, in obedience to which all his work has to be done. He ought to be acquainted with the materials he has to work with, and the conditions under which the work has to be accomplished. Such knowledge has a constant and important bearing upon the business of everyday life. There is no profession, no calling, no pursuit, in which it is not eminently useful and even necessary. The want of it affects, perhaps, the Medical Profession more nearly than any other. Not only do the students suffer from the absence of early scientific instruction, but the ignorance of the persons with whom they have to deal in practice is the source of endless vexation and difficulty. Unless the public have an accurate knowledge of elementary scientific truths, it is impossible for them to judge correctly for themselves what is certain in Medicine and what baseless theory. They are necessarily superstitious and credulous; they become the easy dupes of imposture, so that they are robbed by rogues and charlatans, who obtain the rewards which are the due of honest men. A knowledge of the rudiments of natural science, too, adds a charm to the passage through life. Everything in the way on every side exhibits some wonder of the present, or tells some strange story of the past, stimulates curiosity, and furnishes ideas fruitful of pleasant and seductive speculations." Acknowledging that the serious fault in the system of general education was in process of being remedied to some extent, at any rate in the universities and public schools, he showed that such reforms are necessarily gradual, and that, so far from being surprised at the slow progress which takes place, we ought rather to wonder so great an advance had been made when we considered the prejudice which had to be overcome. Formerly science was regarded as identical with sorcery and magic. In the last century even the members of the Royal Society were commonly looked upon as a pernicious body of men, and were publicly denounced on the ground that they "neglected the wiser and more discerning ancient philosophers, and depended too much on their own unassisted efforts; and that a philosophy founded upon actual experiment would lead to the overthrow of the Christian religion, and even to a denial of the existence of God." And

such prejudice has not died out at this day. I remember hearing a distinguished man of our time relate how, thirty years ago, he was looked upon in society with some suspicion on account of the pursuits in which he was known to be engaged, and men whispered to one another that he was a dangerous man—a geologist. But now things have so happily altered that clergymen wield geological hammers without distrust, and are eagerly helping us to fathom the secrets of existence with microscopes and test-tubes, in the sure belief that the search after truth can never be opposed to sound Christianity. The lecturer then proceeded to show the value of general knowledge to the Medical student—of mathematics as training the mind to precision of thought, developing the power of solving quickly and readily the problems of diagnosis, and enabling the investigator to follow out with ease and certainty an intricate series of dependent phenomena; and of the ancient languages as teaching the art of expression, and essential to the understanding and proper use of technical terms. A mere smattering of classical learning, which was often all the Medical student possessed, failed to give the power of expression, led to a vain pedantry, and excited an irrepressible tendency to bring into play the imperfect acquisition at every opportunity. Medical literature comprised many standard works of pure and classical English; and there were authors of our own time whose works we read with pleasure as well as with substantial profit. But it must be confessed that, as a rule, Medical writings of all kinds, from the most elaborate treatise to the simple account of a case in the journals, were diffuse, crowded with irrelevant matter and superfluous verbiage, presenting a confused mass of technicalities which the reader forces his way through with labour and weariness. The authors remember art is long, but they forget life is short. "I call your attention specially to this fault, because you will most of you probably publish cases, or lecture or speak on Medical subjects, and I advise you, for your own mutual protection, therefore, to cultivate the art of expression. If a plain English term conveys your meaning, make use of it instead of some far-fetched Greek or Latin compound. Study conciseness, how to state the points of your case in few words, and see that those words are the right words in the right place." Modern languages served a different end. At first sight it might appear a waste of power to spend time in acquiring a knowledge of three or four different ways of expressing the same idea. The ideas, the facts, the discoveries, not the forms of speech in which they were recorded, were what was required, for the living languages taught little *as* languages. But access to the results of the researches of hundreds of fellow labourers in natural science in other countries could not be gained without a knowledge of the languages in which they record them. The information obtainable by means of translations was extremely partial and imperfect, and unless men could read the records for themselves, those sources of information were, to a great extent, closed to them.

Passing from the question of general education to that of the special studies of a Medical school, the lecturer expressed a hope that eventually the teaching in general science would be relegated to the universities or special institutions if need be, and the Hospital schools entirely devoted to instruction in physiology, pathology, and the applications of general science to the art of Medicine and Surgery. Then there would be ample time for the study of Clinical Medicine, which was apt to be pushed out in the crowd of subjects which occupied the student's attention during the short term of their Hospital career. It was neglected because it was known not to be vitally necessary to get through an examination. The importance of not neglecting this most indispensable of all Medical knowledge was strongly urged. A knowledge of disease could only be acquired by prolonged and careful observation—

> "Old experience doth attain
> To something like prophetic strain."

But the power of appreciating the lessons of experience could only be properly learned in the wards of a Hospital. Bookwork alone would never fit them for the actual practice of their profession. It would avail but little to know what tubular breathing, or crepitation, or fluctuation, or a bruit, or a friction sound might indicate, if they were unequal to distinguish those signs when they heard them. A bare knowledge of the significance of the presence of the various cells, crystals, casts, or other morbid appearances in the secretions would be a mere mockery if they could not detect their presence to assist in diagnosis. The applications of the various aids to the ordinary senses, such as the microscope, stethoscope, thermometer, sphygmograph, and ophthalmoscope, would be further developed as science advanced, and a thorough knowledge of their use was becoming more necessary to the Practitioner every day. Fresh truths would be revealed by them, which we were yet unable to read from imperfect understanding of the meaning of the evidence they afforded. The thermometer, for instance, had been applied to the purpose of ascertaining the temperature of the body as long ago as the 16th century by Dr. Sanctorio, a Physician of Padua, who used it in fever. But it soon fell into disuse, for it could tell nothing in the condition of physiological knowledge at the time, except that the fever was high or declining. In our day its office is an important one. To us it tells of waste of tissue, of wear and tear going on, of dangers otherwise hidden, of returning convalescence. Since the cure of disease, however, was the ultimate end and aim of all Medical work, the crowning point of all Medical knowledge, the question would naturally be asked, When the faculty of correct diagnosis had been attained, what would they be able to accomplish? What power would they have over the evil they might discover? The triumphs of Surgery and Preventive Medicine were palpable and visible on every hand. Those of Medical therapeutics, although less obvious, were no less real. "We have ceased to look upon diseases as entities to be cast out as we expel a tapeworm, kill an acarus, or extract a calculus. But we can cure certain affections, and control and direct the course of others at every step and in a hundred different ways, prevent secondary lesions, remove pain, relieve distress. Perhaps to you who, sanguine with all the enthusiasm of youth, half expect to hold the keys of life and death, such results may seem disappointing. But we can teach you no magic art. We do not possess the elixir of life. Medicine necessarily waits upon the sister sciences, and the ground had to be cleared of much superstition, and prejudice, and malpractice. Dugald Stewart said that half the lifetime of a philosopher was devoted not so much to the acquisition of new knowledge as to unlearn the errors to which he had been taught to give an implicit assent before he had time for reason and reflection. And this is true of the Physician as well as the philosopher, and has a wider and deeper application still. We have adopted a careful empiricism now, and with that we must be content for a season. As we learn more of the materials with which and of the mode in which the tissues of the body are built up, and the series of morbid changes which take place, and as our knowledge of the precise action of the agents at our disposal upon the tissues and secretions increases, we shall begin to see clearly how to adapt them to the end we seek. Formerly a host of ignorant empirics held sway and reaped reward, while the plodders in the work of science were solitary and unnoticed except by persecuting enemies. Now a great army of skilful and honest investigators, the most persevering and industrious of men, attack the unknown night and day, and light must come out of their labour."

After giving some counsel to the new students with regard to the cultivation of habits of strict accuracy and absolute truth, the value of time, and of the proper management of it, and the necessity that they should take nothing for granted, but search it out for themselves, the speaker recommended them to enter into boating and cricket and other athletic sports if their taste led them that way, and exhorted them, in their contests with other schools, "to do their best with pluck and skill to uphold the honour of St. Mary's, and so to show themselves manly and straightforward in the conduct of the struggle, as to compel their opponents to acknowledge that they were not only formidable antagonists, but courteous and honourable gentlemen." "I might end my address to you by drawing some bright picture of prosperity, of honours to be won, and wealth to be gained in the future, as rewards of earnest study now, and the enlightened practice of your profession hereafter. But I decline to try and bribe you to exercise the gifts with which God has endowed you by any promise of reward, or to deter you from idleness and misconduct by dilating upon the failure and disgrace which are their proper punishment. I will not appeal to ignoble motives which have too much influence in this selfish world already. Every man, I take it, is born to do his share of work in the world, that which he is fit for—and to do it with all his might. Each individual life represents so much force, so much divine fire. If that power be unapplied, the whole purpose of its creation is shamefully perverted. *Your* work is to add to science what atoms of truth you may be able to gather amid the turmoil and endless occupation of your Professional duties. It is to exert all your energies to alleviate pain and defeat death, being careful always, as becomes true gentlemen, to treat the poor and the loathsome and the miserable with as much care and more kindness than

the rich patient who fees you highly. Finally, it will be your part, and one not to be evaded or neglected, to show more specifically and forcibly than can be done from mere general knowledge, how drink, and sensuality, and filth, and vice of every kind carries with it each its own punishment of disease, and pain, and death—to teach the life-giving knowledge how to stop contagion, prevent fever, and foster health—to take manfully your share and office in the great fight which is always going on against evil—and for the rest, let it be. Whether you gain honour or wealth or not, your great reward will, I hope, be the feeling that you are doing your proper work in this world, and that you are doing it bravely and well to the end."

REVIEWS.

The Old Vegetable Neurotics. By John Harley, M.D. Lond., F.R.C.P., etc. London. 1869.

Dr. Harley's elaborate work may be regarded as a much-enlarged edition of the course of lectures which he delivered about a year and a half ago at the Royal College of Physicians. Although he treats only of four medicinal agents—hemlock, opium, belladonna, and henbane—his book is as large as many a treatise on the whole Materia Medica. For the busy Practitioner, with little time at his command, he treats his subjects almost too fully, and even the critical reader and reviewer cannot help regretting that the conclusions are not more distinctly separated from the mass of evidence from which they are deduced.

From the first chapter the chief points to be gleaned are that "the mode of action of the neurotic poisons is an unsolved problem," that "the influence of hemlock in particular is truly marvellous," and that "its action is quite beyond our comprehension." The drug seems to have the power of resolving nervous action into its chief constituents, and, leaving untouched the one portion (the sensory), suddenly paralyses the other (the motor). In selecting hemlock as a remedy in the treatment of nervous diseases, we must be guided by observing whether irritation, direct or reflex, of the motor centres is or is not present. If it be present, conium, according to Dr. Harley, is the appropriate remedy.

Of the various preparations of *hemlock*, the *succus conii* is the most certain in its action. From two drachms to one ounce of it will almost invariably produce the full physiological action and the beneficial results which may be expected to follow. A child one or two years old may take one drachm; one ten years old, from one to two drachms; a woman, two or three drachms; and a man, four or five drachms. From these initial doses we must ascend until the peculiar effect of hemlock is declared, after which it is rarely necessary to increase the dose. "Care," says Dr. Harley, "must be taken in administering conium to patients possessed of but little bodily vigour. On the other hand, there are some persons whose activity is such that three drachms will be required to produce giddiness and muscular weakness. I have given as much as twelve drachms to one patient, and two others have occasionally taken eight drachms without experiencing any very decided effect." (P. 70.) As the narcotic alkaloids are enjoying a popular reputation, it may be as well to mention that "conia is not suitable for internal use, either by the stomach or the skin." (P. 82.) In the next page, however, our author seems to modify this statement, for he tells us that "if we cannot conveniently administer conium by the mouth or bowel, we may then resort to the subcutaneous use of conia."

Although the author's favourite preparation is the "succus" (not prepared, as the Pharmacopœia directs, from fresh leaves alone, but from the plants just coming into bloom), he subsequently states that "by far the most efficient preparation of hemlock may be obtained from the green and nearly ripe fruits." (P. 92.) As many writers have maintained that the root is highly poisonous, while others of high reputation have found it harmless, Dr. Harley has made a series of observations on this subject, and has found that "in medicinal doses the root is quite inert."

The author's most valuable experiments are those which he has made on the combinations of the neurotics of which he treats. Conium and opium intensify each other's action, and two advantages result from the combination of these drugs—first, the use of large quantities of opium will be avoided, and, secondly, the excitant action of that drug will be neutralised. "Thus in a case of delirium tremens, instead of giving one drachm of tincture of opium, we may prescribe from four drachms to six drachms or eight drachms of hemlock juice, with twenty or thirty minims of laudanum."

Hemlock and henbane (which, next to opium, is the most powerful hypnotic that we possess) prolong and, to some extent, intensify each other's action. "Given together, the effects of the conium are first declared, and then quickly follow those of the hyosciamus (*sic*); and while the hemlock appears to accelerate the action of the henbane, the latter prolongs the influence of the conium for an hour or more beyond the usual period of its action." (P. 97.) (Why does our author always spell hyoscyamus with an *i* in the third syllable?) (a)

The chapter on *opium* and its active constituents is based upon the conclusions which Dr. Harley draws from no fewer than sixty-two experiments made on the horse, the dog, the mouse, and on man. In the experiments on morphia and the other active principles of opium, the alkaloid was usually injected subcutaneously, but sometimes was given by the mouth. In the horse, and still more in the mouse, it was found that "physiologically morphia is a compound substance, and that its constituents are tetanus and hypnosis—effects which in these animals are nearly counterbalanced, the preponderance being in favour of the former. . . If the hypnotic action were much weaker, or even altogether eliminated, as may perhaps occur in some animals, then indeed morphia would not differ in its action from thebaia or strychnia." (P. 121.) The mouse, under the early influence of the injection of one-fifteenth of a grain of acetate of morphia, presents a most remarkable appearance. Its tail bends slowly and stiffly upward until it is elevated in a curve over the back, while the spine is bent in such a manner that, while the head is a little raised, the back is elevated into a high lump, and the lumbar and sacral regions are so depressed as to bring the perineum in contact with the floor.

The action of *morphia* and opium upon the dog differs in no respect from their action on man. Both men and dogs may be subdivided into two classes:—1. Those who are readily influenced by the hypnotic action of opium, and who suffer little or no inconvenience from its excitant action on the brain or its depressant action on the vagus; and 2. Those who are depressed by it to such a degree that its hypnotic action is altogether counteracted until it has passed away. In persons included in the second class alarming, often dangerous, and sometimes fatal symptoms are of not unfrequent occurrence, and are far more likely to occur after the subcutaneous injection of the drug than when it has been given in the ordinary manner. In women with a highly emotional and excitable temperament the hypodermic method must be used with great caution.

From nine cases in which Dr. Harley injected morphia or laudanum under the skin, and from a few others in which he gave opium by the mouth, he draws a series of conclusions regarding the action of morphia on (1) the brain, (2) the spinal cord and vagus nerve, (3) the sympathetic, (4) on nutrition, and (5) on the pupils. There is nothing in these conclusions to call for special remark, and we pass on to his observations on *narceine* or *narcia*.

This substance, according to Claude Bernard, is a more powerful hypnotic even than morphia, and possesses the advantage of being "free from any excitant or convulsivant action." Dr. Liné confirms Bernard's opinion as to its hypnotic power, but adds that anuria is so constant a result of its use that he recommends it in *cnuresis*. Dr. Debout found that half a grain produced a calm sleep almost equal to that produced by morphia, and he noticed that a dose exceeding three-quarters of a grain induced dysuria. Other observers deny that it possesses any soporific or anodyne properties. To clear up these discrepancies, Dr. Harley experimented by injection on a dog and on three mice. On the dog the injection of 1·25 grain had little apparent effect. The injection of one-twelfth of a grain kept a mouse comfortably asleep for three hours, while one-eighth of a grain killed a similar mouse in two hours. He has given it to patients by the mouth in five-grain doses without producing any marked effect, and he found that, when introduced by the skin, one grain is barely equivalent in hypnotic action to one-eighth of a grain of a salt of morphia. Hence he regards it as practically useless as a medicine. The post-mortem examination of a mouse showed that the straight tubes of the kidneys, and the urethra itself, were blocked up with crystals of narceine, so that there were retention and suppression of urine. We thus have a clue to the anuria observed by Liné and others.

From his experiments and observations on *meconine*, Dr. Harley believes that it will form a really useful medicine. "By the stomach it has no appreciable effect; by the skin the

(a) In the later part of the volume this error does not occur.

maximum effect is reached by a dose of one or at most two grains. In children, and to those who yield readily to a soporific influence, half a grain of meconine will generally be found effectual. The necessity of introducing it by the skin appears to be the only objection to its use." (P. 156.)

Cryptopia, the next of the opium alkaloids discussed in Dr. Harley's volume, is a substance of which probably many of our readers have never previously heard. It was discovered about three years ago by the Messrs. Smith, of Edinburgh, and a ton of opium yields only an ounce of this new constituent. For a description and analysis of it we must refer to the *Pharmaceutical Journal* for April, 1867. The effects of two grains injected into the skin of a dog are most remarkable. The animal, after some minutes, begins to look intently from side to side, then rushes forward, but stops with a jerk, and stands at bay with every muscle strained to its utmost, and the tail forcibly curved downwards. He then wheels from side to side, or advances with a constrained rush to the other side of the room, from which he beats a forced retreat, flying from an imaginary enemy, till he is driven into a corner. Thus secured in the rear, his rushing scrambling motions are for a time restrained, and he now contends, with remarkable rapidity of action, with those only of his fancied tormentors who approach from the front, and who, judging from his manner, seem to be flying in his face. There is no indication of anger, nor, indeed, of fear; the dog is bent on escape, and resolves to effect it." (P. 158.) These illusions of sight last for two or three hours, after which the animal is quiet and sleepy. In the height of the excitement tetanic spasms of a dangerous character sometimes occur.

In man the injection of this substance in doses of from half to one and a quarter grains produced no visual disturbances, or any effect except more or less somnolence; it seems to be equivalent in its hypnotic effect to one-fourth of its weight of morphia.

Codeia appears, from Dr. Harley's experiments and observations on animals and man, to resemble morphia in its action, but to be far less potent than that alkaloid (in the ratio of 1 to 8), and to be much more transient in its effects. It is prescribed in the French Codex in the form of a syrup, but according to our author, "it cannot be recommended as a useful or desirable addition to our Materia Medica."

Thebaia was injected into the skin of two dogs and two mice. In all these cases its well-known tetanic action was manifested. "It acts almost exclusively on the motor centres, inducing in them that highest degree of excitement which results in cramp, and which is only fatal to life because it arrests the respiratory movements" (p. 183).

In our survey of the action of the above constituents of opium, we notice only two distinct effects—a soporific and an excitant. In morphia these effects are more or less equally associated according to the constitution of the patient. In narceine and mecouine no excitant action is observed; but this action may be merely concealed by the insolubility of these substances. In cryptopia, and still more in thebaia, the hypnotic is almost completely hidden by the excitant action; and codeia occupies a mid-place between morphia and thebaia, being stronger than morphia and weaker than thebaia as an excitant, while as a hypnotic the relations are reversed.

In concluding our remarks upon the alkaloids of opium, we cannot help adverting with regret to the discrepancies which we find in different standard works regarding their nomenclature and even their numbers.

We give in parallel columns the active principles according to Squire, Harley, and Claude Bernard:—

Squire.	Harley.	Claude Bernard.
Morphia	Morphia	Morphine
Codeia	Narceine or nareeia	Codéine
Narcotina	Meconine or opianyle	Thébaine
Papaverin		Papavérine
Paramorphia (thebaia)	Cryptopia	Narcotine
	Codeia or codeine	Nareéine
Narcein	Thebaia or paramorphia	
Meconin		
Opianine		

Passing over a chapter on the physiological action of *belladonna*, we proceed to the consideration of its therapeutic uses. These may to a great extent be inferred from its properties, which are thus summed up by Dr. Harley:—"Belladonna must be regarded, in the *first* place, as a direct and powerful stimulant to the sympathetic nervous system, or, in other words, to the heart and blood-vessels; *secondly*, it is a potent diuretic; *thirdly*, by virtue of a direct action on the nerve-centres, and of its stimulating effect on the circulation, it is an oxidising agent; *fourthly*, it possesses powerful anodyne and hypnotic properties; and *fifthly*, it is a most valuable antispasmodic." (P. 244.) As a diffusible stimulant, our author regards it as surpassing all other drugs, and whenever there is depression of the sympathetic nerve-force—such as syncope from asthenia or shock, in the collapse of cholera, in failure of the heart's action from chloroform, etc.—the subcutaneous injection of atropia in doses varying from the one-hundredth to one-sixtieth of a grain is the most appropriate treatment. In febrile diseases the action of belladonna is frequently observed to be the reverse of that in health, a tonic and sedative influence taking the place of its ordinary stimulant effect. Dr. Harley refers to the value of belladonna in epilepsy traceable to emotional excitement, to the relief which it affords in spasmodic contraction of the bowels and various ducts, and to its invaluable service in enuresis arising from irritability of the muscular coat of the bladder; he also gives the details of cases of acute disease in which it was given with advantage. Amongst these diseases are included pneumonia, enteric fever, typhus, acute and chronic nephritis, suppression of urine, rheumatism and gout, neuralgia, and spasmodic asthma. In some of these cases he gave the tincture and juice internally, but in most instances he had resort to injection by the skin, the quantity of the sulphate of atropia thus used varying from $\frac{1}{100}$ to $\frac{1}{32}$ of a grain. The most common dose was $\frac{1}{48}$ of a grain once a day or oftener, according to the effect produced. In suppression of urine this quantity should be injected every three or four hours.

The combination of *atropia* with the opium alkaloids is next considered. Dr. Harley concludes from his experiments and observations:—(1) That in medicinal doses the hypnotic effect of morphia is increased and prolonged by the action of atropia, whether induced previously or during the operation of the former; (2) that by this combination the nausea, syncope, and insomnia often resulting from opium are prevented; (3) that in sufficient proportion atropia neutralises the contractile effect of opium on the pupils. There is nothing requiring notice in the author's remarks concerning the combination of atropia with the other alkaloids, and we proceed to the consideration of his excellent and very practical remarks on the medicinal use of opium and belladonna in combination. By properly combining the two drugs, many of the objectionable properties of the former are prevented. In this combination opium does not occasion constipation. In the treatment of acute diseases in their early stage, Dr. Harley recommends the subcutaneous injection of a mixture of from one-eighth to one-quarter of acetate of morphia and one ninety-sixth to one-fortieth of sulphate of atropia every eight or twelve hours. He believes that, "by means of this treatment, inflammation in its earliest stages lies completely within our control." (P. 302.) In the treatment of neuralgia and insomnia the morphia should be injected with one ninety-sixth of a grain of sulphate of atropia, the addition of the latter drug preventing the occurrence of those distressing and dangerous symptoms which sometimes follow the injection of acetate of morphia alone.

For the last three centuries there has been a more or less general belief that there is an antidotal or antagonistic action between opium and belladonna. Dr. Harley has done good service to Medicine in thoroughly investigating the evidence bearing on this question. The conclusion at which he arrives is that "the evidence of antagonism in any given case is inconclusive."

The last of the neurotics discussed by our author is *henbane;* and as its active principle, *hyoscyamia*, is not included in our Pharmacopœia, he gives directions for its preparation from the seeds, of which one pound yields about twenty grains of the sulphate of hyoscyamia. The action of henbane is considerably modified by age, children and young adults usually bearing large doses with benefit, while old persons often become delirious from a very small dose. The general action of henbane seems, from our author's observations, to be much the same as that of belladonna, in so far as the secretions and the nervous system are concerned; henbane, however, acting the more powerfully on the cerebrum and motor centres, and less distinctly on the sympathetic. Their actions on the reflex function are identical. In its action on the cerebrum, henbane may be regarded "as opium *minus* the excitant action on the motor centres."

The medicinal uses of henbane are so well understood that it is needless to advert to them. This drug, when combined with opium, modifies the latter in almost precisely the same way as belladonna, increasing its hypnotic action, and, to a certain extent, preventing the distressing effects that occasionally follow the injection of morphia.

Dr. Harley is entitled to the warmest thanks of his Profes-

sional brethren for the labour which he has devoted to the investigation of the properties of the drugs which form the subject-matter of this volume. His observations on the combined action of opium and belladonna are especially worthy of consideration, and we think that the publication of this work will materially tend to increase the popularity of the hypodermic mode of treatment.

GENERAL CORRESPONDENCE.

DR. PLAYFAIR ON DR. BARNES'S BAGS.

[To the Editor of the Medical Times and Gazette.]

SIR,—I regret to find that Dr. Barnes seems to have somewhat misunderstood my motive in addressing you on the subject of his method of inducing labour. Certainly nothing was further from my intention than to say anything depreciatory of Dr. Barnes's operation, and, indeed, I was at some pains to word my letter so as to show the high estimation in which I held it. Fearing, however, that there was some risk of its inducing malpresentation—a question which Dr. Barnes admits "deserves careful consideration"—I inquired of him, as courteously as I was able, in what proportion of the cases in his practice malposition had occurred. On this point Dr. Barnes gives no definite information, but contents himself with attempting to show that in my cases the water-bags had no share in the production of the displacement. I should be very glad to believe this, but, at the same time, I venture to question the value of his criticisms.

In my second case the presentation was most certainly originally of the head—a fact ascertained by Dr. Arthur Farre as well as by myself—and therefore it is not "possible that in this case the water-bags are only to blame for not displacing the shoulder and bringing down the head." In the third case the cord did not present until after the second bag was inserted; whether the occurrence was due to that, or to other causes, I cannot take upon myself to say.

With regard to the fourth case I may state that at no time was the uterus in a state of tonic contraction, as Dr. Barnes assumes. The "curious" point was just this—not that the brow presented, but that, after the full dilatation of the os, contraction of every kind was entirely absent for so long a time; although one of the chief advantages which I have always understood Dr. Barnes to claim for his operation is the certainty with which it commands the process of labour, so that the operator, "instead of being the slave of circumstances, waiting anxiously for the response of Nature to his provocations, is master of the position." It was this, and not the malpresentation, that I characterised as curious, and I believe that it was an entirely exceptional occurrence.

Before the commencement of pains the head was too high to enable me to discover the existence of a brow-presentation. Whether, in the absence of all symptoms of commencing labour, turning should have been resorted to, is an open question, but I still think that the best course was pursued.

Anything like a controversial discussion is most distasteful to me, and I need, therefore, only add, in closing the question as far as I am concerned, that I have only been actuated by an honest desire to obtain the benefit of Dr. Barnes's experience on a point which, as far as I know, had not previously been mooted, and which seemed to me to be well worthy of consideration. I am, &c. W. S. PLAYFAIR.

5, Curzon-street, Mayfair, W., October 11.

UNDER CONSIDERATION AT ST. BARTHOLOMEW'S.

[To the Editor of the Medical Times and Gazette.]

SIR,—The treatment of out-patients at the metropolitan Hospitals has been discussed in several articles in your journal. It is to be hoped that the press will not let this important subject drop until a full investigation has been made into this department of Medical charity. House committees, like boards of guardians, are slow to act, intolerant of suggestions, reluctant to remedy abuses, and prefer to leave things as they are. The social position of the members of the House Committee of St. Bartholomew's Hospital is a sufficient guarantee that their mode of action will be similar, in all respects, to that of other kindred boards. Two years ago, on the death of a popular member of the staff, a subscription was started to raise a memorial to his memory. He was a man of great benevolence, and well known for his kindness to the poor, and much opposed to the farce of the present prize system. One of his old pupils, and a member of the memorial committee acting for the junior school, proposed that this fund should be handed over to the Worthing Convalescent Hospital, or some other institution of similar character, on condition that a ward or a certain number of beds should be called after his name. The treasurer, and many of the staff present, outvoted this proposal on the ground that it was unnecessary, as the Governors of St. Bartholomew's Hospital had under their consideration a scheme for building a convalescent home connected with their Hospital. Since that day until the present time the promised structure has not been built, and the site, as far as can be learned, has not even been purchased. The Biennial Committee, however, founded an entrance scholarship, and many students who would have joined the memorial abstained from subscribing, as they regarded this scholarship as an attempt on the part of their teachers to raise funds from them to increase the number of prizes with which they hoped to maintain the reputation of their school. From these facts you will be able to judge what chance the junior working staff have that the House Committee will inquire into and remedy, for years to come, the abuses of the out-patient department; but a question of such magnitude and importance as the redecoration of their banqueting-hall touched their hearts immediately, for what power has bumbledom unless stimulated by feasts in gilded chambers? I am, &c.

ST. BARTHOLOMEW-THE-LESS.

VACCINATION IN TRINIDAD.

LETTER FROM MR. GASKOIN.

[To the Editor of the Medical Times and Gazette.]

SIR,—In a communication by Dr. Bakewell in your issue of 25th ult., he writes of the prejudice against vaccination in the island of Trinidad, where he is vaccinator-general. It is believed by the poor population, whom I take to be simple people—the emancipated negroes of the colony—that much of the elephantiasis from which they are now suffering proceeds from vaccination. "The general opinion," he goes on to say, "among Medical men is that it is quite possible that elephantiasis may be propagated in that manner," and he lets us plainly see that he inclines to that opinion. This is all of one piece with what has been insinuated lately by certain mischievous persons in the home country among our lower orders as to phthisis being caused in the same way. One cannot too strongly condemn the recklessness of many assertions which, greatly to the disadvantage of vaccination, have found utterance from time to time in this highly sensational age through the medium of various publications. Superstition, prejudice, and ignorance revolt against the prescriptions of science, and it has even more to fear from the extreme candour of its friends. The data furnished by Dr. Bakewell seem to me really too commonplace and slight for serious discussion. The increase of elephantiasis is a very certain proof of physical degeneracy in a people. It might have been certainly foretold and expected by an enlightened Government as an almost inevitable result of slave emancipation in those islands. However, it may have for its starting point some local or climatic condition. Elephantiasis on a large scale is chiefly maintained as a diathesis by insufficient nutrition and by a neglectful hygiene. There is no surer gauge of the material well-being of a colony than is found in this complaint. On that account the attention of the home Government may wisely be directed to it, for this class of disease is found in most, I think I may say in all, our dependencies. Until the population of the West Indies can raise themselves by their industry to higher material conditions and ampler means of subsistence, by which means alone elephantiasis is susceptible of slow extinction, there will continue to be remarked among them an increase of this disease.

October 2. I am, &c. GEORGE GASKOIN.

DIABETES FOLLOWING KICKS ON THE HEAD.

LETTER FROM DR. FRANK RENAUD.

[To the Editor of the Medical Times and Gazette.]

SIR,—I send you the following case briefly stated, which seems to me valuable in a Medico-legal point of view, and as tending to confirm testimony previously offered on the same subject:—

C. B., aged 19 years, was fighting eleven weeks ago, and received several severe kicks on the head, none of which caused

laceration of the scalp. He had also a tooth knocked out in the scuffle. Up to this time C. B. was a healthy young man, and had shown no signs of physical illness. Returning home the same day, he complained of feeling ill, and went to bed. The next and four following days he was delirious, insomuch that a Surgeon who saw him at first mistook the symptoms for fever. He recovered his senses, but not his health, and began to grow thin and pale. Five weeks after the appearance of the first symptom of illness, the urine was observed to pass in larger quantity than usual, whilst the appetite became inordinate, and the thirst great. I saw him a few days before his death, and found that the specific gravity of the urine was 1·040, and saccharine. Two days afterwards he caught cold whilst fishing, and three days afterwards died from the effects of suppressed exeretions. No post-mortem examination was made.

I am conscious that this case is not so conclusively accurate as it should be, but it is as much so as I have been enabled to make it, and sufficiently so, I trust, to render it interesting to the Profession, and to warrant me in asking a little space in your columns for its publication. It certainly does seem to show that within the short period of eleven weeks the initial evidence of diseased action may not only be definitely present, but all its phases passed through. I am, &c.

Frank Renaud, M.D.,
Consulting-Physician to the Manchester
Manchester, Oct. 1. Royal Infirmary.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY.

Friday, October 8, 1869.

Mr. Paget, President, in the Chair.

The session began with one of those admirable addresses for which Mr. Paget is so justly celebrated—such a one in which you would not wish one word altered or left out. First of all, he congratulated the Society on its position, and thanked the secretaries for their indefatigable exertions in its aid—exertions to which all were so much indebted. Then addressing the members, he urged them to be strictly *clinical* in their work. It was, said he, a man's duty to gather for himself all the knowledge he could, to give to others all he could, and to leave behind him all he could, even as he had reaped the labours of his predecessors. Still more strongly would he urge that all their work should be among the living, and the result of their own observation. In all cases the final test—the last appeal was to practice. But there seemed to be a want of faith in clinical research—too great a tendency to fall back on other sciences. Inasmuch as our works correspond with our faith, if we do not hold that clinical science and clinical method are as well established as any other, the result cannot fail to be visible in our work. For each science there is a separate subject, and in each subject the science must be its own judge of truth. We must hold the right of judgment in our own subject. He did not wish to decry the study of physiology, anatomy, or pathology, but, having spent one half of his life in their study and rather more than one half in clinical study, he thought the status of clinical science was quite as good as that of the former. We owed much to these sciences both in knowledge and training, but he still held that for ourselves, in charge of the living sick, clinical science had its own special methods and tests. He was not hereby narrowing the field of inquiry, which was indeed too large for each individual, and he proceeded to instance some of the things we have yet to do. In nearly all diseases a natural history was wanted, and this it was rare to find, implying as it did almost a dereliction of duty, so that we dare not leave a disease clean and pure. As this gap can be but rarely filled up, we should lose no chance of adding to our records. Then, again, there were *rare cases* which should be studied, not only for the light they threw on other diseases, but also as constituting what might be termed in legal phrase "our case knowledge." Clinical coincidences, again, were things worth following up. He remembered when dropsy and granular kidney were mere clinical coincidences which seemed to have no possible connexion. Then, again, there was the curious clinical coincidence of a bronzed skin, and other phenomena, with a certain pathologic condition of the suprarenal capsules. He himself would have to report on a curious skin affection as antecedent to cancer. In other sciences the value of such coincidences was well known.

But if clinical coincidences were to be noted, clinical sequences should not be forgotten. Such, doubtless, there still were in the history of syphilis, which was far from finished. Were there no such sequences of pyæmia and eruptive fevers? We might be certain there was not only one disease like this. He thought he had said enough to show that there was quite room enough for each man to take a line of his own.

It had been thought strange that they had made no therapeutic discovery, but in looking at this matter they had to distinguish between the cure and the management of a disease, as exemplified in ague and typhus respectively. In the latter good work had been done, and, with respect to the former, people were too apt to think it easy. In law it was a maxim that there was no wrong without its remedy, and people were apt to make a similar assumption in Medicine. But, indeed, it was strange that there should be a remedy for ague rather than that there should be none for typhus. He held that physiological therapeutics was merely physiology. Our therapeutics have not altered if our theories have. Therapeutic facts are simple facts, having their origin in some accidental discovery. We must look for an extension of our knowledge in that direction to accident, to some happy chance. Still there was a means of extending our knowledge of disease and its remedies if our analysis was carried far enough. In epilepsy, for example, many remedies had been vaunted, many successes attained. If the cases were analysed so as to show their essential differences, we might attain a clear knowledge of the cases where certain remedies do good. We might take facts which were undoubted and examine them: we should thereby doubtless find that many diseases were included under the title epilepsy.

These were some of the things to be done. Each man should select his own department, each do what he could do best.

After the President's address,

Dr. W. H. Day read a paper on the Hypophosphites of Iron, Quinine, and Strychnia in cases of general debility and nervous exhaustion, illustrated by cases showing their mode of action to be primarily through the nervous system, and secondly through the blood. He believed that results might be calculated on from these remedies when combined which could not be obtained from them when separately administered.

Dr. Clapton read a paper on the Effects of Copper upon the System. Several cases were related which had been under his care as out-patients at St. Thomas's Hospital, and the results given of numerous inquiries which he had made personally at various copper works in London. Several noteworthy phenomena were described, as the presence of distinctly marked green stains on the teeth close to the gums, bluish-green perspiration, hair of a greenish hue in old workmen, and green discharge from old ulcers. All these points were illustrated by the exhibition of workmen and specimens. Proofs were adduced to show that these colorations were due to absorption, assimilation, and elimination of the copper, and not to a mere local deposit. The probable reasons were given why copper workmen (although an unhealthy-looking class and subject to considerable muscular debility) do not suffer from any specific diseases, as do the workmen in most other metals. Investigations at each of the works elicited the remarkable fact that the men have always escaped cholera and even choleraic diarrhœa, although their neighbourhoods suffered severely during the great epidemics.

Dr. Greenhow had, many years ago, read of discoloured gums in copper workers, and having occasion to visit Birmingham, he visited a number of workshops there. He only found the marks in those who worked in what was called soft metal, such as was used for taps. Similar facts with regard to cholera had been observed in Paris.

Dr. Silver said that the phenomena described by Dr. Clapton had for some time been familiar to him. In several coppersmiths the green line on the teeth had been distinctly visible, and they had usually complained of slight gastro-enteritic symptoms. They were generally sallow or pallid in their complexions, and did not seem strong men. The peculiar coloration of the hair had long been known, and had been supposed to be due to deposition of fine filings. In another class of workmen he had seen peculiar symptoms apparently depending on their occupation. These were men employed in antimony works, where the fumes of the metal were abundant. They were affected as if with chronic antimonial poisoning.

Dr. Leeson said that in 1832 there was no cholera among the verdigris workers at Deptford. He had not seen any evil result from antimony works.

Dr. Lawson said the origin of the copper compound and its

nature should be investigated. It was formed in the system in the case of the plantain-eater. The spectroscope might be employed with advantage.

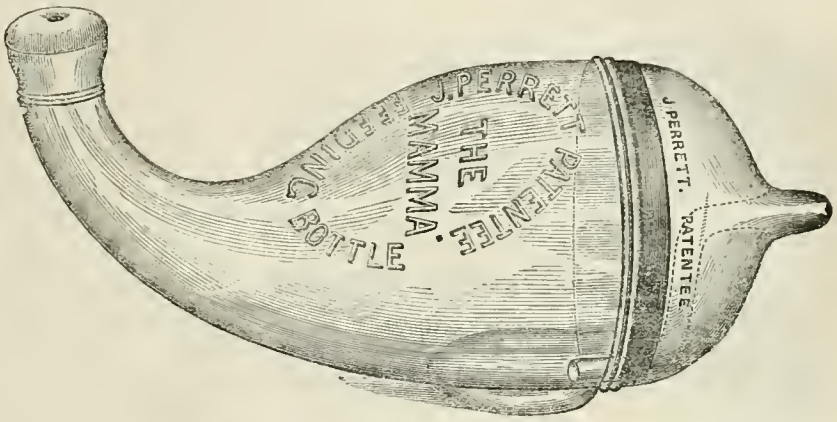
Dr. Wiltshire asked if any inquiries had been made as to pin-workers. He remembered one with well-marked green hair.

Mr. Paget said that many years ago, when gold-printing was introduced, a gentleman attached to the Dispensary in Bartholomew's-close had found on the workers in that art a troublesome eczema, chiefly about the pubes.

A committee was appointed to investigate the matter.

NEW INVENTIONS.

"THE MAMMA" OR INFANT'S (PATENT) FEEDING BOTTLE.



This is a very ingenious and we think successful attempt to imitate the natural fountain whence all sorts and conditions of men are at first nourished. People who have much to do with bringing up babies by hand know well that the life of a weakly child may frequently depend upon the vessel in which its food is presented to it. Not to speak of the evils of a bottle which is not easily cleansed, and in which, without great care, fragments of semi-putrid curd will be left, the life of a feeble child may often hang upon the mere ease or difficulty of suction. A Medical man of our acquaintance was a short time ago requested to see a baby that was being brought up by hand, and which was said to be pining and getting rapidly thinner and weaker. Our friend paid his visit, and amongst other inquiries asked about the feeding-bottle. A bottle with the mouth-piece attached by an india-rubber tube was brought him. The doctor examined the tube carefully, and finding something thick in it, he slit it open, when a quantity of curd almost entirely blocking up the passage was discovered. The mystery was solved. Another mode of feeding the child was adopted, and it made a rapid recovery. The bottle which we are noticing is of simple construction, easily cleansed, and, from trials we have had made with it, we can assert that it is most easily sucked by a very young child. The shape of the bottle is that of a bent cone, on the small end of which is fitted a stopper provided with a valve, on the principle of the cardiac valves, which prevents the entrance of too much air, allows of easy suction, and prevents the food from running out. The larger end is covered with an elastic shield moulded in the form of the human breast, and when the bottle is filled with warm food it presents to the child no bad imitation of the form, warmth, and pliant elasticity of the organ that nature had intended for it. A small glass tube, which is easily taken out, cleansed, and replaced, conducts the food into the nipple-shaped mouthpiece. The "breast" is merely secured on the bottle by an elastic band, which is easily removed, and as it can be turned inside out, the whole apparatus may be cleansed with the greatest facility and certainty. As we have said, we have had trials made with this bottle, and we can speak very highly of it. Its characteristics are simplicity, safety, cleanliness, and ease of suction. It seems to us to possess all these combined in a higher degree than any feeding bottle with which we are acquainted.

OBITUARY.

DR. W. H. COLBORNE

Died at Chippenham on the 27th ult., at the early age of 47. He had been ill for only six weeks. He was educated at University College, was M.D. of the University of London, and a Fellow of the Royal College of Surgeons. He was Medical Officer of the Chippenham Union, and Vice-President of the Poor-law Medical Officers' Association. Dr. Colborne took a very active part in the transactions of this Society, and rendered good service to his brethren by his able and energetic labours on their behalf. He had an extensive practice in North Wiltshire, was an able Surgeon and a thorough gentleman.

DR. EDWARD PATMAN

Died on the 22nd ult. at the residence of his son, the Rev. G. Patman, of Nottingham. He was Medical officer of the Broughshane Dispensary district. He became subject to frequent attacks of pneumonia, the heart became involved, and he died suddenly. He had been professionally connected with the district for upwards of thirty years. He was much respected.

British Museum.—Mr. William S. Kent, whose admirable preparations of the zoology of invertebrate animals in the museum of the Royal College of Surgeons are so well known, has just been appointed an assistant in the geological department of the British Museum.

Munificence.—Mrs. Burton, of Roundhay, near Leeds, has bequeathed £30,000 for charitable purposes, including £2000 to the Leeds Infirmary, £1000 to the Leeds Dispensary, and a like amount to the Leeds House of Recovery.

MEDICAL NEWS.

Apothecaries' Hall.—The following gentleman passed his Examination in the Science and Practice of Medicine, and received Certificate to practise, on Thursday, October 7, 1869:—

Furnivall, Henry Wallace, Hutton, near Weston-super-Mare.

As an Assistant in compounding and dispensing medicines:—

Wheeler, Frederick William, Bedford.

The following gentleman, also, on the same day, passed his First Professional Examination:—

Newman, Ashwin Conway, Guy's Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Fetherston, Gerald H., M.D. Melb., L.R.C.P. Ed.—Honorary Physician to the Melbourne Lying-in Hospital.

Laycock, Thomas, M.D., Professor of the Practice of Medicine in the University of Edinburgh.—One of Her Majesty's Physicians-in-Ordinary for Scotland, *vice* James Begbie, M.D., deceased.

MILITARY APPOINTMENTS.

War Office.—The following appointments have been made:—3rd Regiment of Dragoon Guards: Staff Assistant-Surgeon Robert Henry Bolton, to be Assistant-Surgeon, *vice* Albert Benjamin Robinson, appointed to the 15th Hussars. 15th Hussars: Assistant-Surgeon Albert Benjamin Robinson, from 3rd Dragoon Guards, to be Assistant-Surgeon. 55th Foot: Staff Surgeon Sampson Roch, to be Surgeon, *vice* Surgeon-Major Thomas Parr, appointed to the Staff.

Medical Department.—Surgeon-Major Thomas Parr, from 55th Foot, to be Staff Surgeon-Major, *vice* Staff Surgeon Sampson Roch, appointed to the 55th Foot. Assistant-Surgeon William Collis, from Royal Artillery, to be Staff Assistant-Surgeon, *vice* Thomas Alexander Clapperton Macarthur, placed on half-pay; Assistant-Surgeon Hampden Healy Maclean,

from Royal Artillery, to be Staff Assistant-Surgeon, *vice* Robert Henry Bolton, appointed to the 3rd Dragoon Guards.

Brevet.—Honorary Assistant-Surgeon R. F. Thompson, in Medical charge of the civil station of Hooghly, to have the local and honorary rank of Assistant-Surgeon in India; Apothecary Thomas King, of the Subordinate Medical Establishment at Madras, to have the local and honorary rank of Assistant-Surgeon in India.

BIRTHS.

Naughtin.—On October 13, at 2, Baker-street, Portman-square, London, the wife of William Naughtin, M.R.C.S.E., of a son.

Webb.—On October 4, at Dresden, the wife of Randolph Webb, Surgeon 2nd Battalion of the 14th, of a daughter.

MARRIAGES.

Ball—Matthews.—On October 9, at Christ Church, Forest-hill, Tertius Ball, M.D., Army Medical Department, to Sophia Augusta, second daughter of James Matthews, Esq., of Forest-hill.

Braddick—Partridge.—On October 9, at the parish church of St. Marylebone, William Henry Braddick, Esq., to Mathilde Maria, youngest daughter of S. T. Partridge, M.D., of 2, York-place, Portman-square, W.

Cunningham—Hannay.—On October 7, at Kingsmuir House, Fifeshire, Dr. R. W. Cunningham, H.M.'s Bengal Army, Residency Surgeon, Oodeypore, Rajpootana, to Robina, daughter of the late George Francis Hannay, Esq., of Kingsmuir.

Forsyth—Henty.—On October 6, at St. John's, Paddington, Charles Forsyth, of Hornsey, to Marion Emilia, only daughter of George Henty, M.D., Hilldrop-road, Tuffnell-park.

Hilson—Anderson.—On October 4, at St. John's Church, Jedburgh, Roxburghshire, Archibald Hamilton Hilson, M.D., Surgeon, H.M.'s Bengal Army, to Alice Park, daughter of the late Alexander Anderson, M.D., Abbey-green, Jedburgh.

Smalley—Davidson.—On October 9, at Christ Church, Lancaster-gate, Hyde-park, Henry Smalley, Captain Royal Madras Engineers, son of Edward Smalley, late Madras Civil Service, to Emmeline Matilda, daughter of Thomas Davidson, M.D. Oxon, of Shaftesbury House, Bayswater, W.

DEATHS.

Dickson, Samuel, M.D., at his residence, Bolton-street, on October 12, aged 67.

Flint, Richard, Esq., F.R.C.S., J.P., of Teviot Dale, Southport, on October 6, aged 74.

Lavies, Mary, the dearly loved wife of Dr. Lavies, Warwick-square, Belgrave-road, at Hyndford House, Eastbourne, on October 6.

Murray, Henry A., M.D., of Oaken, Codsall, Staffordshire, after an accident, on October 9, in the 37th year of his age.

Purcell, Dr., late Poor-law Inspector for Ireland, at Tramore, Ireland, on October 5, aged 73.

Rendle, Arthur Sanoforo, youngest son of Edmund Rendle, M.D., at 6, Buckland-terrace, Plymouth, on October 7, aged 19.

Watson, Dr. T. E., at Southgate, on October 5, in the 43rd year of his age.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

Argyle District Asylum.—Assistant Medical Officer. Applications and testimonials to Dr. Sibbald, at the Asylum, Lochgilphead, Argyleshire.

Hull General Infirmary.—Resident House-Surgeon; must be M.R.C.S., and unmarried. Applications and testimonials to Henry Gibson, Esq., on or before October 18.

Liverpool Royal Infirmary School of Medicine.—Lectureship on Botany. Applications and testimonials to the Registrar on or before the 25th inst.

St. George's and St. James's Dispensary.—Physician; must be F. or M.R.C.P. Lond. Candidates are requested to attend with their diplomas and testimonials at the Dispensary, 60, King-street, Regent-street, on the 21st inst. at 4 o'clock p.m.

St. Marylebone General Dispensary.—Physician; must be F. or M.R.C.P.L., and not practising midwifery or pharmacy. Personal attendance will be required at the Dispensary, 77, Welbeck-street, W., on October 20, at 11 o'clock a.m.

Sussex County Hospital.—House-Surgeon. Applications and testimonials to A. Veysey, Esq., Sec., Brighton, on or before November 24.

Swansea New Hospital.—House-Surgeon; must be legally qualified. Applications and testimonials to the Secretary, 23, Gower-street, Swansea, on or before November 24. Election December 1.

Teignmouth, Dawlish, and Newton Infirmary.—House-Surgeon. Applications and testimonials to the Chairman of the Committee, on or before October 29.

Tower Hamlets Dispensary.—Resident Medical Officer; must be L.S.A. or have some other Medical qualification. Candidates to attend personally with testimonials on November 1, at 7 o'clock p.m. Further information may be obtained of T. Stone, Esq., Hon. Sec., 5, Finsbury-circus, E.C.

Westminster General Dispensary, Gerrard-street, Soho.—Surgeon; must be M.R.C.S. and be registered, and not practising Pharmacy or Midwifery. Applications and testimonials to the Secretary.

Wigan Union.—Medical Officer and Public Vaccinator; must be registered, and have both Medical and Surgical qualifications. Applications and testimonials to Henry Ackerley, Esq., Wigan, on or before the 21st inst. The duties will commence on December 25.

Worksop Dispensary, Nottinghamshire.—House-Surgeon; must be legally qualified. Applications and testimonials to the Committee, the Dispensary, on or before October 19; election on October 20, at 4 p.m., when personal attendance will be required.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Chapel-en-le-Frith Union.—Mr. John Winterbotham has resigned the Castleton District; area 35,838; population 2658; salary £15 per annum.

Holsworthy Union.—Mr. C. Nutt has resigned the Fourth District; area 17,283; population 1841; salary £26 8s. per annum.

North Witchford Union.—Mr. David C. Wray has resigned the Third District; area 8512; population 2743; salary £40 per annum.

Sherborne Union.—Mr. R. R. Hawkins has resigned the Sherborne District; area 14,228; population 7398; salary £140 per annum.

APPOINTMENTS.

Liverpool Parish.—Henry F. Fisher, L.R.C.P. Edin., L.F.P. and S. Glas., to the Second District.

Prescot Union.—James Ricketts, L.R.C.P. Edin., L.F.P. and S. Glas., L.S.A., to the Rainford District.

Williton Union.—Walter Frost, M.R.C.S.E., L.R.C.P., to the Williton District, and the Workhouse.

The Association of Medical Officers of Health will hold their first evening meeting for the season at the Scottish Corporation Hall, Fleet-street, on Saturday, at 7·30 p.m., when the President, Dr. Druitt, will deliver an address entitled "A Practical View of Intemperance, its Causes and Remedies."

At a meeting of the Medical Committee of the Metropolitan Free Hospital this week, the subject of the remuneration of the Medical staff was discussed. It was unanimously resolved that in public Medical institutions which do not possess a Medical school, or other indirect source for remunerating the Medical officers, there should be a payment made by the committee out of the general fund.

The winter term at the Queen's Hospital, Birmingham, was inaugurated on the afternoon of the 8th inst., when Mr. Sampson Gamgee delivered the introductory address in the theatre of the Hospital, and the prizes were distributed to the successful students. In the absence of the Rev. C. T. Wilkinson, the chair was taken by Dr. Fleming. The following is the prize list:—Senior Clinical Medicine: 1. Mr. E. B. Wood; 2. Mr. E. G. Smith. Junior Clinical Medicine: 1. Mr. Joseph Hunt; 2. No award. Senior Surgery: 1. Mr. E. G. Smith; 2. Mr. E. H. Ravenhill. Junior Surgery: 1. Mr. J. Priestley Smith; 2. Mr. J. Hunt. Midwifery: Rev. T. H. Lambert.

Unwholesome fish to the enormous amount of 103 tons 9 cwt. was seized during the month of September by the officials appointed by the Fishmongers' Company at or near Billingsgate-market.

University of Cambridge.—The Professor of Zoology and Comparative Anatomy (Mr. Newton) will deliver a course of lectures, beginning on October 25. Candidates intending to offer themselves for examination for Medical and Surgical degrees in the present term are required to signify the same to the Regius Professor of Physic on or before November 8, and to send at the same time their certificates. The first and final examinations for the degree of M.B. will begin on Monday, November 22, at 9 a.m. The second examination for the M.B. degree, and the exaamination for the degree of Master in Surgery, will begin on Monday, November 29, at 9 a.m.

Chloral.—A large number of our Professional brethren being desirous of obtaining some chloral for experiment, but being under the impression that they have to write for it to Dr. Liebreich himself, we are requested to state that that drug may be had perfectly pure from Messrs. Robbins and Co., of Oxford-street, the well-known manufacturers of Dr. Richardson's anæsthetic ether, styptic colloid, etc.

Medical Club.—On Wednesday the members of this club held their annual general meeting at their club-house in Spring-gardens; Sir W. Fergusson, Bart., presided. There was a large muster, as notice had been given of a resolution to alter the system upon which the club has been hitherto conducted. Up to the present time it has been carried on upon the proprietary principle, and, as success has attended it, the proposal was to turn it into a mutual or joint-stock club. After a long and earnest debate, the proposal was negatived with only one dissentient voice, and it was decided that it should be continued under the same management. The committee for the ensuing year was then elected, composed of the following gentlemen:—Mr. Brady, M.P.; Mr. Clement, M.P.; Mr. Cockayne; Sir W. Fergusson, Bart; Dr. Bell Fletcher; Dr. P. Hood; Sir J. G. Logan, K.C.B.; Dr. J. A. Lush, M.P.; Sir Ranald Martin, C.B.; Dr. McEwen; Sir C. K. McGrigor, Bart.; Dr. Russell Reynolds; Dr. Richardson; Mr. Edwin Saunders; Dr. Swettenham; Dr. Webster; Dr. Wiblin; Mr. Erasmus Wilson; and, with a vote of thanks to the chairman, the meeting separated. We are informed that the monthly house dinner, which should have taken place on Wednesday, will be held on November 4, when Sir W. Fergusson will take the chair.

Death of M. Cerise.—The death of this well-known Practitioner and author has cast a gloom over Parisian Medical circles, in which he was greatly esteemed. French by descent, he was a Doctor of the Turin University, and, in fact, possessed no French qualification. Authorised to practise, he acquired a very large *clientèle*. He was one of the founders of the now well-known Société Médico-Psychologique, and his "Traité des Maladies du Système Nerveux" has acquired a great reputation. Among other acts of generosity performed by him, it is related that he contributed 1200 francs per annum to the wants of his master in philosophy, Buchez, until his death, at the same time saving his susceptibilities by making him believe that it resulted from a literary enterprise to which Buchez had attached his name.

Poor-law Medical Officers' Association.—The quarterly meeting of this Association will be held at the Freemasons' Tavern, Great Queen-street, Lincoln's-inn-fields, on Wednesday, the 27th inst., at half-past seven precisely. After the report of the Council has been submitted, the President, Dr. Rogers, will address the meeting, and give his experience of the Irish Dispensary system acquired in a visit recently and specially made to Ireland for the purpose of studying the working of the system on the spot. We earnestly recommend all Medical officers, whether members of the Association or not, to attend; and we would advise any guardians desirous of obtaining information on the subject to avail themselves of this opportunity, when we hope to witness a large attendance.

The Skin Department at Charing-cross Hospital.—We are glad to learn that this post has been conferred on Dr. Beigel, whose previous researches in dermatology point him out as being well qualified for it. His published works include an Essay on Syphilis, on Albinism and Negrism, on Plica Polonica, on Abnormal and Diseased Conditions of the Hair, and on the Pustule Maligne, in which he advocates the disinfection of the flesh of diseased animals by heat, in order to prevent its being dug up and eaten surreptitiously, as has happened in some parts of the Continent. Dr. Beigel has also discovered a new skin disease, the papilloma area-elevatum and the fungus which infests chignons, to which Hallier has given the name Sclerotium Beigelianum. With all these special qualifications Dr. Beigel is an accomplished general Physician of German culture, and has done some service by his disquisitions on Medical education in Germany, published in the *Proceedings* of the Medical Council and elsewhere.

Masonic Testimonial. — The *Times of India* of August 26 contains a very gratifying account of the presentation of a masonic testimonial to Brother Thomas Diver, M.D. Dr. Diver, it appears, has been long an active and zealous Freemason. He has rendered valuable services to the craft, but in no instance, probably, have they been more important than in connexion with the "Eastern Star," a Parsee lodge working under the English constitution. He was the founder and first master of the lodge, and on the expiration of his term of office the lodge voted him a masonic jewel, accompanied by an illuminated address and a purse of £100. The jewel is a handsome work of art, and of a novel patern, the past master's, royal arch, and past district grand warden's jewels being here combined in one. The presentation took place at an unusually large gathering of the lodge and of masters and past masters of other lodges. The testimonial was presented by the Honourable J. Gibbs with an appropriate speech, and acknowledged gracefully by Dr. Diver.

St. George's Hospital.—At the quarterly meeting of the governors held on October 8, Benjamin Lancaster, Esq., in the chair, the following prizes were awarded to the students who had distinguished themselves in the Medical School attached to the Hospital during the session 1868-69:—The William Brown Exhibition (£40 per annum, tenable for three years), Mr. Rowland. Sir Charles Clarke's Prize, Mr. Vasey. The Thompson Medal, Mr. E. G. Barnes. Sir Benjamin Brodie's Clinical Prize in Surgery, Mr. Palmer. The Acland Clinical Prize in Medicine, Mr. Noad. The Johnson Memorial Prize in Anatomy, Mr. Baber; do. Certificate, Mr. Brabant. General Proficiency Prizes: 3rd year Student's Prize, Mr. E. G. Barnes; Honorary Certificate, Mr. Bowles. Certificates of Proficiency, Messrs. Harrison, Noad, Palmer, Squire, and Vasey. 2nd year Student's Prize, Mr. Norman; Honorary Certificate, Mr. Brabant. 1st year Student's Prize, Mr. Goldsmith; Extra Prize, Mr. Stradling; Honorary Certificates, Messrs. Thrupp, Winterbotton, and Warden (chemistry). Certificates of Proficiency, Messrs. Athill, Colthart, Hale, McHardy, and Robinson.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

The letter from *Pau* next week. The other papers as soon as possible.

Studens.—The supply of subjects is beginning very badly this session.

Alpha, Mr. Stokes, etc.—Your letters next week.

Mr. James W.—We cannot take on us the responsibility of prescribing for patients whom we do not see. Better consult the ablest Physician in your neighbourhood. Meanwhile, try some tannin lozenges.

The Supply of Freshmen.—Spite of evil auguries and internal dissensions, St. Bartholomew's is believed to have welcomed nearly its usual number of freshmen. Guy's is very full, and is said to have upwards of one hundred. University College is looking up. King's College not quite so full as usual. Charing-cross and St. Mary's at a low average. The Middlesex and the London above the average.

Papier-Miché.—Tilbury Fox's Manual of Skin Diseases is the best for your purpose. Gray's Anatomy has just appeared in a new edition.

Yorkshire.—Yes, at the Leeds School of Medicine.

R. S.—John Hunter lived in Leicester-square, William Hunter in Great Windmill-street.

M.R.C.S. can recover his charges at law.

P. T. W.—The time fixed for the next examination will be duly announced in the *Medical Times and Gazette*.

A Country Surgeon.—The Medical Witness Act can be obtained by order of a bookseller.

A. B. C.—Yes, it is quite possible.

Nino.—In the year 1816.

Dr. Pappenheim, Berlin.—The Weekly Return of the Registrar-General of Births and Deaths in London will answer every question. It is published every Wednesday by Messrs. Eyre and Spottiswoode, the Government printers, at the rate of three-halfpence, and may be obtained for any given weeks through a bookseller. The meteorological part is contributed by Mr. Glaisher.

B. H.—Are you well to do? If so, don't envy a poorer brother one of those little *aurœ* (we won't say *puff*) which may serve to fill his yet unprosperous sails. Are you poor? Do some work that deserves it, and you shall have a little puff yourself.

An Old Subscriber.—The first number of the *Medical Times* appeared on Saturday, September 28, 1839.

A Student, Derby.—The registration will close on the 15th inst.

Dr. M.—The introductory was delivered on Friday. The *Standard* had an amusing notice of our sharp contemporary's doings in the matter.

H. F. S. will find a stranger case in the *Richmond* (U. S.) *Medical Journal*, where Dr. A. C. White publishes the case of a negress only 34 years old who had given birth to twenty-four children.

Mr. Walker.—The Museum of the College of Surgeons was reopened on last Monday week. Write to Mr. Flower, the Conservator. Our advertising columns will give you the desired information as to the dates of the ensuing examinations.

Chlorosis.—Professor Hammond, of New York, prescribes ten drops of Fowler's solution and one-thirtieth grain of strychnia ter die.

Phrenologist, Liverpool.—The skull is in the museum of the College of Surgeons. The size round the head of Napoleon was fully 23½ inches, being the same measurement as the heads of Wellington and William Pitt.

Inquirer.—There is a full report of the proceedings in the Bristol newspapers.

Ana.—Mr. Joberns was one of the Surgeons of Middlesex Hospital, and lived in John-street, Golden-square. He was eccentric, but a good sort of man, with moderate abilities. There is no foundation for the absurd story referred to.

A Young Practitioner.—No doubt, attendance upon a club is often a stepping-stone to better practice. But there should be no under-bidding, no struggle to obtain an appointment at a lower rate than that originally fixed. This should never be less than four shillings per member annually. This is little enough—indeed, too little—but we regret to say many Practitioners consent to receive less.

We all know the story of Canova and the bridges. When shown that of Waterloo, he exclaimed, on being told that it was built by a private company, "What does your Government do?" He was taken to a leading wooden bridge over the water in St. James's-park. "That, Sir, is a Government erection!"

The Best Midwifery Fillet.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—If "A Ten Years' Subscriber" will call upon Ferguson, of Giltspur-street, he can see a fillet that was made to my order, that I think will please him. I am, &c. Robt. Debenham.

Heath-house, Stepney.

Professional Etiquette.

We have received a correspondence of some length between Mr. J. T. F. Frith, of Rotherhithe, and Dr. Palfrey, of Finsbury-square. We have not space to publish the letters *in extenso*, but the gist of them may be thus stated. Mr. Frith and his assistant, Dr. Johnston, are in attendance upon a club patient suffering from "phthisis." When the man was *in extremis*, Dr. Palfrey, who had been requested by the man's employer to see him, reached the house at 11.20 p.m., and considered this too late an hour to call up Mr. Frith. He pronounced the case to be one of typhus, and ordered the removal of the children at once. Mr. Frith complains less of Dr. Palfrey visiting his patient in his absence than of the opinion he had expressed respecting the nature of the case, and states emphatically that "the man died of pulmonary disease, hastened by exhaustion from neuralgic pain." Dr. Palfrey says—"I pronounced it a case of typhus, and declared that the children should be removed from the house at once."

Now the case, so far as Professional etiquette is concerned, is of importance, as showing how dangerous it is to break through well-defined laws in our conduct one to another. Undoubtedly it is the bounden duty of every man, be he a consultant or otherwise, on no occasion to see the patient of another Practitioner in his absence. There may be cases of emergency—of sudden attack, of dangerous accidents—in which the rule may be broken, but these are the exceptions, and they are rare. All the unpleasantness in this case has arisen from the cause specified. Dr. Palfrey says he has a full answer to the charge, which we shall be most glad to insert. We direct his attention to the main issue to be determined. Did he see the patient in the absence of Mr. Frith, and were the circumstances of the case of such a character as to warrant him in taking the steps he did without in any way consulting that gentleman?

COMMUNICATIONS have been received from—

Mr. P. Wright; Dr. G. H. Fetheaston; Dr. John Whitmore; Dr. Murray; Dr. Symonds; Mrs. Baines; Dr. Wadham; Mr. G. Fisher; Mr. J. W. Mackie; Mr. G. Winstanley; Dr. Burder; Dr. Russell; Mr. R. Debenham; Dr. J. B. Kirgenyen; Dr. C. B. Taylor; Dr. Dudfield; Dr. J. Palfrey; Mr. G. Gaskoin; Mr. C. F. Maunder; Mr. J. T. F. Firth; Mr. Sampson Gamgee; Dr. Playfair; Mr. Horsley; Dr. Lory Maash; Mr. James Ward; Alpha; Thomas Stokes, Esq.; Mr. Arnott; Mr. J. Chatto.

BOOKS RECEIVED—

British Journal of Dental Science, No. 158—Damon's Neuroses of the Skin—Wood's Medical Council and its Critics—Shedfield Cottage Hospital Report—Fayrer's Use of Petroleum or Earth-Oil as an Antiseptic in the Treatment of Surgical Diseases—St. Bartholomew's Hospital Reports, vol. 5—The Natural History of the Three Kingdoms, being a series of plates coloured from Nature—Haughton's Natural Philosophy popularly Explained—White's Biography of Dr. Sheridan Muspratt—Journal of the Scottish Meteorological Society, Nos. 22 and 23.

NEWSPAPERS RECEIVED—

Times of India—New Zealand Colonist—Australian Medical Gazette—Indian Medical Gazette—Birmingham Daily Gazette—New York Medical Gazette—Notes and Queries—Medical Press and Circular.

VITAL STATISTICS OF LONDON.

Week ending Saturday, October 9, 1869.

BIRTHS.

Births of Boys, 1149; Girls, 1099; Total, 2248.
Average of 10 corresponding weeks, 1859-68, 1894·8.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	710	657	1367
Average of the ten years 1858-67	616·8	576·4	1193·2
Average corrected to increased population	...	...	1312
Deaths of people above 90	...	...	...

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-cough.	Typhus.	Diarrhœa.	Cholera.
West	463888	...	1	16	1	10	9	10	...
North	618210	...	4	37	1	10	8	12	...
Central	378058	...	4	36	2	3	5	10	...
East	571158	1	5	64	1	13	3	10	...
South	773175	3	8	63	4	15	8	15	...
Total	2803089	4	22	216	9	51	33	57	...

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·994 in.
Mean temperature	56·7
Highest point of thermometer	73·9
Lowest point of thermometer	44·9
Mean dew-point temperature	52·5
General direction of wind	Variable.
Whole amount of rain in the week	0·02

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, October 9, 1869, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the year 1869.	Persons to an Acre. (1869.)	Births Registered during the week ending Oct. 9.	Deaths. Corrected Average Weekly Number.	Deaths. Registered during the week ending Oct. 9.	Temperature of Air (Fahr.) Highest during the Week.	Temperature of Air (Fahr.) Lowest during the Week.	Temperature of Air (Fahr.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3170754	40·7	2248	1462	1367	73·9	41·9	56·7	0·02	2
Bristol (City)	169423	36·1	114	76	*59	76·6	44·0	56·8	0·28	28
Birmingham (Boro')	360846	46·1	222	175	146	75·0	40·0	56·2	0·04	4
Liverpool (Boro')	509052	99·7	374	295	244	70·7	47·6	56·0	0·24	24
Manchester (City)	370892	82·7	254	210	*162	75·0	43·0	56·5	0·74	75
Salford (Borough)	119350	23·1	73	60	59	75·5	42·4	56·9	0·81	82
Sheffield (Borough)	239752	10·5	172	126	109	70·7	42·7	54·9	0·18	18
Bradford (Borough)	138522	21·0	117	71	63	65·5	47·5	54·5	0·31	31
Leeds (Borough)	253110	11·7	127	129	129	65·0	45·0	55·3	0·38	38
Hull (Borough)	126682	35·6	79	59	48	67·0	41·0	53·1	0 28	28
Newcstl-on-Tyne, do.	130503	24·5	65	69	56	...	...	...	...	...
Edinburgh (City)	178002	40·2	118	86	84	62·7	42·0	53·3	0·10	10
Glasgow (City)	458937	90·6	318	268	217	67·0	41·6	55·3	0·03	8
Dublin (City, etc.†)	320762	32·9	132	158	127	73·4	46·6	59·4	0·30	30
Total of 14 large Towns	6546587	35·5	4413	3244	2870	76·6	40·0	55·8	0·29	29
Paris (City)	1889842	...	...	...	...	...	...	...	...	...
					Week ending Oct. 2.	Week ending Oct. 2.				
Vienna (City)	560000 (1863)	...	...	...	...	...	...	...	...	...

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·994 in. The barometrical reading increased from 29·52 in. at the beginning of the week to 30·10 in. on Wednesday, Oct. 6.

The general direction of the wind was variable.

Note.—The population of Cities and Boroughs in 1869 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous.

* The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

† Inclusive of some suburbs.

APPOINTMENTS FOR THE WEEK.

October 16. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m. King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 1½ p.m.

18. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 1½ p.m.; St. Peter's Hospital for Stone, 2½ p.m.

Medical Society of London, 8 p.m. Mr. Henry Hancock, "On a Peculiar Form of Syphilis of the Neck simulating Epithelioma." Dr. Andrew Clark, "On the Part which Pleurisy plays in the Production of Phthisis."

19. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.

Pathological Society, 8 p.m. Meeting.

20. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.

21. *Thursday.*

Operations at St. George's, 1 p.m. Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

Harveian Society, 8 p.m. Mr. G. Cascoyen, "On Varicocele."

22. *Friday.*

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

Clinical Society, 8½ p.m. Mr. Howard Marsh, "A Case of Cleft Palate." Mr. De Morgan, "Case of Fracture of the Skull with subsequent Coma and Hemiplegia—Recovery—Sudden Death." Dr. Headlam Greenhow, "Diphtheria Paralysis."

EXPECTED OPERATION.

Queen Adelaide's Dispensary, Pollard-row, Bethnal-green-road.—The following Operation will be performed on Saturday (this day) at 3 p.m.:—

By Mr. Maunder—Ovariotomy.

ORIGINAL COMMUNICATIONS.

NOTES ON THE

PHYSIOLOGY AND PATHOLOGY OF THE NERVOUS SYSTEM.

By J. HUGHLINGS-JACKSON, M.D., F.R.C.P.,
Physician to the Hospital for the Epileptic and Paralysed, and Assistant-Physician to the London Hospital.

The Unit of Constitution of the Nervous System.

The following is intended as a continuation of the article on "Localisation" published in this journal June 5, 1869. The term Constitution I borrow from chemistry.

By this term I do not mean a unit of Composition(a)—consisting of an arrangement of afferent fibres, ganglion cells, efferent fibres, etc.—but a unit containing these in such balance of relations that they serve harmoniously in complete actions. To take an illustration. The *composition* of propionic acid, formic ether, and acetate of methyl is identical, but the *constitution* of each is different. Similarly, the meaning of a proposition does not depend on the mere words which compose it, but on the relations these words have to one another—such a relation that the sentence is a unit. Again, the units of the corpus striatum do not represent groups of muscles of the arm, but movements of the whole limb. Entering into the composition of the unit of constitution of the nervous system, there will be the skin impression, the sensory nerve, the centre, the motor nerve, the sensory nerves from moving muscles, and from tracts of the skin stretched or relaxed by the movement.

I suppose it to be indubitable that in the lower processes these several things are concerned in each action, and if so, it is inferable that a *corresponding* process takes place in speech and in thought. Thus in the process which we may suppose to take place when the sound of a word falls on our ear, there will be the impact on the auditory expansion, the auditory nerve, some unknown centre ("the brain") nerve fibres to the nervous arrangements superintending the movement of the word. In the reproduction of a word in thought there will be, I presume, an excitation of the parts which were concerned in the acquiring of the word—the ear—as well as the muscles of articulation. This is the view Fournie has put forward. It is true that there is no obvious movement of the articulatory muscles, but there may be nascent movement of them or nascent excitation of the highest of those nervous arrangements which in actual speech do move them. Words which were acquired by experiences of particular movements may have become, by frequent repetition, independent of those particular experiences, just as inherited experiences (Spencer)—for instance, those by which a chick estimates distance at birth—are independent of any particular experiences. But since it may be denied that any motor element is concerned, or necessarily concerned, in what we rouse up when our spoken word falls on the ear, let us strengthen our case by another illustration.(b) It is generally held that when we see an object a process takes place in which both(c) movement and sensation are involved. In the organised forms which serve as the mental representatives of objects when the objects are absent, there will therefore be comprised not only impressions of surface, but residua of movements. Just as the speculation of units of constitution supposes us to have particular auditory sensations (of the sounds of words) in fixed, although acquired, association with particular movements for words, so the speculation supposes that we have particular visual impressions in fixed association with particular ocular movements.

But the whole of the elements of the unit have not been considered in the above illustration. It frequently happens that these sensori-motor processes occur in succession. For instance, after the particular auditory and articulatory sensori-motor process serving for the *word* "ball," there follows another sensori-motor process, a subjective image of the thing ball; or, in popular language, the word rouses an idea. By what means is it that these two sensori-motor processes occur in sequence? There must be an organic connexion of some kind. It is only possible to speculate on this matter, but it is fair to do so in order that we may work on the larger basis which nervous processes in general (both mental and physical) supply. Let us, then, again speak of commoner and more obvious processes.

When a large movement—say of a leg in walking—occurs as one of a series, it is obvious that its range and degree have definite relations to the range and degree of those before it and after it; otherwise a series of movements would not serve to a common purpose, and the act of walking would be impossible. The unit of the sensori-motor arrangement, by the excitation of which one movement results, must then have *organic* connexions with the units of the sensori-motor arrangements, by excitation of which the movements before and after result. Similarly there must be an organic connexion betwixt the units of the two sensori-motor arrangements for the word "ball" and the image "ball," as the two are in indissoluble association. If the nervous system is built on one plan—mental and physical being but convenient names for large degrees of difference—the organic connexion will be of the same kind in all cases. My speculation is that in gross movement the "return" nerves from the muscles moving and from the skin stretched or relaxed by the movement serve in the excitation of the next movement, and that correspondingly return nerves from the nervous arrangements for the movement-word "ball" serve to revive the visual image and ocular movement, which constitutes the mental representatives of the object "ball." Or, in popular language, the word rouses an idea.

So far, then, I believe that in every action, whether it be a gross movement, as in walking, or a process above actual movement, as thinking, the whole elements of units are concerned.

But it is, I conceive, plain that single units would not suffice for giving relations of likeness and unlikeness; and this is what is fundamental in all mental operations, and in the higher physical. It is by an alternation of two sensations and two movements that we obtain an idea of the coexistence of two external objects; and, I suppose, we speak and think by the "same method of parallax"—by an alternation of words and perceptions.

It is evident that the whole nervous system is double; but the phenomena of disease show that damage to *one* hemisphere (usually the left) will produce loss of speech, and that damage to *one* hemisphere (usually the right) will not produce loss of speech.

Right-handedness is further evidence that the two halves of the nervous system are different. It seems, then, that the two halves are not mere duplicates; neither are they two juxtaposed singles. A careful study of cases of disease of the nervous system has led me to conclude that *each* side of the brain contains processes for all classes of movements of *both* sides of the body, but that it contains them differently. The phenomena of hemi-spasm show that the muscles of *both* sides—(1) those which must act bilaterally; (2) those which may act alternately; and (3) those which can act independently—are all represented in(d) *each* side of the brain. But they show also that those muscles of both sides which are in their action bilateral only, are equally represented in each of the two sides of the brain, that the muscles of both sides which are alternate

(a) See Spencer's "Psychology," second edition, part 1.

(b) In this and in previous articles I have perhaps too much taken it as settled that motor processes constitute the verbal signs by which we think, and that there is necessarily a nascent reproduction of movements for words when sounds of words fall on the ear. Contrary to the opinion of many, probably of most, I hold that the man who is rendered speechless from disease of *one*—say the left—side of his brain has processes for words in the right side; that, although speechless, he is not wordless. But, admitting the view which has obtained so much favour, that the right side of the brain is uneducated, and that therefore there are no motor processes of speech in his brain when the left side is extensively damaged, we have still to admit that he has thought of some kind. It may be said that he thinks only in eye-derived impressions. If he does, there will still be both sensation and movement involved. But how comes it that he can revive his eye-derived impressions in the order he wishes? Does not this require words? Dr. Charlton Bastian has in several most valuable papers (see *Fortnightly Review*, January, 1869, *Med. Chir. Review*, January and April, 1869) advanced the hypothesis that we think by aid of *sounds* of words. Although I still believe that verbal motor processes are essential in understanding what is said to us and in thinking, and that, as Fournie says, the idea is attached to the *movement* for the word, it will be necessary to give a careful consideration to the recently expressed views of Dr. Bastian, which I hope shortly to do.

(c) In all that regards visible movement and visible form, the muscular consciousness, it is now contended, is the indispensable element, the optical sensations merely guiding the movements.—Bain, *Fortnightly Review*, April, 1869.

(d) Since, as this evidence seems to show, each side of the body sends fibres to, or receives fibres from, both sides of the brain, we are led to think of the arrangement in the optic commissure. We have, however, to add inter-cerebral fibres (corpus callosum, etc.) analogous to the inter-retinal, and we have to add the commissures of the cord analogous (?) to the fibres which pass from one optic tract to the other. The arrangement of fibres in the optic commissure, so far (Beale says) from being peculiar to the optic nerves, is found in every texture of the body to which nerve fibres are distributed. These facts and inferences point to the conclusion which *à priori* is likely—that the whole of the nervous system and its parts are developed on the same fundamental plan.

in their action have a less equal representation in each side, and that those muscles of both sides which act independently as well as alternately and bilaterally have a very unequal representation in each of the two sides. The facts supplied by diseases of, and experimentation on, animals seem to show that the representation of the two sides of the body in each side of the brain is more equal the lower we go. These facts, read with the phenomena of hemiplegia, point, I consider, to the conclusion that the units of the nervous system are, like the nervous system itself, double. Using chemical metaphor, the units of constitution are the atoms, but the developed processes—those which stand out in an actual and in a *quasi*-separate form from the background of nascent and potential processes of the whole organism—have a molecular formula containing two atoms of constitution. The unit of action is double the unit of constitution.

ON THE SOLVENT TREATMENT OF URIC ACID CALCULUS,

AND THE QUANTITATIVE DETERMINATION OF URIC ACID IN URINE.(a)

By the Rev. W. VERNON HARCOURT.

When the British Association met at Manchester in 1861, Dr. Roberts, Physician to the Royal Infirmary of that city, communicated a paper respecting "The Power of Strong and Weak Solutions of the Alkaline Carbonates on Uric Acid Calculi,"(b) in which he showed the fallacy of the experiments supposed to have proved their inefficacy in a report formerly made to the French Academy by MM. Gay-Lussac and Pelouze.

Dr. Roberts found that solutions of the carbonated alkalies containing more than 120 grains of the salt in a pint of water arrested their own action by forming an insoluble crust of biurate on the calculus, and that the maximum of solvent power lay in solutions which contain 50 or 60 grains in the pint. At this strength, no incrustation was formed when the carbonate of potash was employed; and 21·4 grains per cent. of the weight of the calculus were removed by a flow over it of 6 pints in twenty-four hours. The carbonate of soda followed the same general course, with inferior efficacy.

In 1865, Dr. Roberts communicated to the Royal Medical and Chirurgical Society of London(c) a paper in which he showed, by a series of well-devised experiments, how this discovery might be applied, with a reasonable prospect of advantage, to Medical practice; and laid, for the first time, a scientific basis for attempts hitherto empirical and contradictory at dissolving the stone. The most remarkable of these experiments was that in which he passed the urine of a patient who was taking citrate of potash at the rate of 40 grains in 5 ounces of water every two hours over a fragment of uric acid calculus, and, by this process, reduced it in twelve hours from 180·5 to 174 grains, or at the rate, in twenty-four hours, of 13 grains.

In July, 1868, I was made aware, by an eminent Surgeon, Mr. Spencer Wells, of the presence of a stone in the bladder, one diameter of which appeared to measure 1½ inches; and I was advised by Mr. Wells (and by Sir H. Thompson, who confirmed his opinion as to the size of the stone) to aim at preventing its enlargement by such doses of citrate of potash as might keep the urine in a state approaching neutrality. In conversation with my excellent friend, the late Mr. Hodgson, who, when Surgeon to the Birmingham Hospital, had had great experience in this complaint, I learned that he had met with so much success in the application of an empirical medicine of much celebrity, manufactured in that neighbourhood, and consisting of carbonates of potash, that, in any case of uric acid calculus, he would advise the experiment of its administration.

Mr. Wells afterwards drew my attention to the experiments of Dr. Roberts, which appeared so satisfactory that I determined to make trial of his method of treatment, and to ascertain, if possible, by chemical analysis, the excess of uric acid above the normal quantity contained in the urine which it might be considered as removing from the calculus.

I felt the great importance of the inquiry, and had the advantages of more than ordinary leisure, a long familiarity with chemistry, a well-furnished laboratory, and an assistant in executing the experiments on whose accuracy I could fully rely.(d)

I will now proceed to lay before the section a short abstract of the chief results which I have obtained from an unintermitted course of careful experiments on all the urine voided during the past twelve months, some of which will be found of value to future experimenters, though, from causes which I shall describe, they have not realised all my expectations. If, as I had supposed, there had been any known chemical method of determining, with a near approach to accuracy, the amount of uric acid in urine, then the quantities of that acid which Dr. Roberts had found to be removed from calculi out of the body were abundantly sufficient to be ascertained by analysis, on the supposition that the same process went on in the bladder under the treatment recommended by him. I had scarcely, however, commenced my course of experiments before I became convinced of the fallibility of the methods in use for separating uric acid; and the experiments which I have to describe will place that fallibility in a strong point of view.

The method first employed was the ordinary one of adding 5 per cent. of hydrochloric acid, allowing the mixture to stand forty-eight hours, and then, after decantation, collecting the uric acid on a small filter, washing it with distilled water, and drying it at 212° F. till it ceased to lose weight. The first seven determinations, from August 20, 1868, to the 26th, inclusive, were made each day on the urine of the preceding twenty-four hours, in a neutral or slightly alkaline state, brought to that state by doses of from 120 to 165 grains of citrate of potash. The quantities of uric acid obtained varied from 11·08 to 8·43 grains. In the subsequent daily determinations, down to September 5, acid reactions were interpolated, due to the use of smaller alkaline doses, which lowered, proportionably, the amount of uric acid obtained; and, when no alkali had been taken for two days, and the urine was, in consequence, strongly acid, the quantity of uric acid found was only 2·35 grains.

From this time commenced a course of large quantities of citrate of potash, amounting, during fourteen days, to 315 grains in twenty-four hours, taken in a state of effervescence, in doses of 45 grains, dissolved in 3 fluid ounces of water. For ten of these days the hydrochloric acid was used to precipitate the uric acid; and the determination of this gave from 11·95 to 6·00 grains. In every case but the last, the whole urine of the twenty-four hours had been used; but, in the last, half was treated with hydrochloric acid, and the other half with the same proportion of nitric acid: that treated with the former acid gave 6·42 grains, whilst that with the nitric acid gave only 1·97 grains. On the following day, half the urine was treated by Lehmann's process, and gave 6·40 grains; half with nitric acid and acetic acid, in equal proportions, which gave 4·09 grains uric acid. The preference, however, assigned by Dr. Thudichum, in his able and well-known treatise on the "Pathology of the Urine," to nitric over hydrochloric acid as having given him better results led me to continue its use.

The quantity of citrate of potash taken was then raised to 350 grains for four consecutive days. On the first of these days the uric acid found was 1·54 grains, on the second, 1·23 grains. These results were so extraordinary that, for the purpose of corroborating them, or discovering an error in the analysis, I sent 40 fluid ounces out of 61 fluid ounces voided on the latter day to Dr. Thudichum, who was so good as to furnish me with his analysis of it, containing the weights of sulphuric acid, phosphoric acid, chlorine, potash, urea, and uric acid which he had obtained. The uric acid amounted to no more than 0·775 grain.

This result led to one of two conclusions. Either, independently of any question of the solution of the calculus, the presence of uric acid in the bladder had been almost entirely prevented by the alkaline treatment, or the process for obtaining it was altogether unreliable. Taking the latter alternative as far the more probable, I endeavoured henceforward to improve the analysis. The mucus secreted from the bladder by the alkaline action being now a good deal in excess, I was advised that it would be prudent to diminish the quantity of alkali taken; and it was accordingly reduced, for five days, to 300 grains of the citrate, and, for eight days, to quantities varying from 270 to 240 grains. The alkalinity was now determined for every voiding with hydrochloric acid. 2·5 per cent. of that acid was added to each; and as it had been observed that uric acid was lost by decantation, however careful, the portions of urine operated upon were entirely filtered, and

(a) Read before the British Association, Exeter meeting, Section B.

(b) "Report of the British Association, Manchester, 1861," p. 90.

(c) *Medico-Chirurgical Transactions*, vol. xlviii. p. 89.

(d) My assistant, Mr. W. P. Horn, learned, in Sir Benjamin Brodie's School of Chemistry in Oxford, those habits of precision in manipulating and accuracy in observing which are essential to chemical experiments.

the water with which the precipitates were washed was acidified with acetic acid. Under this treatment, on the fifth day of taking 300 grains of citrate, the alkalinity, measured by a standard solution of hydrochloric acid, and estimated in grains of carbonate of potash, was 25·5 grains per pint. The uric acid obtained weighed 4·74 grains; and the series below 300 grains of citrate gave quantities of uric acid varying from 2·91 grains, the alkalinity being 23·05 grains per pint, to 8·42 grains, the alkalinity being 17·2 grains per pint.

One-half of that which, with 2·5 per cent. hydrochloric acid, had yielded 8·42 grains was treated with 5 per cent. nitric acid, and kept at the temperature of 90° F.; and to render the experiment in other respects analogous to Dr. Thudichum's analysis, the alkalinity and dilution were brought to a similar standard by additions of carbonate of potash and water. The uric acid thus obtained weighed 2·07 grains, showing a loss, by this method, of 6·35 grains.

The following table contains an account of the uric acid obtained on the thirty-five days from October 9 to November 12, inclusive, as well as of the potash taken, and the quantity and alkalinity of the urine.

Citrate of potash.	Alkali, per pint.	Uric acid.	Urine voided, in ounces.
220	16·3	6·9	51·4
20	16·8	5·6	46·6
10	22·1	8·1	40·6
255	4·2	12·2	49·7
240	19·1	7·9	47·1
240	21·3	10·6	50·7
240	30·9	9·3	55·1
225	20·0	8·4	51·9
260	36·2	6·4	46·4
270	19·5	5·5	59·0
230	18·4	6·5	56·5
240	16·8	9·1	60·7
270	22·6	7·1	53·5
270	29·0	6·6	63·5
255	27·5	8·4	59·7
285	35·4	3·23	62·5
255	40·3	7·1	52·0
240	29·4	9·6	52·0
240	19·8	8·8	52·9
225	23·3	8·7	60·3
140	10·0	11·9	64·7
140	5·0	5·1	57·2
120	1·4	4·9	44·0
120	4·2	6·4	45·0
25	5·2	7·8	51·5
185	7·6	8·4	52·5
225	26·3	7·3	51·5
210	17·4	9·7	61·9
210	22·0	7·3	64·5
210	16·4	8·3	76·4
210	19·2	8·5	42·5
210	19·5	9·4	51·4
210	19·8	9·9	63·5
195	21·3	7·6	53·5
180	21·2	11·6	55·5

In this table, the highest quantity of uric acid, 12·2 grains, is connected with an alkalinity of 4·2, while the lowest quantity, 3·2, was obtained when the alkalinity was as high as 35·4. Twenty days, in which the alkalinity of twenty-four hours varied from 19·2 to 40·3, gave an average of 7·94 grains; whilst fifteen days, when the alkalinity was from 19·1 down to 1·4, gave an average of 8·08 grains. These data would lead to the supposition that the alkali had exercised no action on the calculus; but, on the other hand, the great and sudden rise of the uric acid, when the alkalinity descended from 22·1 to 4·2, might raise a suspicion that the alkaline treatment may reduce the secretion of uric acid, and, in that case, the absence of solvent action cannot be inferred.

A good deal of blood passed with the urine from November 13 to 16, accompanied with some diarrhœa and sickness. On the 17th, the determination of the uric acid was resumed; the alkalinity on that day being 5·3, the uric acid was 11·55 grains. On the following day, the acidity being 10·8, the uric acid was 10·38 grains.

I now instituted some new experiments, on the effect which different degrees of dilution in urine produce on the separation of uric acid. On November 19, 40 grains of citrate of potash having been taken, the urine voided in twenty-four hours amounted to 31 fluid ounces; it was neutral; the sp. gr. was 1·032. It was divided into three equal portions, one third in the natural condition treated in the usual manner with 2·5 per cent. Hydrochloric acid gave uric acid at the rate, for twenty-four hours, of 11·78 grains; one-third, diluted with its own bulk of water, and of sp. gr. 1·022, treated in like manner, gave uric acid, 10·99 grains; one-third, evaporated down to half its bulk, and then treated with the same quantity of hydrochloric acid, gave uric acid, 13·81 grains. November 22, 180 grains citrate having been taken, the alkalinity being 1·96, and the sp. gr. 1·030, the urine for the twenty-four hours, amounting to 41·5 fluid ounces, was divided into two portions, one of which, in the natural condition, gave 12·32 grains; the other, concentrated to one-third, sp. gr. 1·070, gave 14·78 grains of uric acid. On the 23rd, the same quantity of citrate being taken, the alkalinity 18·05, sp. gr. 1·028, the quantity of urine 42 fluid ounces, one-half, in the natural condition, gave 12·72; the other half, concentrated to one-fourth, sp. gr. 1·072, gave 14·94 grains of uric acid. On the 24th, the same quantity of citrate being taken, the alkalinity 20·4, sp. gr. 1·030, the quantity of urine 35 fluid ounces, one-half, in the natural condition, gave 10·318; the other half, concentrated to one-fourth, sp. gr. 1·074, gave 12·135 grains of uric acid. On the 25th, the same quantity of citrate being taken, the alkalinity 21·2, sp. gr. 1·031, the quantity of urine 43 fluid ounces, one-half, in the natural condition, gave 9·94 grains; the other half, concentrated to one-fourth, sp. gr. 1·075, gave 11·02 grains of uric acid. Again, on the 30th, 135 grains of citrate having been taken, the alkalinity 37·6, the quantity of urine 40 fluid ounces, one-half, in the natural condition, gave 8·53; the other half, concentrated to one-third its bulk, gave 12·66 grains of uric acid.

These give very nearly the two extremes of difference in forty comparative experiments, in the last fifteen of which the urine was reduced to a standard volume of six or three fluid ounces, according as half or quarter of the urine was employed; the average difference in these fifteen was 3·03, and in the former twenty-five, reduced to the proportions above described, 3·09 grains. What was the cause of the variation in the differences does not appear; it occurred equally, whether the urine was acid or considerably alkaline.

I was not satisfied, however, that sufficient accuracy of analysis had yet been obtained, and I have since employed the following process, which promises more perfect results:—A fourth of the urine of twenty-four hours is evaporated to 3 fluid ounces; it is treated with a mixture of hydrochloric acid and alcohol in equal parts, each being 2·5 per cent. of the quantity of urine employed; it is allowed to stand for forty-eight hours, drained on a small filter, washed with alcohol (methylated spirit), and then with equal parts of acetic acid and water. The colouring matter and phosphates, etc., are thus removed, and the uric acid is of a light colour and perfectly, though confusedly, crystalline.

The advantage which this method possesses over those heretofore in use is shown in the experiment which follows:—In urine having an acidity of 5 grains per pint, the nitric acid method gave 1·16 grains of impure uric acid; the ordinary hydrochloric acid method gave 5·53 grains; the method above described gave 9·90 grains of uric acid. I have found this method equally effective in the treatment of acid urine neutralised by potash, and believe that it might be not less applicable to that which contains a greater amount of chloride of potassium.

On the whole, these experiments, though they have failed to realise my expectation of testing, by analysis, the effect of Dr. Roberts's solvent treatment on vesical calculus, may serve to point out to others the road to success in such an attempt; and if they do so, the labour of a twelvemonth will not have been spent in vain.

There is one prominent chemical fact attending these experiments which remains to be noticed—viz., the greater amount of uric acid obtained before the alkaline treatment commenced, than in the last experiment by the same process, in the proportion of 9·56 to 5·53 grains. A similar diminution has taken place in the mineral acids; whilst from 120 to 150 grains of citrate of potash were required for neutrality in August, 1868, in March and April, 1869, from 30 to 60 grains sufficed for the same purpose. Dr. Thudichum's analysis, in September, 1868, gave—of sulphuric acid, 51·1 grains, of phosphoric, 45·7 grains. The analysis made in my laboratory, in March, 1869, gave—sulphuric acid, 25·9, of phosphoric, 34·2 grains, a difference scarcely to be accounted for without reference to the alkaline treatment undergone in the first three months of the interval.

Though I have been unable to produce any chemical evidence in favour of the solvent treatment, a fact observed during the whole course of that treatment, and not afterwards, persuades

me that a solvent action was really going on. This fact consisted in a small amount of constant deposit, in which fragmentary particles of uric acid were discerned by the microscope, enveloped in mucus, and bearing, in the opinion of Mr. Wells, as well as my assistant, a close resemblance to the detritus left by the incomplete action of carbonate of potash on fragments of uric acid calculi. I suppose these to have been washed out of the bladder in consequence of a partial solution. That no such solution should have been brought into evidence by the many determinations of uric acid, however imperfect, which I have here described, if it cannot be fully accounted for by that imperfection, may possibly be due to a physiological effect of the alkaline treatment in preventing the formation of uric acid, which may have counterbalanced the excess expected from solution of the calculus.

To ascertain these points two sets of experiments are required, one in a case in which calculus is present, and one where it is absent, in both of which the process for determining the quantity of uric acid last described may be of use.

My experience of the effects of citrate of potash not exceeding 300 grains taken in twenty-four hours, and producing an alkalinity equalling from 20 to 35 grains of carbonate of potash, continued during three months, has convinced me that no sensible disadvantage to health need be feared from such a course; and this is the experience of a man eighty years of age, who has been for some years an invalid. Neither during nor since the treatment has any irritation of the bladder been felt, and the urine has been for many months perfectly clear; it was never ammoniacal or albuminous. The calculus was judged to be uric from the previous passage of crystals of uric acid. Since the treatment no uric acid has appeared in the urine except once recently, and 25 grains of citrate of potash are found sufficient to prevent its recurrence.

Supplement.

Subsequently to the communication of this paper, the following experiments were made:—

I.

The urine voided in twenty-four hours, of which the acidity = 15·7 grains of carbonate of potash, was neutralised and divided into three parts. No. 1 (11·7 fluid ounces) was evaporated to 1·5 fluid ounce; an equal bulk of alcohol was added, with 2·3 drachms of hydrochloric acid, and the mixture stood for forty-eight hours. To No. 2, 17·5 grains of carbonate of potash were added, and neutralised with hydrochloric acid; it was evaporated to 3 fluid ounces; 2·3 drachms of hydrochloric acid, with an equal quantity of alcohol, were added, and it was then treated like No. 1. No. 3 was treated like No. 2, but with the addition of 3 grains of uric acid dissolved in carbonate of potash. The three precipitates were severally washed—first with alcohol, and lastly with equal proportions of acetic acid and water. The result was as follows:—

	No. 1.	No. 2.	No. 3.
Uric acid .	6·97	6·51	9·62—3 = 6·62 grains.

II.

The urine of twenty-four hours (35·5 fluid ounces), of which the acidity = 10 grains of carbonate of potash per pint, was neutralised and divided into four parts. No. 1 was treated in all respects like No. 1 of the above series. No. 2 was similarly treated, with the addition of 30 grains per pint of carbonate of potash neutralised. No. 3 was treated like No. 2, with the addition of 2 grains of uric acid dissolved in carbonate of potash. No. 4 was evaporated only to 3 fluid ounces; the alcohol added was only 1·7 fluid drachm; in other respects it was treated like No. 2, but the precipitate of uric acid being more coloured than in Nos. 1, 2, and 3, it was further washed with boiling alcohol, which removed 0·14 grain of colouring matter, and still left it darker than the others. The weight of uric acid obtained in the four experiments was as follows:—

	No. 1.	No. 2.	No. 3.	No. 4.
Uric acid .	7·44	7·80	9·50—2 = 7·50	7·30 grs.

Two further experiments were made, in both of which the proportion of 1 grain only of uric acid was superadded to the urine of twenty-four hours, the process employed being the same in other respects as that of No. 1 in the preceding experiments. The results were as follows:—

1. Uric acid without addition = 7·96 grains.
   „ with addition of 1 grain = 8·74, or—1 = 7·74 grains.
2. Uric acid without addition = 7·67 grains.
   „ with addition of 1 grain = 8·42, or—1 = 7·42 grains.

In the first of these two experiments the alcoholic acid was decanted from the precipitate previous to filtration, after standing for nineteen hours, and an interval of considerably less would, I believe, suffice.

On the whole it appears that the best process for determining the quantity of uric acid in urine is the following:—To neutralise a third or fourth part of the urine of twenty-four hours, if alkaline with hydrochloric acid, or if acid with carbonate of potash; to reduce this to 1½ fluid ounce; to treat it with 3 drachms of hydrochloric acid, combined with 1½ fluid ounce of alcohol; to decant when the liquid is clear; to wash the deposit first with alcohol, and, when that dissolves no more, with equal parts of acetic acid and water. And it also appears that the amount of potash in the urine does not detract from the accuracy of the determination.

It may, I think, also be concluded that, notwithstanding the variability of the quantity of uric acid in different states of the system, under conditions of health and diet nearly uniform, a sufficiently exact average determination may be made of the normal quantity of uric acid antecedent to the alkaline treatment, and that if the alkaline treatment furnishes a grain or two more of uric acid, this may be relied upon as evidence that the uric acid calculus in the bladder is undergoing solution.

ON DISEASES OF THE JOINTS CONNECTED WITH PROGRESSIVE LOCOMOTOR ATAXY.

By BENJAMIN BALL,
Professeur-Agrégé at the Paris Faculty of Medicine.

(*Concluded from page* 274.)

II. Pathological Anatomy.

The results of a single autopsy, and one, besides, very incomplete in its character, are certainly far from being sufficient to determine the anatomical characteristics of the affection which at present occupies our attention, but the fruits derived from clinical observation permit us, to a certain extent, to supply what is wanting, and the phenomena observed exterior to the joint reveal, in some degree, the nature of the morbid process going on in the interior of the articular cavity.

In the progress of the malady three different degrees may be recognised in an anatomical point of view. Symptoms at first but slight are quickly succeeded by those of a more serious kind; these, in their turn, are followed by permanent disorganisation of the articulation and destruction more or less complete of the articular surfaces. Such are the three successive periods which spinal arthropathy seems to observe. The autopsy which we possess refers to the second degree, or what may be called the intermediate period, of the malady. In order to describe the commencement and the last period of the malady, we shall be obliged to have recourse to the consideration of the phenomena observed during the life of the patient.

In the first degree the articulation is attacked by hydarthrosis, and the neighbouring tissues become infiltrated with serum. The effusion is not confined to the articular cavity, but the neighbouring serous bursæ seem to participate in it to a certain extent. This fact has been observed in at least one case by means of direct inspection, and Surgical exploration has allowed us to confirm its existence more than once in the living subject. The effused fluid appears to consist exclusively of serum of a citron colour; it contains neither blood, nor pus, nor albuminous flocculi; and the punctures made on the living subject by Dr. Labbé and myself (a) reveal the same results as did the autopsy conducted by M. Charcot.

Nevertheless, Case 16 is an exception to this rule; but, as we have already said, there exist, perhaps, several types of this malady which we shall be better able to appreciate by-and-by. The quantity of the effused fluid is often very considerable, seeing that in one of the patients whose history we have given, nearly ten ounces of fluid were evacuated consequent on three successive punctures.

No inflammatory action appears to accompany the morbid process. This is attested by the nature of the fluid evacuated; and the only autopsy which we possess confirms the fact. The synovial membrane did not present any abnormal vascularity, neither were there found osseous vegetations, properly so called, in the articular cavity.

Regarding the hypertrophy remarked in the surrounding tissues, it is impossible for us as yet to indicate its precise nature. We are, however, disposed to believe that there exists, at the onset of the disease at least, a considerable effusion in the deep-lying parts.

(a) Obs. 1 and 4.

The first degree of arthropathy seems, then, to have for essential character a kind of serous "fluxion" invading at the same time the articular cavities, the surrounding tissues, and the neighbouring bursæ. But matters do not remain long at this point, for we see rapidly developed more serious lesions, which mark the second stage of the disease.

It is impossible for us to proceed further from want of sufficient data. We simply know that at certain points ossific tumours are developed while the articular surfaces appear to undergo rapid destruction. In the only case where we have been able to ascertain the exact state of the parts, the cartilage had disappeared, and the bony substance itself was eaten away as if from violent and prolonged friction. Nevertheless, small bony excrescences surrounded the diseased joint. And, lastly, irreducible dislocations are observed in many subjects—the direct consequence of the atrophy of the articular surfaces.

It now remains for us to point out the differences which separate, in an anatomical point of view, the arthropathy of persons labouring under locomotor ataxy from certain other diseases of the articulations which seem to present a certain analogy with this affection, but which, however, differ from it in several respects.

A. Chronic Arthritis, which in these latter times has been the object of deep research, is characterised essentially by extensive alterations in the osseous tissue, by vegetations peculiar to it, and by the incrustation with phosphate of lime of the articular surfaces, which in spinal arthropathy are wanting, or which seem at least only to exist in a lesser degree in this latter affection. In both cases the living cartilage is destroyed; but the phases of this morbid process, which have been studied with great attention in chronic arthritis, have not been examined, up to the present time, in the arthropathy of persons afflicted with locomotor ataxy. All that we are in a condition to say on this point is that the progress of the atrophic process seems to be much more active in the second case than in the first. In a word, in chronic arthritis there exist a flattening and an augmentation in the size of the articular surfaces which are not to be found in spinal arthropathy.

B. Dry Caries.—This disease, described some while ago by Volkmann,(b) bears a certain resemblance to the affection which at present occupies our attention, it being characterised by a rapid atrophy of the articular extremities of the bones. The shoulder is its seat of election. But in this dry caries we find the bone hollowed out in small irregular cavities lined by a fine granulated membrane, not very vascular, so firmly adherent to the subjacent bone that a certain force is needed to detach it. Nothing of this kind seems to exist in the arthropathy which we have been studying; besides, the lesions which this latter presents resemble those which might be produced by continuous frictions—a kind of wear and tear of the osseous surfaces—while in the dry caries there exists, according to Volkmann, a serious alteration in the bony tissue itself. But it seems useless to give here the histological characters of dry caries, seeing that those belonging to affections of joints found in connexion with locomotor ataxy are still unknown to us.

C. The Articular Affections, which occur to persons afflicted with paraplegia, are analogous to those that result from prolonged immobility, and if they cause the polish of the surfaces to disappear by modifying the structure of the bones, they never give rise to that particular atrophy which we have just described.

We believe, therefore (as far as we may be allowed to conclude from the imperfect observations which have come under our notice), that we have been dealing with a special affection hitherto not described, offering both clinical symptoms which differ from those of every other kind of arthropathy, and anatomical characters which entitle it to be regarded as an independent pathological species.

III. Diagnosis and Prognosis.

The affection we have just described seems only to manifest itself in persons afflicted with ataxy; it is consequently among these only that it becomes necessary to establish its diagnosis.

A sudden tumefaction appearing in an isolated articulation, and speedily followed by hydarthrosis, will naturally give rise, at first sight, to the idea that we have to do with an attack of acute rheumatism; but when we reflect on the habitual absence (fifteen times in eighteen) of redness, of fever, and of pain; when we remark especially the general infiltration of the corresponding limb; when we bring these phenomena to bear on the previous existence of an affection of the medullary axis, we shall always succeed—at least we think so—in avoiding this error.

Besides, it should not be forgotten that the pulse may be frequent in persons labouring under ataxy, it being the result of their special malady. It is, therefore, by an examination of the temperature of the body that we can have the assurance of the absence of all febrile movement. We must bear in mind, in short, that rheumatism most frequently invades several articulations, and that it is migratory in its character. Articular affections, on the contrary, found in connexion with ataxy, localise themselves in one particular joint, or at most in two, and abide there during the entire course of the disease.

It is well known that progressive locomotor ataxy does not guarantee its victims against the invasion of rheumatism; but we think that by the assistance of the indications which we have given, and by following attentively the progress of the disease, we shall always be able to distinguish these two affections, which resemble each other only in a very superficial manner.

When affections of the joints follow on a blow or on a fall, we may for the first few days be tempted to attribute them to the external violence thus received; but the evolution of the symptoms, so different in all respects from what we observe as the result of local contusion, will very soon correct this mistake; besides, we might from the very commencement avoid this error by taking into account the general swelling of the limb.

But the observer may be called upon to form a judgment of a lesion of the origin of which he may be ignorant. The enormous deformity of diseased joints at an advanced period of arthropathy may easily suggest the idea of a white swelling when the articular complication of ataxy is not taken into account. Here the diagnosis may often present great difficulty. In a patient confined to bed for a long period, and who presents articular deformities in an advanced stage, the question of ataxy may not suggest itself; but if at a given moment the patient be interrogated with a view to the discovery of this affection, we find to our surprise that he presents the characteristic features of this formidable disease. The patient of whom M. Charcot has communicated the history was a case in point. It was only some long time after her admission into the ward that the existence of locomotor ataxy was discovered, accompanied by extensive articular lesions.(c) It is evidently necessary to consider the antecedents of the patient; it is necessary to take into account the principal affection—to wit, locomotor ataxy; it is equally necessary (when the knee is affected) to examine the articulation of the opposite side. If there we find a hydarthrosis at its onset, we may almost with certainty diagnose *spinal arthropathy*. Thanks to the discovery of this fact, we were able in the case of one of our patients to spare him the amputation of the thigh.(d)

From this we see that not only the curiosity of the *savant* may be satisfied, but that the most experienced Practitioner may derive profit from an acquaintance with this malady.

In the shoulder an arthropathy of this nature might be taken for an old dislocation unreduced; but it is easy to recognise beneath the skin, not the presence of the head of the humerus, as in dislocations, but the destruction more or less complete of this extremity of the bone.

The prognosis in these diseases of the joints is not very unfavourable as regards the life of the individuals affected. In no case have we yet seen the lesions followed by death. The case is altogether different with regard to the diseased articulation, which rarely or ever recovers its functions, but becomes the seat of permanent disorganisation, and thus adds one infirmity more to those which invariably accompany progressive locomotor ataxy. Most generally the power of locomotion is destroyed in those individuals whose knee-joints are the seat of the disease.

The changes brought about by this affection, when it has for seat the shoulder-joint, although no less susceptible of cure, have not such a marked influence on the functions of the arm, notwithstanding the permanent dislocation which is an almost invariable consequence.

When the morbid process is not of long duration, the lesions produced may be of a less serious kind, and these are the cases in which the patients recover the use of their limbs. It may further be added that, all things being equal, the gravity of the prognosis is in a direct ratio to the prolongation of the malady.

IV. Treatment.

It is highly important to check the progress of the disease as rapidly as possible. This result, we believe, will be most effectually secured by the three following means, viz.:—

(b) Volkmann, Ueber die Caries sicca des Schultergelenks, in Neue Beiträge zur Path. und Th. der Krankh. der Bewegungsorgane. Berlin. 1868. Aug. Hirschwald.

(c) Obs. 15.

(d) Obs. 5.

repose of the affected member, the use of revulsives, and compression. As soon as symptoms of articular disease begin to manifest themselves in a patient under ataxy, the limb should be condemned to absolute immobility, and blisters applied. The actual cautery has never yet been had recourse to, so far as we are aware, and we cannot, therefore, say what benefit might be derived from its use, but *à priori* we believe that, having seen excellent effects from blisters, transcurrent cauteritation might be employed with advantage. At a more advanced stage of the disease, and after revulsives have done their part, continued compression exercises a favourable influence in bringing about resolution of the œdema, and hastening the absorption of the effused fluid.

V. Nature of the Malady.

We shall not attempt to define the nature of a disease, the anatomical characters of which are so imperfectly known; but, without entering the field of conjecture, we may at least indicate the direction in which the progress of modern science seems to lead us, and show to observers who may enjoy an opportunity of studying facts of this nature, in what sense it will be useful for them to prosecute their investigations. Physiology and pathology are at one in demonstrating the influence which the nervous centres exercise over the nutrition of all the tissues of the body. Is this power exerted through the medium of certain nutrient nerves? or is it, on the contrary, dependent on the great sympathetic? This point yet remains to be decided. Fortunately, however, for us, the question at present under discussion may be considered from another point of view.

Vivisections demonstrate, and the fact has also been proved by clinical observations, that neither the morbid alterations of the posterior columns, nor those of the anterior and lateral columns of the spinal cord produce any change in the nutrition of the parts dependent on them.

Derangement of sensation and power of movement, ataxy, paralysis, paraplegia, such are in similar cases the symptoms observed, but lesions other than these are needed to explain the phenomena of atrophy. Complete section of the spinal marrow could not alone produce such effects; isolated from its superior centre, the inferior portion of the medullary axis continues to live, and suffices, in a certain degree, for the support of those regions in the body dependent on it. This is the reason why, in certain individuals suffering from paraplegia, the influence of the spinal cord may be interrupted completely by some considerable morbid change without any symptom of atrophy declaring itself in the lower extremities. As regards the sloughing of the sacrum and the heels, as regards the want of vitality in the external teguments, which so often declare themselves in similar cases, these must not be classed with the atrophy, so marked and so rapid in its development, which invades the articular extremities in those cases of ataxy which we have detailed; besides, these latter depend probably on special lesions, of which we shall now speak.

The researches of modern histologists, and especially of Valentiner, Luys, Lockhart Clarke, and Charcot, tend to connect progressive muscular atrophy with the destruction of the nerve cells which occupy the anterior cornua of the grey substance. Should further researches enable us to establish a constant connexion between these two lesions, it will then be demonstrated that the nutrient centre of the muscular system resides in a given point of the spinal axis. But that which may be proved true according to this hypothesis, as regards the muscular system, may perhaps hold good, in an equal degree, in reference to the articulations, the health of which, in a great measure, depends on the integrity of the nervous centres.

It has been shown that traumatic lesions of the spinal marrow give rise to morbid changes in the corresponding limb, analogous in their nature to those we have been considering. But since the posterior column of the spinal cord as well as the anterior and lateral ones must be excluded from the question—since, in short, complete section of the spinal marrow is incapable of producing such phenomena—it remains for us to search for the cause on which they depend at some point or other of the grey substance. Hence may be derived that trophic influence which sends forth nourishment to those regions of the body in which the morbid process is manifested. It is, therefore, obviously our duty to examine with care the condition of the spinal marrow, and more particularly its central portions, in all persons dying of ataxy, or of any disease complicated with this affection, whenever the opportunity presents itself.

Meantime, while waiting the occasion for carrying out such researches, it might be well for us to endeavour, by means of vivisections carefully conducted, to produce articular affections similar in character to those which form the subject of our paper.

That such experiments will be crowned with success we dare not predict; but whatever the result may be, it will be matter of satisfaction to us to have called the attention of the Medical Profession to a phenomenon not less interesting in a practical than curious in a purely scientific point of view.

HYPERTROPHY OF THE LEG, PROBABLY DUE TO SYPHILO-ELEPHANTOID DISEASE.

By J. FAYRER, M.D., C.S.I., F.R.S.E.,
Professor of Surgery, and Senior Surgeon Medical College Hospital, Calcutta.

Bholanath, a Hindoo peasant, aged 22 years, was admitted on January 16, 1867, with hypertrophy of the right leg and foot. He said he had had syphilis a year previously, and had been mercurialised by fumigation; an eruption of constitutional syphilis followed, and the cicatrices indicate rupia as the form the disease assumed. The ulcers made their appearance in successive crops over the body and extremities, and at the same time the right foot and leg began slowly but steadily to hypertrophy until it attained its present enormous magnitude. The swelling commenced in the foot, but gradually extended upwards until the leg was involved. There is no history of any periodic recurrences of fever, nor has there been any pain attending the swelling. The patient was an unhealthy, cachectic-looking individual, marked all over with rupial cicatrices, some of which were so extensive in the left hand as to have contracted the wrist-joint. The appearance of the foot and leg on admission is depicted in the accompanying sketch. The measurements are also noted. The ulcerated spots in the

Outer aspect, January 23, 1867.

Inner aspect of leg and foot, January 23, 1867. Measurements: Instep, 18½ in.; above ankle, 14½ in.; below knee, 11 in.

hypertrophied leg were covered with patches of sloughy-looking matter. The swelling itself seemed to depend on hypertrophy of the skin, and had exactly the appearance of elephantiasis. I am not certain, indeed, that it was not that disease, though the history of the patient, the absence of elephantiasis in other parts of the body, and the mode of its growth without fever incline me to consider it rather syphilitic than elephantoid in its nature. It is true the man was a native of Bengal, and therefore liable to be the subject of elephantiasis, but the previous history as well as the results of treatment lead me to believe it had more affinity with syphilis than with elephantiasis. He was ordered to keep in bed, and was put under a tonic and nutritive plan of treatment, quinine and iron, good food, and a little wine. The sores were dressed with some simple applications, and a bandage applied to the thickened limb.

The swelling was of a peculiar character, large lobular folds of integument concealing the natural shape of the foot and hiding the toes almost entirely. The following were the measurements on January 23, 1867:—Round instep 18½ inches; above ankle 14½ inches; below the knee 11 inches.

In the beginning of February his bowels became relaxed, for which Dover's powder was administered. The ulcers were healing and the limb evidently somewhat diminishing. Bitter tonics were next prescribed. In the beginning of March the ulcers were cicatrising: general health good; very little if any diminution in the size of the limb. Towards the middle of April the ulcers had nearly all healed. On April 27, the measurements were—round instep, 18 inches; above ankle, 11 inches; below knee, 10 inches—showing a slight diminution in the size of the limb. The unguentum plumbi iodidi was ordered to be rubbed in morning and evening, and quinine with other tonics continued. The limb was carefully bandaged day and night.

On May 25, 1867, it is noted that there is no fresh ulceration. The ulcers are very nearly healed, but the upper part of the leg is somewhat more swollen than before. There has been no marked paroxysmal fever, though occasionally he is feverish.

In the beginning of June, 1867, cod-liver oil was ordered, and the application of iodide of lead discontinued.

On June 12 a new ulcer appeared in the foot. On the 18th he had an attack of fever, with pain and swelling of the leg (this is very like elephantoid fever), which continued for three days.

On July 5 he had a purulent discharge from the right ear, but by the end of the month this and the ulcers were well. About the middle of July iodide of potassium was prescribed. This brought on catarrhal symptoms, but it was continued, as the leg sensibly diminished under its use. The iodide of lead ointment was again applied, and over the most hypertrophied part of the integument of the foot a blister was applied on the 19th. The blister was kept open for some time. The foot and lower part of the leg had considerably diminished by this time, but the upper part of the leg was larger. The measurements at this time were—round instep, 14 inches; below knee, 13 inches. By the middle of September the blistered surface was allowed to heal.

He continued to improve under the iodide of potassium, and in October the measurements were—instep, 13⅛ inches; above ankle, 11 inches; below knee, 10⅞ inches. A blister was now applied to the leg, and the potas. iodid. continued as before, gr. iij. ter die. He had another attack of fever on October 22, with irritability of stomach, which passed over in three or four days.

On November 20 an ulcer made its appearance at the root of the third toe, which healed under an opium lotion. The blister was renewed on the leg.

About January 10, 1868, he had enlargement of the cervical glands, which soon passed over under the influence of tincture of iodine. On the 14th had fever and diarrhœa, which soon passed over. The potas. iodid. is continued, and the blistered surface kept open.

About February 15 the blistered surface had been allowed to heal, and now the unguent. hydr. biniodidi was rubbed into the leg. The swelling of the leg had by this time considerably abated. The biniodide, after two applications, brought on violent salivation, with swelling of the tongue and cheeks. This soon passed away under the application of astringent and brandy-and-water gargles. It left him very weak and depressed, but the leg had diminished considerably. The measurements now were—instep, 11½ inches; above ankle, 9 inches; below knee, 9 inches. It is evident from this that the blister, the potas. iodid., and the biniodide ointment have had a marked effect.

By the beginning of March the salivation and ulceration of the mouth, the result of inunctions of the biniodide of mercury, had passed away. A more solid diet was now given, and the iodide of potassium resumed on April 9, 1868. The leg was again blistered. He got an attack of bronchitis about this time.

On May 15, 1868, he was ordered nitro-muriatic acid and chiretta, and for some time he continued to improve in general health.

On June 2, 1868, the potas. iodid. was resumed, and the leg and foot again blistered, the thickening still diminishing.

On June 28, 1868, the blistered leg had healed, and pressure with strapping was tried. This was continued for some days with apparent benefit.

This again, on August 16, gave place to a repetition of the blister, and, on September 11, the unguent. iodidi plumbi was again ordered to be rubbed in. Under this form of treatment he has continued ever since, and, although the progress has been slow, it has been nevertheless most satisfactory. The swelling has almost gone, the toes are all visible and naturally placed. The integument of the leg has become soft and pliant, and the power of walking and using the limb naturally has been almost entirely restored. He begins to walk with the natural spring from the ball and end of the great toe, and his general health is better, perhaps, than he has ever known it to be.

He is still, May 11, 1869, in Hospital, but is anxious to go out, and his wishes will shortly be complied with. He still takes potas. iodid. gr. iij. ter die, and has the leg bandaged and occasionally rubbed with the unguent. plumbi iodidi. The present measurements are, as compared with those on admission into hospital on January 16, 1867, or nearly two years and four months ago—

Measurements April 29, 1869:—Instep, 8¼ in.; above ankle, 7⅜ in.; below knee, 10 in.

	Jan. 23, 1867.	April 29, 1869.
Instep	18½ inches	8¼ inches
Above ankle	14¼ ,,	7⅜ ,,
Below knee	11 ,,	10 ,,

So that a diminution has taken place of—instep of 10¼ inches; above ankle, 6⅞ inches; below knee, 1 inch. The measurements of the sound leg, as compared with the diseased one, are as follows:—

	Right.	Left.
Instep	7¾ inches	8¼ inches
Above ankle	7⅛ ,,	8 ,,
Below knee	9¼ ,,	9½ ,,

These measurements were taken on May 13, 1869, by which time the diseased leg had actually become rather smaller than the sound one. The progress of this case was very slow, but the result has been very satisfactory; for whether due to elephantiasis or syphilis, or to a combination of both, it was a most serious disease of the limb. The result of treatment certainly seems to point to syphilis as the origin of the morbid condition; but the fact of the man being a resident of Bengal, and that the progress of the disease was at times accompanied by paroxysms of fever, together with the general appearance and similarity of the hypertrophy to that of elephantiasis, leave a doubt as to whether it may not have been a combination of both diseases. It is the only instance in which I have seen either local or constitutional treatment make any permanent impression upon elephantiasis, if such were the disease; and it therefore encourages me to hope that success may

attend constitutional treatment if persevered in, and especially if there be any probability of the disease being combined with constitutional syphilis. Had the femoral artery been ligatured in this case, no doubt the improvement would have had the appearance of being due to the operation; and it is very suggestive of how far the reputed favourable results of the cases recorded in which the artery has been tied may not have been due to the prolonged rest or other causes altogether apart from the operation. I think this suggestion is perfectly natural in reference to an operation which, so far as I can understand, has no physiological reasoning to recommend it. It is also remarkable that here the removal of the local disease, as a local cause of blood dyscrasia, was followed by removal of the constitutional symptoms which indicated its action on the system generally.

A CASE OF

URGENT DYSPNŒA AND ENGORGEMENT OF HEART WITH BLOOD. VENESECTION—IMMEDIATE RECOVERY.

By GOPAUL CHUNDER ROY, L.M.S.,
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Heroic as the treatment by blood-letting may be, it is undoubtedly an important agent when wielded with moderation and discretion. A remedy so potent of evil cannot fail to be also productive of good. Since the present generation it has been so universally condemned as a spoliative measure that younger Surgeons look upon it with horror and disgust. In fact, we have run to such an extreme that, whilst it was the custom in previous years to bleed patients by scores, it is rarely now that one finds the opportunity to practise the operation throughout the whole period of his existence. Many a case of asphyxia nowadays might have well been saved but for the abhorrence that the Surgeon feels for depriving his patient of his vital blood, and many a case of apoplexy could have well been warded off had timely interference been resorted to in the shape of venesection. The annexed is a case of the nature in point, where, I have no doubt, the man's life was saved by the heroic treatment that was timely enforced.

L., aged about 35 years, a police constable, of pretty strong constitution, was brought into the Nagpore City Hospital with extreme dyspnœa and impending "suffocation." Has been ill with bronchitis for the last two months. About four days before admission fever supervened. It was of an intermittent nature, and used to come at the middle of the day with shivering. This day it came as usual, and the cold stage lasted for two hours, but after its cessation he was suddenly taken ill with dyspnœa, which, within a short period, so much increased that, with an anxious apprehension of an imminent death, his friends brought him for relief to the Hospital. The condition in which I then observed him was the following:—The patient was seated on a bench, breathing deep, hurried, and with difficulty; countenance anxious and livid; skin warm; eyes protruding; a rattling noise with the respiration; a feeling of approaching dissolution, and craving to be saved; the veins of the neck prominent, and with each inspiration the external jugular was found to swell out as big as a finger; heart's sound loud and tumultuous, and its impulse strong. Auscultation over the lungs showed that air was entering freely on both sides; percussion sound normal; had never any such complaint before.

Whilst each moment aggravated the dyspnœa and increased the risk of suffocation, I thought to lose no time in bleeding him. The median cephalic vein of the right arm was opened, and about fourteen ounces of blood were withdrawn in a sitting posture, at interrupted intervals. The heart's action in the meantime was strengthened by diffusible stimulants, so that even no approach to fainting was induced. The effect of venesection was charming. As the blood was flowing the breathing became easier, the veins less prominent, and the heart's action more quiet. Within a quarter of an hour the symptoms disappeared like the extinction of a flame.

I think there cannot be any doubt as to the propriety of venesection in such instances as verified by the result. The sudden supervention of dyspnœa was owing to the engorgement of blood in the lungs during the cold stage of fever, especially as the organs were predisposed from chronic congestion of their bronchi. As the *vis a tergo* of the heart was insufficient to overcome the impediment in front, there were gradual accumulation of blood and distension of the right auricles and ventricles, and hence stasis of blood in the venous system. The livid appearance, the distension of the veins, and the fluttering action of the heart corroborate the view I have adopted. Danger was now apprehended from three sources—1st, apoplexy and coma; 2nd, asphyxia; and 3rd, stoppage of heart's action. All these were the manifest result of an overburdened heart and lung. If, in the way of assisting Nature, the surplus portion of the blood were removed, both organs would recover their natural functions. With this hypothesis I proceeded to bleed. Essential as the blood is to our existence, its excessive flow in an organ brings on stagnation and stoppage of its functions. Thus, in congestion of liver and kidney, we find suppression of biliary and urinary secretions, and thus, in engorgement of heart from valvular disease, death suddenly supervenes from failure of its action. In bleeding for inflammation, the rule is to take blood from the system till the symptoms of fainting are approached. But the practice should be modified in cases like the present, where the object was to deprive the system of a portion of its blood without the least constitutional effect, for fainting would have increased the danger we intended to avoid—viz., permanent stoppage of the heart's action. I therefore bled in an interrupted stream, and, whilst the patient was losing blood, the heart's action was stimulated by a dose of ammonia and other mixture. From that time the patient progressed favourably without any recurrence of the urgent symptoms.

Nagpore City Hospital.

LEAD IN CIDER.

By CAREY PEARCE COOMBS, M.B. Lond.

The numerous painful conditions which lead may cause are well known, but the symptoms generally given as showing the presence of this particular metal in cases of colic are so liable to variation, and the sources of the poison often so different from those which would be suspected, that I venture to offer the outlines of some cases which have fallen under my notice. The blue line, so valuable usually in determining the presence of lead in the tissues, is often present when there are no symptoms of colic, palsy, or muscular or articular pains. The line often continues after the disappearance of the attack of colic, and in one case to which I shall allude the line disappeared without the cessation of the colic.

The constipation, too, generally associated with the pain, does not always occur; the action of the bowels may be irregular, sometimes too frequent. The urine is sometimes retained by the inability of the patient to make the necessary effort, because any use of the muscles in or around the abdomen gives him so much pain. This circumstance is common to all forms of colic. The plumbic anæmia is only present in the worst cases. The pain generally occurs in the umbilical region, but in many cases it is in the epigastrium, owing no doubt to chronic gastritis. This is very common in this part of the country in the summer, being caused by drinking unlimited cold cider when hot and exhausted by out-of-door labour. Many men will take one and a half to two and and a half gallons of cider day after day for weeks, and labourers generally are allowed five or six pints all the year round. Say half a gallon a day (three hundred days), then a man may be supposed to drink one hundred and fifty gallons per annum. If only a very small proportion of lead were present—for example, three grains per gallon—it would be equivalent to nearly an ounce of the metal every year. The salt of lead which occurs in this drink is probably a malate. The above-mentioned proportion, 1 in 25,000, would not require a high solubility.

The source of the metallic impurity is not always to be made out; the investigation is not easy, cider cellars being dark and difficult to examine. In one case it appeared to be the dish or trough in which the pulp or crushed apple is placed, from which the juice is expressed, which was here, though very rarely, made of lead; in another case, the cider was drawn from the cellar through a flexible pipe which had a sinker or rose at its end, made of pewter or some other alloy of lead.

From a man for many years connected with the cider trade I have learned that the taps of the barrels are sometimes made of pewter, and that nearly all are lined with lead, even if the outside of the tap is of brass or copper.

The casks are usually placed on their ends, and all bung or cork holes in the sides carefully filled up and sometimes covered over with lead; any defect in the bung permits the cider to come in contact with the metal. Leaden pipes are rarely used in the manufacture of cider, gutta percha being preferred, but

at inns it is usually pumped through lead pipes. I have seen it stated that litharge, or acetate of lead, is sometimes added to improve the taste, but such a practice has never come under my notice. Various compounds are sold to improve the colour and taste. One of the former, which I examined, consisted of coarsely powdered cochineal alone, and one of the latter, called an "antifermentative," appeared to be lime, with some carbonate—it certainly contained no trace of lead. Another of these antifermentives is a mixture of charcoal and chalk, intended, I suppose, to unite with any lactic acid which may form—not that this prevents fermentation, but takes off excessive acidity. The charcoal obviously is intended to clear the liquid.

In a case which has been for some time under my treatment, the symptoms have been—pain in the umbilical and lumbar regions, diarrhœa alternating with constipation, and a very faint blue line on the edge of the lower gum. The pain had been first felt about twelve months before I saw the man, recurring at intervals of a fortnight or more, very sharp and leaving much soreness in the abdominal walls. At the time there is difficulty in passing the urine, which is, however, rarely discoloured, or containing any precipitate. He has for some three or four months found his wrists weakening. The steady use of iodide of potassium has taken away the stain in the gum, but the pain still recurs, though at longer intervals. Gentle mercurial treatment is now being employed.

The poisoning in this case was probably from a leaden tray on which a cheese stands in the press, and which had been new some few months before the pain appeared. The first cheeses made on this lead became very dark-coloured, and my patient kept them for his own consumption; his wife ate little. The said tray becomes greasy and moist in use, and, being heavy, has been generally cleansed by the farmer himself, whose hands, I should remark, are unusually soft for a person in his station.

The clear history of the passage of lead into the system, the gum stain, the severe abdominal pain, with absence of symptoms of gallstones or renal calculi, and the presence of weakness of the extensors, have led me to regard and treat this as a case of saturnine colic. In addition to the leaden tray which I have mentioned, there is the cider which the man habitually drinks, and which may have been a source of poisoning.

Some years ago I saw a young farmer who had colic, obstinate constipation, the gum-line, etc., and who was relieved first by opium and enemata, and then by iodide of potassium with sulphate of magnesia, but no reason could be given for the presence of lead in the cider. (The presence or absence of the metal in the water supply, in the case of Somersetshire farmers, is as little to be considered as it would be in the case of Mynheer Van Dunck.) His mother had abdominal pains and an anæmic appearance, but her symptoms were less severe than those of the son. Then three of their workmen had attacks, and one of them who was very ill, hearing that inquiries had been made about the cider, said that at the time it was made some was put for a day or two into a milk lead, which would afford a very large surface for the cider to become contaminated by the metal.

In some cases the approach of the disease is very gradual, and in others the symptoms appear suddenly. There has been an epidemic of remittent fever (not necessarily "bilious") in this neighbourhood from Christmas last until now, and an attack of this disease is sometimes followed directly by the saturnine symptoms in full force. The muscular pains in the limbs, attending the first complaint, are so blended with the pains of the lead poisoning, that they might be considered to be due primarily to the influence of the lead on the muscles or nerves. Some men have slight colic every summer. The paralysis is not a common effect in these parts, though I have met with one case in which the use of the extensors was completely lost. I suppose the disease is generally recognised and treated in time to prevent this disaster. The blue line is very commonly present in the months of cider drinkers, so that there is probably some source of contamination or other to be found in most cider-houses; but I have often fruitlessly examined barrels from which the injurious liquor has been drawn, and the difficulty of finding the source puts preventive measures aside. No other drink is produced so constantly as this one is on the consumer's premises. Each farmer, large or small, has his own orchards and cider apparatus, and there may be, no doubt there are, many ways in which the malate of lead is formed. About two years ago I attended a farmer who was suffering from severe colic and very obstinate constipation, which was relieved by opium, with enemata either simple or containing assafœtida, castor-oil, etc. In this case, as in one in many respects similar, which has just ceased to be under treatment, the anæmia was very marked. The farmer passed last summer without an attack, but this summer he has had anæmia, a faint blue line, and general disturbance of the system, with slight diarrhœa and epigastric pain; in the former attack it was umbilical. Mercury and iodide of potassium have completely relieved him.

The introduction of opium into the treatment of colic from lead, necessary as it is, and backed by good authority, seems strangely at variance with the really curative remedies; but after a few heroic attempts in these cases to overcome the constipation by calomel with colocynth, that practice will probably be given up. In whatever way the lead influences the nerves and muscles, the pain and general symptoms appear to show that spasm is the immediate cause of the constipation, and opium, with warmth externally and very frequent enemata, are more likely to overcome spasm than are irritant purgatives. And where there is much reason to expect constipation for days, the use of calomel is hazardous, salivation being almost sure to follow. The iodide of potassium has succeeded better in my practice than sulphuric acid. In a case lately treated with the iodide and mercury, the inside of the lip was deeply stained purple opposite the lower incisors where the gum-line had been most marked, the lip stain appearing about the time of recovery.

The danger of the disease attacking cider drinkers is commonly recognised about here, and cases are very numerous—there are often as many as six or eight under treatment at a time in my practice alone. But where the culture of orchards and making of cider are carried to such a pitch of perfection as hereabouts, it is a pity that the absorption of a poisonous metal is not prevented, though, in justice to the farmers, I must say that I do not think they know the reason why the cider becomes injurious.

Castle Cary, Somersetshire.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

MIDDLESEX HOSPITAL.

CANCEROUS TUMOUR IN PAROTID REGION TREATED WITH CAUSTICS AFTER LIGATURE OF THE COMMON CAROTID ARTERY.

(Under the care of Mr. C. H. MOORE.)

This patient has been recently admitted for the third time into the Hospital, and is still under treatment. We record the case because it illustrates well the beneficial action of caustics in controlling the rapid growth of cancers in regions inaccessible to the knife, and we think many of our readers may be interested in watching the treatment of such cases.

Benjamin M., aged 35, a horsekeeper, married, and the father of two children, was admitted into Forbes Ward on September 28, 1868, with the following history:—He had always enjoyed fair health, but during the past two years he had occasionally had epileptic fits, which he ascribed to great mental disturbance following the death of a child. He had been ailing for twelve weeks, but had not noticed any swelling in the neck until nine weeks back. He then pointed it out to a Surgeon who was treating him for an ulcer of the leg, and who, considering the swelling to be a strumous inflammation of the glands in the neck, poulticed, and lanced it in a prominent soft spot. Nothing but blood following the prick, it was judged to be probably malignant, and the man was sent to another Surgeon. The tumour was said to present now an unmistakably cancerous appearance — soft, tuberous, and with enlarged veins ramifying over its surface. Moreover, a grooved needle inserted into it brought away some soft bloody matter, showing under the microscope diverse cell forms, some with rapidly multiplying nuclei. The growth now began to increase with wonderful rapidity, doubling its size in ten days. The skin gave way freely at more than one point; copious hæmorrhage occurred two or three times, and was with difficulty arrested, and on one of these occasions he was taken to the Hospital.

When admitted the man was weak and pale from loss of blood, but his general health did not seem greatly affected. A soft projecting mass, the size of half a tennis-ball, partly covered by thin vein-streaked skin, and partly ulcerated, lifted up the lobe of the left ear, and sprang from a wider, firmer growth occupying the whole of the parotid region, measuring across four and a half inches, overlapping the ramus of the jaw

in front, and apparently also dipping deeply behind that bone. The projecting part was hot, and almost visibly pulsating, the patient complaining of much throbbing pain in it. Two or three thread-like lines led down to as many slightly hardened glands above the clavicle.

During the next two days there was return of hæmorrhage, and on the 30th Mr. Moore proceeded to tie the left common carotid artery. The wound was closed with pins, and carbolic acid putty applied. On prodding the mass with the scissors immediately after the deligation of the artery, it bled slightly. The left cheek was very notably cooler than the right. No difference in pupils.

October 1.—Patient slept fairly during the night. Temperature of left side still very perceptibly lower than right. He complains now (afternoon) of drowsiness, but of inability to sleep on account of great throbbing pain in the right side of the head. Right eye suffused, and conjunctiva more injected than left. Right carotid has bounding pulsation; none detected in left temporal artery. Some dragging of the left angle of the mouth and falling of the left nostril noticed whilst patient turns over in bed, but this may be caused by the pain of the growth. No difference in pupils. Radial pulse equal on both sides. Skin warm and perspiring. Has had no more pain and throbbing in the tumour since the operation. Ordered strong beef-tea Oiij. daily. Towards evening, the pain in the right side of the head being very great, an ice-bag was applied, and a draught containing tinct. hyoscyami f.3j. was given.

Next day the throbbing pain in the head was less, and a faint pulsation was felt in the left temporal artery. The tumour bled slightly when dressed, but with nothing of the former profuse spouting. The man complained of a good deal of pain and stiffness about the neck, and of difficulty in swallowing, "as if the throat were sore," he said, but the fauces were not congested. He was constantly moving his head about in a restless manner.

4th.—Pain and throbbing in right side of head almost entirely gone. Still some coolness of left side.

8th.—Lies quite quietly now. No more throbbing. Hardly any bleeding of the tumour when the dressings are changed.

15th.—The tumour has by this time increased to nearly three times its bulk on admission. It is flattened and ulcerated on its surface, and not very painful, but the man complains much of throbbing pain in the left side of the head, keeping him from sleep. This pain has been present for the last two days. The ligature separated from the carotid to-day, and the wound is slowly healing by granulation. A paste of chloride of zinc, flour, and laudanum was now ordered to be applied to the ulcerated surface of the tumour, equal parts of this paste and of stramonium ointment being used at first, and the proportion of the caustic gradually increased.

26th.—The caustic paste has destroyed a considerable thickness of the tumour. Mr. Moore to-day removed the surface of the hard eschar, grooved the lower portion, and poured in a semi-fluid caustic, consisting of zinci chloridi gr. xxx., potassæ fusæ gr. xv., aquæ f. ʒ vj., covering the whole with the caustic paste spread on lint. Patient says that the action of the caustic does not give him much pain. The same treatment was continued, the strength of the caustic being increased as the tumour was gradually destroyed, until by Christmas the growth was so reduced as not to project above the level of the surrounding skin. It was now kept in this condition, and dressed with the stramonium ointment so much used for cancerous ulcerations at this Hospital, which afforded considerable relief, and the patient left at his own request on January 19, 1869.

On February 9, 1869, he was readmitted, complaining anew of pain. In the three weeks' interval the tumour had considerably increased in size, forming now a prominent red granulating surface bathed in a thin discharge, and raised nearly an inch above the level of the surrounding skin. The man was also very thin, only just able to get about, and with a marked sallow tint of skin. The chloride of zinc paste was reapplied as before, so as to keep down the projecting portion of the mass, and the patient also took a draught containing potass. iodidi gr. v., liq. morph. ♏ xv., and vin. colchici ♏ xx. three times a day.

On February 26 he was seized with an epileptic fit in which the left limbs were strongly convulsed; but, with the exception of this and another similar fit on July 1, the case presented no feature of interest during these six months, the patient remaining in much the same state of health and strength, and the growth of the tumour being kept under by the occasional substitution of chloride of zinc paste for the stramonium ointment. Injection of acetic acid after Dr. Broadbent's method was practised once, but without any marked effect upon the mass; and the injection gave such intense and enduring pain, in spite of free subcutaneous injection of morphia at the same time, that it could not be repeated.

On August 17 the man thought he could manage to do some light work, and left the Hospital.

On September 14 he was again admitted, having had another fit in the interim accompanied with severe hæmorrhage from the tumour. This has again sprouted to the size of a bantam's egg, but in other respects the man seems in about the same state of health, although very thin and sallow. The chloride of zinc paste has just been ordered to be reapplied.

We shall hope to bring the conclusion of this case before our readers at a subsequent period. The progress hitherto has been very satisfactory, considering that the state on admission and the extremely rapid growth during the week or two previous made it probable that the patient could not live more than a few weeks at most. The stramonium ointment, which gave so much relief in this, as in many similar cases, is made by mixing half a pound of fresh stramonium leaves bruised, with two pounds of lard, exposing to a mild heat until the leaves become friable, and then straining through lint.

UNIVERSITY COLLEGE HOSPITAL.

SCIRRHUS OF THE TONGUE—EXCISION OF THE WHOLE TONGUE—PYÆMIA—DEATH.

(Under the care of Mr. BERKELEY HILL.)

F., a woman aged 43, thin and pale, had during the last four months suffered much discomfort from a sore on the left side of her tongue. Her health otherwise had been good.

When admitted, a hard nodular mass occupied the tongue on its left side, and encroached somewhat to the right of the mesial line. The surface of this mass was ulcerated on the left side at a point about a third of the tongue's length from the base. The base, however, was felt to be quite free from induration when the finger explored the mouth. Excoriations also extended from the tongue along the left anterior pillar of the fauces. No enlargement of the submaxillary glands, and no extension of the disease beyond the tongue itself were detected.

On August 25, 1869, the whole tongue was removed in the following manner:—The lower lip was divided in the mesial line by a cut passing from the mouth almost to the hyoid bone. A hole was then drilled with an Archimedean drill through the lower jaw on each side of the middle line. The jaw was then sawn through, and the attachments of the tongue to the jaw divided with a blunt-pointed bistoury, the tongue being transfixed and drawn out of the mouth by a stout whipcord ligature. An acupressure needle was then thrust upwards through the base behind the tumour, and the chain of Chassaignac's écraseur carried behind the pin round the tongue, so that the removal of all the diseased growth was insured. The chain was gradually tightened, and divided the tongue in nine and a half minutes. No bleeding followed the operation; but the epiglottis, no longer supported by the floor of the mouth, closed the larynx and threatened asphyxia. Mr. Hill then, with the assent of Mr. C. Heath, who was assisting at the operation, fastened the root of the tongue forward with a suture in the skin near the chin. This relieved the impending asphyxia, and caused no trouble afterwards. The surface of the wound was touched with solution of chloride of zinc, and the excoriated anterior pillar of the fauces with the actual cautery. The segments of the jaw were next brought together by a stout copper wire carried through the holes previously drilled in the bone for that purpose. The ends of the wire were tightened by a key used by Mr. Worthington, of Liverpool, in treating fracture of the jaw by wire sutures, and the soft parts adjusted by the twisted suture.

The patient was able to swallow the same day, and by the third day after the operation could take a sufficient quantity of liquid food. For the first week the mouth was constantly washed out by a stream of carbolic acid in water (1 part to 80), in order to check the fœtor that resulted from the sloughing which spread over the surface. Notwithstanding this occurrence the patient's strength and appetite returned, and she could in a week's time articulate sufficiently to reply an intelligible "no" and "yes" to questions. When the wound had nearly healed, on the sixteenth day after the operation, the temperature suddenly rose to 101° Fahr., and the patient died on the twentieth day with multiple abscesses in the right lung. At the post-mortem the surface of the wound in the mouth was found healed except at one point near the epiglottis, where a small slough adhered.

SOUTHERN HOSPITAL, LIVERPOOL.

A CASE OF SCIRRHUS OF THE PANCREAS.

(Under the care of Dr. CAMERON.)

[Communicated by Mr. W. LITTLE, House-Surgeon.]

R. R., aged 44, a seaman, was admitted into the Southern Hospital, Liverpool, on August 14, 1869, complaining of great emaciation, pain in abdomen, and constant vomiting, constipation.

History.—Has been a very healthy man until six months ago when he was off the West Coast of Africa. He was at that time rather a plethoric man, but soon noticed that he was losing flesh. Had spasmodic attacks of pain in abdomen, alternating costiveness and diarrhœa, occasional vomiting, and which generally occurred directly after taking food. He thought also that he could feel something hard to the left and a little above the umbilicus. These symptoms increased in severity so quickly that on his admittance in August he was not a half of his weight six months before, and was almost a living skeleton. There is no history of malignant disease in the family, and has never had any injury to the abdomen.

He now complains of constant pain in the abdomen, increased by pressure, vomiting immediately after taking anything into the stomach, great costiveness, loss of appetite and constant nausea, increasing emaciation.

On examination of abdomen, a tumour can be distinctly felt just above and to the left of the umbilicus, extending upwards and downwards about two inches and a half, and from side to side about five inches. It has a particularly hard and rough surface; great dulness on percussion over the region of tumour; not at all movable, but abdominal parietes are quite free from any connexion with tumour. Percussion-note over stomach never particularly clear. Liver: Dulness normal. Heart and pulmonary sounds healthy, but cardiac sounds rather feeble. Pulse 100, feeble. Has the greatest ease when kneeling down in bed. Urine acid, specific gravity 1018, slightly cloudy on heat and nitric acid. The patient was ordered a mixture three times a day, containing bismuth, hydrocyanic acid, and calumba, and to take nothing but beef-tea, arrowroot, and milk, neutralised with lime-water.

August 16.—Vomiting slightly relieved, but has an attack of diarrhœa. The mixture ordered to be temporarily suspended, and to take pil. saponis co. gr. v. three times a day. The linimentum crotonis to be applied over the epigastric region.

17th.—Diarrhœa and vomiting quite stopped, but has constant nausea; but keeps down the milk and beef-tea. Ordered four ounces of wine. Has less pain. Pills stopped and mixture renewed.

19th.—Complains of more pain and tenesmus; inability to pass a motion, though desirous. A warm-water enema ordered. Some difficulty found in passing the tube of syringe, and, on examination per rectum, malignant disease of the bowel was found. The bowels acted after the enema. The stool consisted of scybala of a clay colour. (They have been of this colour for some time previously, according to the patient.)

22nd.—Does not sleep well at night since last note; was ordered liq. opii sed. mxv. and succi conii ʒj. at bedtime. Has no vomiting, and takes the beef-tea, milk, and wine. The tumour hardly so well defined as on admittance. Bowels been confined since the 19th inst. Ordered another warm-water injection; the stool had a similar clay appearance.

24th.—Evidently getting weaker. Has so much nausea that he takes nothing. To keep on with mixture, with gentian added instead of hydrocyanic acid; to keep on with sedative at night.

27th.—Has been slightly delirious. Vomiting has returned and also pain. Pulse 110 and very weak. He gradually sank and expired at midnight.

29th.—A post-mortem examination made of the body this morning, thirty hours after death. Body extremely emaciated; lungs healthy; heart atrophied, and walls very flabby. On opening the abdominal cavity, the peritoneum was slightly congested, and over its surface small tubercles of a scirrhous character were scattered. The mesenteric glands were likewise much enlarged and extremely hard. The liver had three or four deposits of scirrhus. The stomach at its posterior and lower margin was firmly adherent or quite joined to the pancreas, which was at least five times the usual size, being about 3½ inches across by 8 inches long, all its normal appearances quite lost and consisting of one hard mass of cancer, very rough and corrugated on its surface, and of a yellowish white colour. The pancreas was firmly adherent to the stomach and spleen—the latter, though, being perfectly healthy. The posterior and lower portion of stomach was also affected with the disease, the cardiac orifice being encircled by scirrhous deposit. The intestinal walls, etc., about the ileo-cæcal valve were affected with large and hard deposits of cancer, also the anterior wall of the rectum about 2½ inches from the anus.

POISONING BY STRYCHNIA.

(Under the care of Dr. CAMERON.)

M. A. B., aged 17, a girl, housekeeper for her father, was admitted into the Liverpool Southern Hospital at 1.10 on the morning of August 29, and who was said to have swallowed a threepenny packet of Battle's vermin killer about an hour and three-quarters previously. All she complained of on her admittance was a hot and bitter taste in the mouth and fauces. Pulse 110, and she had a peculiar look about the eyes. The stomach-pump was used, the stomach being well washed out. She was then removed to the ward and ordered to be put to bed, but before she could be undressed was seized with violent tetanic spasms, lasting each of them for about half a minute. The spasms lasted altogether about a quarter of an hour, the first attack of spasm commencing about two hours after taking the poison. The patient never lost consciousness during the spasmodic attacks; had difficulty in breathing; respiration 35 per minute; pulse 140; pupils dilated; began to get hot. Chloroform in the form of inhalation was given, and which almost immediately subdued the spasms, but on discontinuing the chloroform and slightly touching the patient the spasms were again brought on, but as quickly subdued on again giving the chloroform. The patient was ordered to be kept very quiet in the horizontal position. The muscles of the body generally, but especially those of the legs, were very hard. She complained of want of power in the lower extremities. No involuntary passing of fæces or urine. 2.30 (three hours after taking the poison): Patient expresses herself as feeling pretty well except the stiffness of her muscles; pulse 130; respiration 26; pupils dilated; has momentary spasm on being touched; perspiring freely; no headache. A draught was given her, containing—℞ Ol. crotonis mij., ol. ricini ʒj., aq. menth. pip. ʒj. Ft. haust. statim. Chloroform was again inhaled, after which the patient slept. 11 a.m.: Patient says she feels quite well; pupils rather dilated; slept for about three hours after taking the chloroform; had slight momentary spasms during the time she was asleep, but without awaking her; she looks pale and anxious; says she has no pain anywhere; bowels have not been opened; tongue clean; has still a bitter taste in her mouth; pulse 84; respiration 22; feels thirsty; has no stiffness of the muscles. Ordered ʒj. of castor oil, and to take mist. ammoniæ acet. ʒj. 4tis horis.

August 30.—Was discharged from the Hospital this morning quite well.

Remarks.—Supposed to have taken about three-quarters of a grain of strychnia, "*which produced no symptoms until the long space of two hours after taking the poison.*" The other features of the case presented nothing different from those usually present in these cases. Chloroform proved a valuable remedy in subduing the spasms and keeping the patient in a quiescent state.

DEATH OF M. PAUL GUERSANT.—Another well-known Paris Surgeon, the son of a still more distinguished Practitioner, has just died. One of the last remaining pupils of Dupuytren, his practice was nearly confined to the Surgical diseases of children, in treating which he had attained great celebrity. He has written an excellent little work on the subject, the fruit of his thirty years' practice at the Children's Hospital, where his father founded his celebrated clinical course. It is mentioned as a curious circumstance, that M. Guersant scarcely ever ate more than one meal a day, his breakfast, which he partook of at the Café Véron for more than twenty years.

AN ENTHUSIASTIC COLLECTOR.—Mr. Wallace, describing his capture of a new and magnificent species of "bird-winged butterfly," observes: "The beauty and brilliancy of this insect are indescribable, and none but a naturalist can understand the intense excitement I experienced when I at length captured it. On taking it out of my net and opening its glorious wings, my heart began to beat violently, the blood rushed to my head, and I felt much more like fainting than I have done when in apprehension of immediate death. I had a headache the rest of the day, so great was the excitement produced by what will appear to most people a very inadequate cause."—*Malay Archipelago*, vol. ii.

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Medical Times and Gazette.

SATURDAY, OCTOBER 23, 1869.

DR. BURDON SANDERSON ON THE INOCULATION OF TUBERCLE.

There are few men who combine, in a higher degree, the most pre-eminent qualities of physiologist and pathologist with those of the practical Physician than does Dr. Burdon Sanderson. Few men could consequently better deal with such a vexed and difficult subject as the inoculation of tubercle. In this respect Dr. Sanderson has amply justified Mr. Simon's selection by the two admirable papers which have been published in that gentleman's annual report on public health. Papers like those of Dr. Sanderson are hard to epitomise; they are full of facts, inferences are scanty, and it would be impossible for us to give our readers even a faint notion of the labours of Dr. Sanderson, or of the processes whereby he reaches the conclusions which we venture to sketch.

The first thing to be noted is that a miliary tubercle is not a mass of shrivelled anatomical elements, as has generally been supposed and taught, but a well-defined structure, consisting of a network of fine fibres, enclosing in its meshes bodies apparently identical with lymph corpuscles, the whole structure closely resembling certain normal constituents of the body. Wherever tubercle is habitually found, in the peritoneum, the spleen, the liver, the lungs, or in lymphatic glands generally, there a tissue, identical with what we have above described, is invariably found as a normal constituent. This peculiar tissue (which Dr. Sanderson terms *adenoid*) is associated in an especial manner with the lymphatics which pervade the system, sometimes forming a distinct sheath round blood-vessels, especially veins, sometimes, as in the lungs, occurring in isolated masses, but always associated with the corporeal aqueducts. Now, it has already been shown by Dr. Wilson Fox and others that active tuberculosis may be set up by the introduction of many kinds of irritants beneath the skins of rodent animals under certain conditions which have not yet been specifically determined; but it has been found that, for the purpose of inciting an artificial growth of tubercle, no plan is better than the introduction of tuberculous matter into the peritoneal cavity. This having been done, tubercular masses speedily arise, but these are no new products—they are simply a hyperplasia of the pre-existing vascular sheaths or other masses of adenoid material normally existing beneath the serous epithelium. When the irritant is introduced beneath the skin, granules or nodules having a texture identical with adenoid tissue elsewhere make their appearance round the site of injury, but these masses cannot yet be shown to be in direct communication with lymphatic vessels. Nevertheless, the next step in the process of infection is the invasion of the lymphatic glands, but only those in the neighbourhood which swell up owing to proliferation of lymph cells until the gland becomes a diffluent mass surrounded by a thickened capsule.

Meanwhile other changes have been going on, and the whole system has been, so to speak, poisoned. The lymphoid bodies plentifully found in the lymphatics have made their way into the veins, whence their evil influence is by means of the arteries scattered over the body, thereby exciting to growth the adenoid sheaths surrounding many of the vessels. The proliferating masses round these assume larger dimensions at certain points than at others from projections above the surface, and become miliary tubercles. But we know that tuberculosis does not terminate with the formation of miliary tubercles, the future progress of which may be best illustrated by considering what takes place in the infected lymphatic glands. These seem to be invariably infected in consequence of disease existing whence their afferents spring. Lymphoid cells multiply and fibroid tissue is formed within them, but with the latter comes the beginning of the end. Its meshes become denser and denser, surrounding, compressing, and destroying the capillaries. The necessary supply of blood is thus arrested, and partial death gradually ensues. The glands become caseous.

Such, in brief, would seem to be the process whereby tubercle is spread and the means whereby its evil consequences are brought about, but it need hardly be said that the process varies in different situations. In the liver there is the glandular tissue to consider, in the lung the changes in the alveolar cells, and in both the distribution of the normal adenoid tissue. Nevertheless, it would seem to be shown that the origin of miliary tubercle is in a normal constituent of the body excited to inordinate activity. And this does not depend on Dr. Sanderson's researches alone, but on those of other most careful observers. But the next question is what are the means whereby these fatal changes are primarily induced? Undoubtedly the inoculation of tubercle itself or of the cheesy matter of tuberculous glands, if that can be called tubercle, under the skin of a guinea-pig, or still more certainly if introduced into the peritoneal cavity of the animal, will in course of time cause general tuberculosis, but then blotting-paper, charpie, gutta-percha, india-rubber, and even a simple injury will do the same. Neither, as at first supposed, is local suppuration necessary to induce general tuberculosis, for tubercle follows when there have been no abscesses. On the other hand, as Dr. Sanderson has shown, setons steeped in carbolic acid have in ten instances been followed by no tubercle. Extensive simple fractures of the scapula have in five instances given no tubercular result. This portion of the subject still needs investigation, and we can only hope that Mr. Simon will be induced to pursue the matter through the medium of Dr. Sanderson. As for the latter, we sincerely thank him for the intellectual feast he has prepared for us, and strongly recommend to our pathologic readers a fuller participation therein than we have been able to afford.

THE WEEK.

TOPICS OF THE DAY.

The numbers of new Medical students are not quite complete, but, so far as they go, they show the Medical Profession to have lost none of its attractiveness to young men. They show also the continued vitality of the old hereditary schools of Guy's and St. Bartholomew's.

Social questions, such as intemperance, prostitution, mendicancy, and the relief of the poor, continue to occupy the attention of the educated and thoughtful part of society. The whole question of intemperance, and with it that of the legitimate use of alcoholic drinks in health and their employment in the treatment of disease, requires to be fully considered from a Medical point of view. The causes of intemperance espe-

cially require to be well sifted, and probably it may be found easier and more useful to remove them in detail by well-directed exertions than to denounce them in the lump. The exceedingly difficult subject of legislation for drunkards which was broached by Dr. Symonds at Clifton, and by Dr. Gairdner, of Glasgow, in a paper marked by good sense and moderation, requires the most cautious handling, as we hope to show in future communications. With regard to prostitution, we conceive that we are doing our readers a service by recapitulating the remedies which the law already provides against it. We would particularly call attention to a new Association for the Suppression of Mendicity and Organisation of Charitable Relief, whose head-quarters are at No. 15, Buckingham-street, Strand. No member of that society need trouble himself about the most heartrending tale told him in the streets. Let him give one of the society's tickets, and he may be sure that if there be real distress it will be relieved, whilst imposture and fraud will be left out in the cold. Beggars of every degree are beginning to infest the streets in unusual numbers, and furnish the strongest proof of the imbecility of our municipal government. There is no argument for arresting and detaining prostitutes which does not apply with tenfold force to beggars. The prostitute is probably alone; the beggar is accompanied with a troop of children, who are being educated to a life of theft and prostitution, with typhus fever lurking in their frowsy rags. There are a hundred per cent. more chances of escape from prostitution than from a life of confirmed mendicancy.

The majority of the societies are now in full swing. Last week we noted the commencement of the Clinical Society's session, and we have now the Pathological, the Obstetrical, and the Medical Society of London in full working order. The Pathological began with a special meeting to discuss the amalgamation scheme, as will be seen elsewhere in our columns. The members determined to support it on condition that their *Transactions* should not suffer. The first regular meeting was held on Tuesday, when, among many curious and interesting specimens, one produced by Dr. Morell Mackenzie excited considerable interest. It was the pharynx and trachea of a young German Medical man, who had shown some symptoms of mental derangement. For a slight cold he had blistered one of his sides completely round. He was finally induced to go into the London Hospital, where he was closely watched; but during the night he managed, unobserved, to pack his pharynx with the cotton wool, which covered his side, so as to cause suffocation. In the morning he was found dead. The Obstetrical and the Medical Societies also show signs of vigour. We trust their sessions may be prosperous.

Whether we consider the cruel and careless method of road-mending or the neglect of "local authorities" in carrying out the provisions of the Sanitary Act, the neglect to provide carriages for patients ill with contagious fevers, and means of disinfecting their clothes, everything points to the futility of the present system, and the need of putting our municipality under fewer and more vigorous hands.

ST. PANCRAS AND THE POOR-LAW BOARD.

The President of the Poor-law Board has been requested by the guardians of St. Pancras to grant an interview to a deputation to enable them to lay before him the position in which they are now placed with respect to Dr. Ellis, the Medical officer of the infirmary, "who, in their opinion, has been guilty of conduct which entirely unfits him for holding his present responsible position." The reply states that "the President must decline to enter at a personal interview into charges brought against any particular officer; but, if the guardians desire to confer with him on any of the general questions connected with the workhouse of St. Pancras, and consider that such a course is likely to conduce to the removal of some of the difficulties which have arisen, the President will receive a deputation from the guardians."

THE LONDON MEDICAL SCHOOLS.

The annual return of the number of students pursuing their Professional studies at the eleven recognised metropolitan Hospitals, which has just been prepared from the registry of the Royal College of Surgeons for the Government Inspector of Anatomical Schools, exhibits an increase of 37 over the number of last year, the number of new entries alone amounting to 415. The total number of registered students is 1231. The following return will no doubt be interesting to metropolitan teachers:—

1. Guy's Hospital	285,	including	96	freshmen.
2. St. Bartholomew's Hospital	237	„	80	„
3. University College Hospital	194	„	71	„
4. King's College Hospital	116	„	33	„
5. London Hospital	78	„	23	„
6. St. George's Hospital	72	„	28	„
7. St. Thomas's Hospital	64	„	28	„
8. Charing-cross Hospital	60	„	18	„
9. St. Mary's Hospital	56	„	16	„
10. Middlesex Hospital	42	„	15	„
11. Westminster Hospital	27	„	7	„
Total	1231		415	

In addition to the above, there are, of course, a few more students who have entered at the different Hospitals, but are not eligible for registration, not having yet passed a preliminary examination in arts, etc. The above statement will show how very fallacious are the statements published in a contemporary that "*many* of the new students at several of the Hospitals do not intend to register at the College of Surgeons." This notion only exists in the imagination of the writer. From the following statement it will be seen that the total number of students now pursuing their Professional studies in this metropolis very nearly amounts to the number registered in 1860, the *annus mirabilis* for Medical teachers:—

Years.	Metropolitan Schools.	Provincial Schools.	Total.
1860	1228	333	1561
1861	1116	258	1374
1862	1045	248	1293
1863	1020	214	1234
1864	995	247	1242
1865	1013	249	1262
1866	1027	258	1285
1867	1125	257	1382
1868	1194	284	1478

In the year 1863 the Grosvenor-place School of Medicine was closed, and this year we are informed that a provincial school has disappeared. The return from the provinces is not yet completed.

THE CHAIR OF SURGERY IN GLASGOW.

It has been pointed out to us that in commenting on the appointment of Dr. George Macleod to the chair of Surgery in Glasgow we omitted to mention the name of one of the candidates—Dr. Eben Watson. The omission arose from no disrespect for Dr. Eben Watson's talents either as a Surgeon or as a teacher. We know that Dr. Watson is highly esteemed in the Andersonian institution, where he holds the chair of Physiology, and we should have regretted had such an able teacher been lost to a subject which, especially nowadays, needs able exponents. Neither did we, if our paragraph is read aright, confound the candidate Dr. George Buchanan with the well-known Dr. Andrew Buchanan, whose original investigations are only now becoming appreciated. But even the unsuccessful candidates cannot, if we are to judge from published work, find fault with Dr. Macleod's appointment.

FRESHMEN AT CAMBRIDGE.

The following are the numbers of new entries at the undermentioned Colleges at the University of Cambridge:—Trinity 146, St. John's 107, Caius 38, Trinity Hall 35, Emmanuel 30, Jesus 27, Sidney 24, Christ's 21, Clare 19, Magdalen 13, Queen's

11, St. Peter's 10, Pembroke 10, St. Catharine's 9, King's 8, and Downing 7—making a total of 515. The return from Corpus Christi has not been published.

ENDOWED HOSPITALS.

The storm raised by Dr. Mayo at St. Bartholomew's appears to be extending far beyond its original limits, and to be gaining a considerable share of public attention. In fact, the *Pall-mall Gazette* goes so far as to say that the current of public thought is decidedly setting towards the subjection of these institutions to State control. It is quite clear at the outset that Hospitals supported by endowments have very different relations to the State from those which rely on voluntary contributions. An Hospital of the latter kind has a right to do what it pleases, provided the public interest be not injured. It is a joint-stock concern, the shareholders in which receive in return for their contributions the right of placing their dependants under the treatment, usually gratuitous, of certain Physicians and Surgeons. The title which such transactions have to the name of Charity is of course a variable one. Doubtless it would be unfair to deny the highest of all motives to the providers of a large proportion of the funds of these institutions. But the case of endowed Hospitals is widely different. In them there is no body of subscribers. Their managers are simply trustees of funds which belong to the community, and the claim of the State upon them is a far more stringent one than that they shall do no harm with the money. They must do good, and the greatest amount of good of which the endowments are capable, on pain of having the trust taken away from them. If they plead "We undertake the charge gratuitously," the obvious answer is, "Nobody asked you to do it; you did it of your own choice." Moreover, the public has opinions of its own as to the value of unpaid labour of this kind, and is showing them in various ways. The only way in which men can earn a title to praise for the administration of such institutions is by discovering new and better modes of making them useful to the public. Merely to do well what we undertake to do may make us satisfied with ourselves, but it gives us no title to public gratitude; it is simply our duty. But to use the opportunities afforded by the control of public funds for empty show and vain-glory, while essential requirements are neglected—to attempt to make such positions stepping-stones to social advancement, and to limit the management of the institutions to a small clique, could only lead, in the end, to public indignation and the contempt of all thinking men. Similar results to these have followed periods of mismanagement in the case of endowments other than those of Hospitals. It is to be hoped that the Government inquiry which is now almost certain to come will show that Hospitals, which are nearly the only endowed institutions that have yet escaped the besom of reform, are not, on the whole, exceptionally bad in these respects.

THE "ARMY AND NAVY GAZETTE" ON ARMY MEDICAL OFFICERS.

In a notice of the Army Medical Department Report for 1867, which appeared in our military contemporary the *Army and Navy Gazette*, of 16th inst., the Medical officers of the Army are mentioned in highly laudatory terms. The report is said to reflect "credit on their literary as well as scientific acquirements." Further on it is added that—

"The British Army has, so to speak, another army of scientific men taking care of it, or constantly fighting the enemies which our troops have most to fear, and the only foes to which they are sometimes obliged to succumb—viz., bad climate, sickness, disease, and death. This other army which is always under arms, always facing and fighting the enemies which it tries so hard to subdue, is composed of the Medical men of the service—a gallant band of gentlemen to whose courage and perseverance and never-tiring energy the report before us, though compiled in the most matter-of-fact manner, and in the driest official language, bears ample witness."

Hitherto the *Army and Navy Gazette* has not been very friendly in its tone towards our Profession in the public services. We trust that the above may be considered as an "earnest" of future support, as well as an *amende* for previous want of sympathy with the position and claims of the "Doctors." As such we cheerfully accept and record it in our columns.

HEALTH OF MAURITIUS.

The latest reports from this island indicate a very marked and encouraging improvement in the health of both town and country. The total mortality during July amounted to 829, as compared with 1080 during June. At Pamplemousse, Rivière du Rempart, and Grand Port, there had been a slight reappearance of the malarious remittent form of fever; diarrhœa also had been rather prevalent. At Port Louis no fresh cases of fever had occurred, and the mortality had fallen below that of ordinary times.

CHOLERA IN BENGAL.

After a temporary cessation, cholera has lately reappeared with increased vigour among our troops in Bengal. Latest accounts mention that there have been rather more than 500 admissions and 300 deaths of soldiers from cholera and choleraic diarrhœa. Among the women and children the disease has also been very prevalent. The regiments which have suffered most are the 58th at Allahabad, the 62nd at Lucknow, the 1st Battalion 7th Fusileers at Saugor, the Artillery and the 103rd Regiment at Morar, and the 41st Regiment at the hill-station of Subathoo. At most of the other up-country military stations occasional cases have occurred, showing a very general epidemic influence. Thus far no cases appear to have occurred among the British troops at Calcutta, and only one at Dum Dum early in the season. We regret to see that Assistant-Surgeon G. C. Dunn, of the 5th Lancers at Lucknow, has been carried off by cholera. This is the second Medical officer who has fallen a victim during the present epidemic, the other having been Assistant-Surgeon A. E. Hale, of the 103rd Regiment. They were both young men, having entered the service in October, 1866, and September, 1864, respectively.

YELLOW FEVER IN THE WEST INDIES.

Unfavourable accounts of the prevalence of yellow fever in the West Indies still continue to reach us. At Trinidad, during August, cases were still occurring occasionally among the troops. The civil population of Port of Spain was also suffering much from fever and dysentery of very fatal character. Later advices announce slight improvement in the health of the troops. At Nassau the disease was prevalent among the officers and white non-commissioned officers of the 2nd W. I. Regt. and their families. One officer, Ensign Hornsby, and the wife of a sergeant died on August 29. A white non-commissioned officer, also the wife of Staff Assistant-Surgeon Clarke, were reported as being seriously ill, and several cases had occurred among the civil population. At Bermuda, up to September 23, the health of the troops was good, but some cases of yellow fever and two deaths had occurred under particularly sad circumstances among the Royal Marines. A sergeant and eight men had been sent to Port's Island upwards of three weeks after the removal of the last cases of yellow fever, which had occurred among the men of H.M.S. *Barracouta*. Among their other duties they had to whitewash the Quarantine Hospital; and, while so employed, occupied one ward while whitewashing the other, to which they shifted their quarters while whitewashing that first occupied. About a week after arrival the sergeant and one of the men were attacked by yellow fever, and died on September 6. Six days afterwards another, but milder, case occurred among the men, and the party, including the affected man, have been removed to Halifax in one of H. M.'s steamers. In the above cases the probability of the disease having been communicated by the infected atmosphere of the Hospital is very strong, and must be rather puzzling to those who deny the contagious properties of yellow fever.

INDIAN SICK FURLOUGH RULES FOR MEDICAL OFFICERS.

A CORRESPONDENT has drawn our attention to a table published in the *Delhi Gazette* of August 28, comparing the relative advantages of the rules of 1854 and 1868 as regards Medical officers of the Indian service while on sick furlough in this country. It appears from the table that, supposing twenty months to be the period passed on sick furlough, the contrast is almost invariably in favour of the rules of 1854, Surgeons-Major under twenty-five years' service being the only class who derive any advantage from the rules of 1868. To Medical officers who entered the service since December, 1864, the rules of 1854 would be even more advantageous than they are shown to be to those who entered at earlier dates. As the choice of rules is still left to Medical officers coming home on sick furlough—this being, we believe, the only advantage of which they have not been deprived by the new furlough rules—it would behove all such to inform themselves thoroughly on the question before making their selection. We have frequently alluded to the rapidly waning popularity of the Indian Medical service as indicated by the numerous complaints received from its members, as well as by the falling off in the number of candidates as compared with vacancies. Lord Mayo, by a more liberal interpretation of the furlough rules, may yet do much to remove the discontent created by Lord Lawrence.

ALLEGED IMPROPER MEDICAL TREATMENT.

AN inquest was held on the 8th by Mr. Richards, in Bethnal-green, on the body of a woman 27 years of age, who, it was stated, had died from improper Medical treatment. The evidence went to show that the woman had been attended in her confinement on the 17th ult. by Dr. Richards, and that she and the child appeared to be doing well until the night of Monday week. Mr. J. W. Budgett, of Backchurch-lane, was called in, said she was suffering from inflammation, and applied leeches. The woman died the following morning, Mr. Budgett declaring by his certificate that death resulted from exhaustion consequent upon peritonitis. Dr. Phillips said the woman died from disease of the heart and lungs, and was incurable. It was elicited that Mr. Budgett was not qualified to give a certificate of death; that he was assistant to his father, a properly qualified Practitioner, who had signed the certificate for his son. Eventually the inquest was adjourned to procure the attendance of Mr. Budgett, sen., who was at present suffering from fever. At the adjourned inquest on the woman who died in childbed, held on Monday, Mr. Budgett, jun., was called. He said he was a Member of the Royal College of Surgeons of England, etc. He gave an explanation of the case, and Dr. Phillips, in reply to a question, said, if deceased had been suffering as described, the treatment of Mr. Budgett was quite proper. A verdict of natural death was eventually returned.

SUSSEX COUNTY HOSPITAL MUSEUM.

THE committee of the Sussex County Hospital are circulating an appeal to the governors and friends of the institution asking the means for erecting a new library and museum. It appears that at the foundation of the Hospital, forty years ago, the Medical officers resolved to forego all emoluments from pupils' fees, and to devote the money to the formation of a good library and pathological museum, which have now become richly furnished with books and preparations. But they have outgrown the limited space allotted to them within the Hospital, which besides is urgently required for Hospital purposes. On all grounds, therefore, a new building is urgently required, which shall hold the library and museum, and afford besides a working-room for the pathological curator, a lecture-room, and a day-room for the pupils; and it is honourable alike to the governors and to the Medical staff that an effort to supply them has been commenced, and is sure to be brought to a successful termination. Amongst the resident governors of a Hospital in such a city as Brighton, there are sure to be a considerable number able to appreciate the benefits which the proposed scheme must bring, not only to the Medical officers, but to the whole community. We would only suggest that it does not go far enough. They who set up a Hospital, and avail themselves of the services of members of our Profession to carry out their benevolent intentions towards the sick poor ought to supply every scientific means for carrying on the art of healing with all the precision and completeness possible. They ought to supply a pathological laboratory, in which the chemistry of diseased excretions should be studied, just as the anatomy of diseased organs is studied in the museum. Brighton Hospital might be a good clinical school for youths who have learned the fundamental part of their Profession elsewhere. There are others besides the Physicians and Surgeons who would benefit by this act of liberality.

"THE QUEEN'S DOCTOR."

THE *Dundee Advertiser* says:—

"It is currently reported in Crathie, on what is believed to be good authority, that her Majesty is to have a Medical Practitioner stationed in Crathie. No doubt her Majesty, in the course of her visits among the people of the district, has become aware of the great want that is felt in this respect, more especially in cases of sudden illness, or during the prevalence of a heavy snow-storm, persons in want of a Doctor having to send to Braemar, a distance of nine miles. Should a Medical man be stationed in the place, as reported, it will be recognised by the inhabitants in the district as a great boon."

TOWN AND COUNTRY AIR.

DR. ANGUS SMITH'S last annual report under the Alkali Act is of very great interest. In the course of investigations into the contamination of the atmosphere by the fumes escaping from large chemical works, the general question of atmospheric impurity has been dealt with. It is now pretty well known to chemists that the impurities actually occurring in the atmosphere are, as in the case of the impurities actually occurring in drinking water, very minute in quantity. The air in the neighbourhood of a chemical factory, which may be quite incompatible with the existence of vegetation, differs from the air of the open country only by the presence of the merest traces of impurities; town air, such as that of so many of our northern towns where hardly a blade of grass will grow, and where the human inhabitants are characterised by very pale faces, differs from country air but slightly in chemical constitution. As a practical fact great differences in the proportion of oxygen contained in the air in different localities do not occur, and great accumulations of carbonic acid are hardly ever to be met with, so that neither to deficiency of oxygen nor to superabundance of carbonic acid are we to attribute the specific effects alluded to. The quantities of foreign matters which affect the sanitary condition of the atmosphere are so minute that the ordinary processes of gas analysis are inapplicable for such examinations as claim the attention of the sanitary officer, and a special method of examination has to be adopted. This consists in washing a certain quantity of air, then making an examination of the wash-water, and from the composition of this wash-water forming a judgment of the degree of impurity of the atmosphere. An ingenious idea suggested is the taking advantage of that washing which is done for us naturally, in other words having recourse to the rain. By examining the character of the rain-water which falls in different localities, we are provided with a guide to the state of the atmosphere in those localities.

In this kind of investigation it has to be borne in mind that the rain which falls at the beginning of a shower is of necessity richer in foreign matter than rain falling later.

From the researches of Dr. Smith, a certain amount of sea salt appears to be a normal constituent of the air or of rain-water. Further, that the presence of very minute quantities of free acid (sulphuric or hydrochloric acid is found in the neighbourhood

of chemical factories) is fatal to vegetation. The following are some of the quantities which have been observed, and which will give some idea of the delicacy of this inquiry. One million parts of rain-water contained 28·7 parts of sulphuric acid. This rain-water was collected in different parts of Manchester in the year 1857, the figure given being the mean of a great many analyses. In 1868 the average quantity of acid in one million parts of rain-water in Manchester was 58·6. In 1868, in Liverpool, the quantity of acid was 46·75 in one million parts of rain-water. In contrast with these quantities we have 5·3 parts of acid in one million parts of rain-water taken at Row, Dumbarton, in Scotland. Inasmuch as during its fall to the ground a very little rain washes a very great volume of air, we may conceive how very minute the proportions of acid in the air must be which are indicated by the above measurements. The proportion of free acid which has an appreciable effect upon the physiological character of the atmosphere is therefore marvellously small.

Dr. Angus Smith has likewise measured the quantities of ammonia and "albuminoid ammonia" in different specimens of rain-water. The following may be cited:—

Place.	Date.	Parts in one million of rain water. Ammonia, free.	Ammonia of albumen.
Row, near Helensburgh	Jan. 16, 1869	0·00	0·0
Clydeford, Glasgow	Jan., 1869	1·25	0·0
London Hospital	Feb., 1869	2·00	0·3
,, ,,	,,	2·2	0·3
,, ,,	,,	3·0	0·4
Gasgow St. Rollox	Dec., 1868	3·75	0·0
Gasgow Netherfield	Jan., 1869	5·5	0·0
Manchester	Dec., 1868	6·0	1·0
Newcastle-on-Tyne	Dec., 1868	5·0	0·0

By extending this inquiry very important results may be looked for. These measurements, as we learn from Dr. Smith's report, were made by Wanklyn, Chapman, and Smith's process.

FROM ABROAD.—THE PROPERTIES OF CHLORAL—HYPODERMIC INJECTIONS IN SYPHILIS.

Chloral seems destined to give a good deal of exercise to the ingenuity of experimental physiologists, and with somewhat perplexing results. While M. Liebreich pronounces it to be an anæsthetic, M. Demarquay declares that it is no such thing, and that, although an admirable hypnotic, it is yet a hyperæsthetic. At the last meeting of the Academy of Sciences MM. Dieulafoy and Krishaber presented the results of their investigations. According to these, we may determine on rabbits, *at will*, either exaggerated sensibility or complete insensibility, by means of hydrate of chloral. Subcutaneous injections in moderate doses induce very marked excitability, while quantities in excess of half a drachm produce different degrees of insensibility. These are their conclusions:—1. Chloral in feeble doses excites sensibility, and in large doses progressively diminishes it until complete anæthesia results. 2. Anæsthetised animals pass through the prior stage of excitability. 3. Animals in which general and absolute anæsthesia has been produced may continue in that condition for several hours. They almost invariably succumb afterwards. 4. Sleep exists with hyperæsthesia as well as with anæsthesia. In the latter case resolution is absolute. 5. Chloral modifies greatly the rhythm and number of the motions of the heart; it renders the movements of the diaphragm progressively slower; the temperature is notably lowered. 6. The phenomena induced by chloral differ in many points from those produced by chloroform, even when the same amount of anæsthesia exists in the two cases. 7. To sum up the results, rabbits treated by doses exceeding 2½ grammes were always anæsthetised, and were both anæsthetised and killed by doses exceeding 3½ grammes. By doses of less than 1½ they were sent to sleep, but not anæsthetised, and doses of less than 60 centigrammes produced no effect.

At the last meeting of the Société de Chirugie M. Giraldès, after giving a history of the discovery of chloral and an account of the experiments made with it, referred to some cases in which he had employed it at the Hôpital des Enfants. He gave it to two children about 3 years of age, on one of whom he wished to operate for ectropion, while the other suffered from some nervous excitement subsequent to the amputation of a finger. He administered 2½ grammes in 10 grammes of water, to which some syrup was added. The first child was thrown, for several hours, into so deep a sleep that no noise would wake him; but as reflex movements persisted and were induced by pinching the skin, his condition was not deemed suitable for operation. The other child was thrown into a still deeper sleep which lasted the entire day, without being disturbed by noises, pulling, or shaking. In other cases in which it had been administered no effects were produced, and other Hospital Surgeons have informed M. Giraldès that they have met with similar negative results. As far as his present experience goes this substance proves no rival to chloroform, since it allows of the persistence of reflex movements which that arrests. At all events the dose has not been discovered at which effects similar to those produced by chloroform occur. However, this may be, chloral seems to be a powerful auxiliary to the Surgeon in nervous complications of traumatic origin, for the relief of which a remedy without the stupefying effects of opium was a desideratum.

As our readers are aware (*Medical Times and Gazette*, June, p. 637), the subcutaneous injection of corrosive sublimate in the treatment of syphilis has been tried on an extensive scale in Germany and France, and recently Professor v. Sigmund, the celebrated Vienna specialist, has just contributed an account of the results of the trials that have been made in his Hospital. These have been 113 in number, comprising all the forms and complications of the disease. Most of the patients have been females, several of these being pregnant or puerperal women. None of them were younger than 18, and only three above 40, and for the most part they belonged to the working classes. In the majority nutrition had not become impaired through syphilis. In those in whom it was defective this was attributable to tuberculosis, intermittent fever, cachexia, and inveterate syphilis, as also to loss of blood on delivery. Some of the patients had already been under treatment by means of other forms of mercury.

The injection employed was that recommended by Professor Lewin, of the Berlin Charité,(a)—viz., 4 grains of the sublimate to the ounce of distilled water. In order to prove successful, the injection must be performed with the greatest care and delicacy, good syringes with very fine and sharp canulæ being chosen. The best places for injecting have been found to be the outer side of the thorax, the abdomen, the upper part of the haunch, and the outer side of the upper arm, while the lower half of the haunch, the lower extremities in general, the back, and the inner side of the arm are to be carefully avoided. Patients treated by other Practitioners have applied to Professor v. Sigmund on account of extensive and tedious infiltrations surrounding the points of injection, and sometimes obstinate ulcerations, and in these cases the injections have usually been made on the back, and in the most troublesome cases on the inner surface of the thigh. In his own clinic he has met with very few cases in which any considerable inflammation was produced. But then not only were the injections skilfully performed, but the patients were kept quiet, avoiding all motion and compression. It is a good rule to perform the injections in the evening in those patients who are unable to remain at rest during the day. In Hospital practice the patients did not make any objection to the numerous punctures sometimes required; but in private practice the accompanying pain and subsequent inflammation are much less patiently borne. In most patients one injection was made per diem, and in several in two places, without any local inconvenience arising. But in some of them stomatitis was very quickly produced, without being attributable to any other cause. The number of injec-

(a) For an analysis of Professor Lewin's important paper see *Brit. and For. Med. Chir. Rev.*, October, 1868, p. 553.

tions has been very different, but when the treatment has been pursued uninterruptedly they have averaged between twenty-nine and thirty, carried over a space of five, and not infrequently six or seven, weeks. The most unpleasant consequence observed has been the stomatitis, which in some cases has been very rapidly produced, sometimes even in six or seven days, and even quicker when the injection has been performed twice a day. This is, indeed, most surprising, when we consider how little of the sublimate (often scarcely half a grain) has been introduced at a distant part. The mucous membrane of the month is alone affected, the salivary glands being little, if at all, concerned. As to the general result of his experiments with these injections, which, however, he acknowledges are at present insufficient in number, Prof. v. Sigmund considers they are an inferior means in the treatment of syphilis to the methodical mercurial inunctions which he has so long employed. Still in certain cases he regards injection as a valuable additional means of treating the disease. It is so in individuals who, from any cause, are unable to undergo inunction, and in those whose digestive organs are in a condition not to admit of their employing mercurials by the mouth. He has seen papular syphilis of young infants advantageously so treated, but they were children who were well fed and carefully looked after. He thinks great caution should be used with this means in patients suffering from kidney disease, as he has known such cases to become aggravated. Finally, all hygienic precautions are just as necessary in his mode of treating syphilis as in any other.

SANITARY COMMISSIONS IN INDIA.

(*From a Correspondent.*)

We learn that, in accordance with instructions by the Government of India, the Sanitary Commissioner has sent to all regimental Surgeons a list of one hundred and fifty questions from the answers to which he may shape his own report on the epidemic of cholera lately if not still raging in that country. Now, it strikes us that considerable ingenuity must have been exerted to devise so many as one hundred and fifty *practical* questions on such a subject; while if mere matters of *theory* are included in the number, the threatened report to be based upon the answers received can have no other result than to render confusion more confounded than it is already. There exist, if we mistake not, ample materials in the offices of the Army and Indian Medical Departments to supply materials for any number of "reports" in regard to this terrible disease, but may we not add to the imposing list of questions alluded to some others? as, for example—Has there not been already too much of this kind of interrogation for the mere purpose apparently of making up "reports?" Is it fair to Medical officers, while actively engaged, it may be at the risk of their own health, in combating sickness among the troops, to have the further tax inflicted upon them of concocting and writing replies to "one hundred and fifty questions?" And, lastly, how comes it that such questions are submitted by the Sanitary Commission, and not by the officers at the head of the respective Medical Services in India?

There is some reason to suspect that, little by little, the functions of the army Medical officers are coming to be encroached upon not only in India, but elsewhere, by what are called sanitary commissioners and sanitary officers; and the time has arrived when we should inquire into the necessity for or justice of the innovation. If the heads of the Medical services are unequal to the duty of guiding inquiry into matters affecting the health of the troops or general community in India, let them be superseded by men who are; but if fully capable, as they are severally well known to be, to conduct such investigations, then why is the system tolerated of appointing others, at handsome salaries, to perform duties which properly come within their sphere?

Thus, in India, we have a sudden eruption of sanitary commissioners, some of whom are not Medical men; and, in Pall-Mall, we have a gentleman unconnected with the army, and consequently, we may assume, in happy ignorance of the actual conditions of the soldier, yet whose duties seem to comprise those which, properly speaking, pertain to the Medical officers of our army. Might not, then, the Secretaries of State for India and for War severally take a hint from these remarks when preparing their next Budget estimates?

EXISTING LAWS AGAINST PROSTITUTION.

In order to furnish materials for the full discussion of the proposed extension of the Contagious Diseases Act to the civil population, we propose to consider what powers the existing laws give already, and how far the new law would be an innovation.

Now, we may remark that, before any summons can be issued under the present Contagious Diseases Act—and we presume the provisions of any subsequent Act would be identical in this respect—"an information on oath" must be "laid before a justice by a superintendent of police, charging to the effect that a certain woman is a common prostitute; upon the return of such summons the justice present, on oath being made before him substantiating the matter of the information to his satisfaction, may, if he thinks fit," direct the law to be put in force. (See sect. 15 and 16.)

Now, there is nothing new in this. It must be remembered that "open and notorious lewdness," in man or woman, is itself an offence already at common law, and that a woman who has by her open and notorious conduct brought herself within the definition of a "common prostitute" to the satisfaction of a magistrate upon evidence given on oath before him, has no right to complain of an interference with her liberty in the pursuit of an illegal occupation; for, although fornication, and even adultery, are no longer included in the category of offences cognisable by the criminal law, we apprehend that the vocation of a common prostitute is in itself an illicit pursuit, and as such it has been continually treated by the legislature. By Act 5 George IV., c. 83, s. 3, "every common prostitute, wandering in the public streets or public highways, or in any place of public resort, and behaving in a riotous or *indecent* manner, shall be deemed an idle and disorderly person," and shall be liable to be dealt with accordingly; and by the 6th section, "any person whatever may apprehend" such offender; and further, by sect. 13, any justice may, upon information on oath, issue his warrant authorising any person to enter at any time into any common lodging-house and apprehend and bring before him any disorderly person, rogue, or vagabond (including common prostitutes as before described) harboured or concealed in such house. Thus common prostitutes are already under the law of the land, and the present Contagious Diseases Act so far is only based upon acknowledged principle. And although a brothel be conducted in a quiet and, as far as the exterior of the house be concerned, in an inoffensive manner, it is sufficient to prove that the rooms were let for the purpose of prostitution, although no indecency or even disorderly conduct was perceptible from without. (Regina *v.* Rice, 1 Law Reports [Central Criminal Court], 21.)

We will add further, that from the earliest times "the doing of any act by which the health of the public might be endangered, whether by the propagation of an infectious disease or otherwise, was a great misdemeanour at common law. Three diseases were regarded with the utmost terror—the plague, the syphilis, and the leprosy—and the strictest precautions were taken to prevent the propagation of them." (Willcock on the "Laws relating to the Medical Profession," p. 142, c. ix.) By 2 Jac. I. c. 31, if any person went about having a plague sore upon him, he might be punished as a vagabond, but if he had *any infectious sore upon him uncured* he should be guilty of felony. This statute was only repealed by 1 Vict. c. 91, s. 4. The laws relating to quarantine necessarily also interfere with the liberty of the subject; but, to fall back upon the old common law, which still remains in force, if, as Mr. Justice Le Blanc said, in passing sentence in the case of Regina *v.* Vantandillio, 4 Maule and Selwyn, p. 73, "there can be no doubt that if a person unlawfully, injuriously, and with full knowledge of the fact, exposes in a public highway a person infected with a contagious disease, it is a common nuisance to all the subjects, and indictable as such." We would add, *a fortiori*, that a person under such circumstances *soliciting* or inviting contact is a common nuisance and a scourge. The "endangering the health and lives of other subjects" is spoken of by Lord Hale, in his "Pleas of the Crown," p. 432, as a common-law misdemeanour.

With laws like these in existence, it needs but vigour of administration to check prostitution, and to provide means for the detention of such women as are arrested in the exercise of their calling, and, besides, to give every woman a chance of escaping from her miserable life as well as from its penalties. This is a very different thing from legalising prostitution, issuing clean bills of health, and licensing brothels.

REVIEWS.

Pharmacopœa Suecica. Editio septima. Stockholmiæ, 1869. P. A. Norstedt et Filii, Typogr. Reg. 8vo, pp. 276.

At the present day the accents of the Latin tongue in a work such as that before us may seem strange to English ears. Yet in this instance we are ready to acquiesce in an arrangement which obliges the language of the country to give place to another. First, because by the adoption of this plan a most valuable book is rendered much more accessible to the Medical Profession in general than could otherwise have been the case; and again, because we believe that the framers of the seventh edition of the *Swedish Pharmacopœia*, in selecting Latin as their mouthpiece, were actuated by a laudable desire to pave the way to the compilation of a Scandinavian Pharmacopœia. Towards the accomplishment of this undertaking the first step has already been made, for, as mentioned in the preface to the work under review, a committee of Danes, Norwegians, and Swedes have consulted as to its practicability. Further, the forthcoming edition of the Pharmacopœa Norvegica will, it appears, closely agree with the book we are now discussing. The chief obstacle to the carrying out of the desirable object in question lies in the fact that a preference could not with fairness be given to either the Danish or Swedish tongues. It is only, therefore, through the medium of Latin that this work can be accomplished.

While speaking of language we must take exception to one point. It is that though the Swedish synonyms of most of the articles contained in the Pharmacopœia are given throughout the book after their Latin names, there is yet no general index to them at the end. This, we think, is an omission of some importance, not to Swedish Practitioners only, but also to foreigners conversant with Scandinavian Medical literature.

In the present volume the plan of arrangement adopted in the last edition of the British Pharmacopœia has been followed. Thus we find all the articles of the Materia Medica placed in alphabetical order along with the preparations made from them. In our opinion the advantages of this method more than counterbalance any defects it may have.

With regard to *nomenclature*, the necessity of, as far as possible, adhering to old names is insisted on in the preface, and rightly so; still we must confess that such appellatives as "Lapis Divinus" and "Hepar Sulphuris" jar somewhat on our perhaps too sensitive ears. The preparations of opium, again, are rather inconsistently given under the names "acetum *thebaicum*," "tinctura *thebaica*," and "tinctura *thebaica benzoina*." It is a little hard to recognise our "tinctura camphoræ composita" in the last-mentioned. In all these cases the probable reason for the suppression of the word "opium" is to be sought for in a desire to conceal from patients the nature of the remedy administered.

In the formation of the Latin appellatives we must allude to a point of refinement which is perhaps worthy of imitation—the throwing the substance mentioned into an adjectival form. For example, we have "acetas *morphicus*," "citras *magnesicus*," "carbonas *kalicus*," etc. This is certainly more classical than the usual mode of expression, "acetas *morphiæ*," etc.

In a brief notice like the present, it would be impossible to enter into general details; we will, therefore, merely recall one or two points which struck us on glancing through the book.

And first, we cannot sufficiently commend the plan of inserting some remarks at the head of each class of pharmaceutical preparations, such as extracts, tinctures, etc., as to the general mode of making them.

Relative to the preparations themselves, it appears that the majority are in every respect analogous to those in use in this country. The different acids are almost identical in strength with those of the British Pharmacopœia; chloroform has a specific gravity of 1·492 to 1·496; ether of ·725. We look in vain for dilute hydrocyanic acid. This powerful agent has, however, five representatives in the Swedish formulary: these are (1) "aqua amygdalarum amararum concentrata" (in truth a sufficiently long title); (2) a dilute form of the same; (3) emulsio amygdalina; (4) "amygdalinum;" and (5) "emulsio hydrocyanata." None of these contain a large quantity of the acid. In 1000 parts of the first there are 1·3 to 1·4 parts of anhydrous acid—a proportion equivalent to 1 part in about 740.

The second preparation is twenty times weaker, and consequently the amount of prussic acid in it is merely nominal. The same remark applies to the "emulsio amygdalina." "Amygdalinum" does not seem to be used directly as a therapeutic; it, however, enters into the composition of "emulsio hydrocyanata," of which it forms one part in 81. The strength of the last-named emulsion as regards the acid is one in 1500 parts.

Among the liniments, a modification of St. John Long's celebrated terebinthine application appears with the synonym "Linimentum *Stokesii*" in compliment to Dr. William Stokes of Dublin.

As to the insertion of doses, the compilers of the "Pharmacopœa Suecica" have set us an example which we should do well to follow. Instead of stating the doses vaguely under the different medicines, they have in an appendix given a table showing the maximum quantity of strong remedies which may be dispensed without incurring risk. In this table, as elsewhere throughout the work, the *metric system* of weights and measures is used.

Three other tables are appended. In the first of these is contained a list of such medicines as are not to be dispensed except when specially prescribed by the Physician or permitted to be so by persons in authority. The additional precaution of having these medicines kept apart in locked-up presses is also enjoined. The therapeutic agents included in this list are likewise denoted by a special sign in their several places in the Pharmacopœia itself.

The form in which the work is published is faultless; it is a neat volume of convenient size, and printed on excellent paper. The letterpress is really beautiful.

In conclusion, we feel we are but doing our duty in speaking highly of this model Pharmacopœia; and though some, who in a book of the kind look for separate treatises on chemistry, botany, Materia Medica, and other subjects of equal importance to the Medical man, will doubtless be disappointed, yet to those who stand in need of a thoroughly practical, concise, and correct formulary, we can heartily recommend the new edition of the "Pharmacopœa Suecica."

PROVINCIAL CORRESPONDENCE.

LIVERPOOL.

October 17.

A new feature has been added to the Liverpool Medical Institution by the formation of a microscopical section, the first meeting of which was held in the small theatre of the Institution on Friday, the 15th inst., at 8 p.m. The chair was occupied by the President, Dr. Maenaught, and the proceedings were inaugurated by the delivery of a good sound practical address by Dr. A. T. H. Waters, chiefly illustrative of the value of microscopical research in Clinical Medicine. The success of this branch of the Institution will mainly depend on the degree in which the line indicated in the address is adhered to. If the microscope be made an instrument for pathological research, and the individual results of each member's application of it to his own practice be laid before the Society, we can see that much good may result from its establishment. If, however, the meetings should be chiefly occupied in the exhibition of slides prepared by Professional members, and having no reference to cases actually under the observation of the exhibitors, we fear that much of the possible good that such a section might do will be missed. A little too much of this feature prevailed on Friday, perhaps; though it could not have been for lack of means for illustrating local cases of interest, as several members of the committee had expressed their readiness to prepare for exhibition any morbid specimens that should be sent to them. It is to be hoped that this microscopical section may do some good work of its own, and really advance the knowledge of pathological anatomy, and not be content with exhibiting mere marvels of manipulative skill procured from distant parts.

The general meetings of the Institution were resumed on Thursday, the 7th inst., by the delivery of an introductory address by Dr. Ewing Whittle. This address also was characterised by a thoroughly practical cast. Dr. Whittle, in reviewing the change of mode which had come over the treatment of disease during the past twenty years, deprecated the too exclusive disuse of the lancet on the part of the Physician, and instanced several cases from his own notes where its free employment had been attended with the most manifest and permanent advantage.

GENERAL CORRESPONDENCE.

DR. BARNES'S METHOD OF INDUCING LABOUR.

LETTER FROM DR. BARNES.

[To the Editor of the Medical Times and Gazette.]

SIR,—I very much regret that Dr. Playfair does not think my reply to his first letter satisfactory. My impression was that I had replied with sufficient clearness to his objection that my cervical dilators might displace the head and bring about an abnormal presentation. In analysing his cases I showed that there was no distinct evidence, as they were narrated, to prove that they supported his objection. He has now supplied some defects in his first reports of the cases, and the presumption that the presentation was changed in one of them after the application of the dilator is strengthened. But I had distinctly admitted not only that the objection is one "well worthy of consideration," but I had also quoted from a memoir of my own (see *St. George's Hospital Reports*, 1868) this expression—"It is possible that the dilating bags may displace the head from the brim." In that memoir, and scattered through the journals and elsewhere, I have published the greater number of my cases of induction of labour. The means of judging how far in my own experience I have known this displacement to occur are thus open to Dr. Playfair and to others. I may state generally that, although I suspect in two or three cases the bags did displace the head, I do not think the accident is at all frequent—that is, as the work of the dilators. The frequency of malpresentations in premature labours must be well known. D'Outrepont long ago said that this was the strongest objection to the operation for the induction of labour. It must not, then, be hastily concluded that because a malpresentation is observed after the use of the bags, it was caused by the bags. It must also be remembered that even when no bags are used, the presentation is apt to change from the head in premature labours, and especially is the cord liable to fall through.

Dr. Playfair reminds me that the surprise he expressed in reference to one case was caused by the fact that no pains followed the use of the dilators. If he expects the dilators always to evoke uterine contraction, he will assuredly be disappointed. I recommend the dilators mainly because in premature labour the uterus, being immature, will not always act as we desire. If it did act, it would open the uterus. The dilator is designed simply to expand the cervix. Further proceedings must depend upon the subsequent course of events.

Dr. Playfair deprecates controversy. I am entitled to say that I have never yielded to the temptation to enter upon any subject in a controversial spirit. I am content to leave any proposition, physiological or therapeutical, I may advance to the ordeal of experience. If this method of inducing premature labour, or any other proceeding of mine, be shown to be erroneous in practice, I shall not be the last to condemn it, and to abandon it in search of better. I am, &c. ROBERT BARNES.

31, Grosvenor-street, Grosvenor-square, October 19.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

FRIDAY, OCTOBER 15, 1869.

RICHARD QUAIN, M.D., President, in the Chair.

SPECIAL MEETING.

THE PRESIDENT said that this special meeting of the Society had been called to consider the proposition of the Royal Medical and Chirurgical Society as to an amalgamation of the existing Medical societies. It would have been called earlier had not all their regular meetings been held before the proposition was forwarded to the Council, which judged it best to defer the special meeting till the beginning of the session, when something could be done. The Medical and Chirurgical Society had sent the basis of their scheme. In this respect they had done well, for when formerly an attempt at amalgamation had been made it fell through, owing to no basis being furnished by the Society. Some parts of that scheme certainly required alteration, as far as the Pathological Society was concerned, especially Section XXI., which laid down that not more than half of a society's income was to be spent on their *Transactions*. Now, in the case of the Pathological Society, nearly all their income was expended on their *Transactions*. The general impression seemed to be that an amalgamation was desirable. They were asked to appoint delegates. He trusted those from this Society would go with full authority, but instructed to permit the Society to suffer no injury. The Council had met and carefully considered the matter, as, indeed, was due to the Society.

The Council's report was then read. It was to the effect that they were of opinion that union was desirable—rather, however, in the interest of the Profession at large than of their own Society. Certain modifications were necessary before the proposals made could be accepted, especially with regard to the publication of the *Transactions*. Finally the Council recommended that delegates be appointed to meet and treat with those from other societies.

Dr. MURCHISON moved the adoption of the report. His main object was to secure the publication of good *Transactions*. They at all events should not suffer by union. The difficulties in the way of the scheme were mainly financial.

Dr. ROBINSON seconded the motion.

Mr. GAY moved as an amendment that the Society decline the invitation, chiefly because no reason for amalgamation was given, and that thereby the Society's efficiency would not be increased.

This motion was not seconded, whereupon the original motion was put and passed *nem. con.*

Mr. SIBLEY moved that three members be sent as delegates. He thought this resolution was in accordance with the general views. Minor difficulties only were in the way, the most important being the *Transactions*.

Mr. BIRKETT was at a loss to understand why there should not be several societies. Still a feeling for amalgamation had been very strongly expressed. The chief point was to save time. He seconded the motion.

Mr. GREGORY FORBES moved, and Mr. BROOKE seconded, that the President, the Treasurer, and the Surgical Secretary be appointed delegates.

This was passed unanimously.

Mr. HULKE felt considerable difficulty in entering into the matter. Had the Medical and Chirurgical Society fostered Pathology, this Society would never have existed, and, even after being formed, it had on several occasions not been treated with kindness by the older body. He thought it would be right to give the delegates instructions, but not plenary powers.

Mr. HOGG thought that the Council having reported to the Society, and the report having been adopted, sufficient instruction was contained in it for the guidance of the delegates.

Dr. MURCHISON also thought the report enough in the way of instruction. They could scarcely go further now, as it was quite possible a new scheme altogether might be adopted. The delegates, being members of the Council, could always confer with that body, and what the Council advised must always come before the Society generally.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, OCTOBER 6.

Dr. GRAILY HEWITT, President, in the Chair.

THE following gentlemen were elected Fellows:—Dr. Bantock, Mr. Boyd, Dr. Caskie, Mr. Godden (Birkenhead), Dr. Hardinge, Mr. Milward (Cardiff), Dr. Oxley (Liverpool), Dr. Russell (Messingham).

Dr. BARNES exhibited the head of a child delivered by cephalotripsy, with the instrument (Hicks's) attached. The case was that of a wretchedly deformed rickety creature, aged 19, admitted in the last week of first pregnancy at St. Luke's Workhouse, in which his assistance was requested by Mr. Harris. The conjugate diameter was estimated at from 1·25" to 1·50," and the space on either side of the promontory was about the same. Dr. Barnes determined to act at once instead of waiting for labour. He passed a bougie in the uterus on the afternoon of September 13. At 3 p.m. on the 14th, there was some uterine action; an appointment was made for 6 p.m. to complete the delivery. This was done with the assistance of Messrs. Harris, Rogers, and Sison. The medium dilator was applied for ten minutes, and room enough was gained for work. After perforation the cephalotribe was applied three different times. Some pieces of the cranial vault were removed by the craniotomy forceps, and then the head was extracted by the cephalo-

tribe. The head was so well crushed and compressed that extraction was not very difficult, there never being any considerable pressure upon the mother's parts. The whole operation lasted one hour. The mother did well, although a miserably feeble creature. Dr. Barnes believed the pelvis in this case was the smallest in which cephalotripsy had been successfully performed in this country. The instrument worked admirably, but he thought a less curve would be better. Dr. Barnes at the same time exhibited a cast of a head grasped by the straight instrument of Dr. Kidd, of Dublin, kindly lent him by Dr. Kidd.

Dr. Hicks considered this case a very satisfactory proof of the efficacy of the instrument he had modified. He wished, however, again to advert to the remarks he had made as to the advantage of using the cephalotribe as a tractor also, because, although we may compress the head down to not much over an inch at the point of pressure, if the blades are removed, the after-expansion of the bones is such that all the advantages of such compression are lost; so that an instrument with blades capable of less approximation adapted as a tractor is really more efficient.

The President remarked that one practical deduction to be drawn from Dr. Barnes's case was the advisability of giving the cephalotribe very little curve. It was to be recollected that, in most cases of pelvic deformity, the pelvis was not only narrow but shallow, and a nearly straight instrument would be generally applicable.

Dr. Hicks would observe, with respect to the President's suggestion, that his late instruments were not so curved as the early examples. As to the concavity looking backwards, he thought we could always arrange that the quarter turn should be so that the concavity should look forwards, because if we applied the instrument in the transverse of the pelvis, a quarter turn would bring the concavity to one or other side, so that the blades would be virtually straight as far as regards the antero-posterior aspect.

Dr. Woodward exhibited his Obstetric Back Supporter. It consists of a padded plate, on the posterior surface of which two springs are hinged, having their common centre formed by a rack and pinion hinge, by moving which the springs assume an arched form. To the extremities of the springs is attached a belt which encircles the abdomen, so that, in their effort to take a curved form, force is exerted against the pad forming the centre of the arc, and the requisite amount of pressure is exerted on the surface covered by the pad. Dr. Woodward said that he had used this apparatus in a large number of labours and with much benefit.

Dr. Barnes observed that there was nothing new in the principle of support and compression of the uterus during labour. The apparatus exhibited was but another of many ways of giving such support. In his lecture on "Obstetric Support," he (Dr. Barnes) had quoted Kristeller, who described a method of actually squeezing the child out of the uterus by external pressure. The Dublin School, represented by Dr. Joseph Clarke, Collins, and Beatty, had long practised the application of a binder during the expulsion of the child, and the manœuvre of pursuing the uterus in its retreat towards the pelvis by the hands during the expulsion of the child, and of keeping up the pressure upon the uterus afterwards to insure full contraction, the detachment of the placenta, and the prevention of hæmorrhage. This practice he had himself always carried out. He was not a little surprised to observe that within the last few years this method had been promulgated in Germany as a discovery by Credé; and a manœuvre which had been in use here for at least a century was actually distinguished by Dr. Credé's name.

Dr. Protheroe Smith, whilst recognising fully the merits of Dr. Woodward's original design, disagreed with him in the idea that the principle of his supporter had anything in common with the instrument he (Dr. Smith) had exhibited to the Society on July 7. Simple compression by a circular bandage with a lumbar pad, as in Dr. Woodward's instrument, would be insufficient to accomplish the objects he now proposed—that of rectifying the anteverted gravid uterus, and of supplying sufficient support and compression during labour. He was led to say so after a lengthened trial of a bandage for upwards of thirty years, which any one would remember who had attended his clinical lectures on midwifery at St. Bartholomew's Hospital. On the subject of compression of the uterus with a view to expedite labour, Dr. Barnes's remarks were very pertinent, and he fully agreed with him that there was nothing new in it. He would, indeed, say that it was as old as woman, since nature had furnished her with an apparatus for the purpose, which, though all-sufficient in savage life, was impaired in the civilised woman through the evils resulting from her dress. By the continued pressure of clothes suspended around the waist from infancy, the structure of the abdominal muscles becomes so deteriorated as to lose much of its power of contraction, often shown in the deadhouse by the attenuated parietes of the abdomen in instances of tight-lacing. When this defect exists, or when power is suspended by the undue employment of anæsthetics, the uterus is overtaxed, and painful or perilous labour may result. To obviate this evil, after many experiments, extending over six years, he had produced an instrument which, in brief, he would describe as an artificial skeleton, so constructed as to present in its pubic, sacral, lumbar, costal, and sternal pads and springs all the *points d'appui* from which a properly adjusted bandage is made to simulate the action of the lumbo-abdominal muscles. Thus the accoucheur was enabled efficiently to aid the uterus in the act of expulsion, or to rectify its position when anteverted through the laxity of the abdominal walls. In this way the risks of childbirth could be greatly diminished.

Mr. Warn exhibited an Ovarian Cyst which had been removed from a patient in whom pregnancy had co-existed with the ovarian disease. In the delivery of the patient, which was accomplished by version, rupture of the cyst occurred, and death subsequently took place.

Dr. Murray, who had seen the case with Mr. Warn, gave some further particulars of the condition of the patient, and of the treatment adopted.

Dr. Routh advocated, in these cases of pregnancy complicated with ovarian disease, the early induction of premature labour, founding his opinion, among other circumstances, upon the rarity with which the children, even if born alive, lived.

Dr. Hicks thought that, before we accepted the rule of Dr. Routh as our guide in these cases, it would be desirable to ascertain the percentage of cases in which serious trouble arose. As far as his own experience went, he had never seen any serious trouble occur. He could at once recollect six pregnancies which had done well with healthy children. In one of these cases he had tapped at the seventh month, the patient going on to full term, the baby being born healthy.

Dr. Tyler Smith referred to three cases which had come under his notice, and recommended tapping if the cyst became so large as to produce great inconvenience or distress.

Dr. Barnes had seen many cases of ovarian disease complicated with pregnancy. Although, for reasons which he would state, he thought it was generally right to bring on premature labour, he admitted that there might be occasions on which tapping the cyst or doing nothing would be the better course. It might be stated as a general truth that Nature could not tolerate the double burden of a growing uterus and a growing ovarian tumour. The rapidly increasing pressure must at some time cause such distress that relief must in some way be obtained. In most of the cases he had seen, relief was found in the advent of spontaneous premature labour. He thought we should accept this indication as a guide in practice. Whilst pregnancy went on there was no security against some formidable catastrophe. We could not tell what the condition of the tumour might be, or what accidents might at any time arise. In one case he had seen death follow from rupture of the cyst. It had burst under the increasing pressure when the pregnancy had reached the seventh month. In another case the patient, when approaching seven months' gestation, became greatly distressed. He proposed inducing labour, but was overruled. The patient at last had severe peritonitis, and died. It was found that the tumour had been rolled over on its axis by the uterus rising below it. The vessels of the tumour were strangled, and blood had burst into the abdomen. He saw another and similar case last year. Rokitansky had related similar cases. To obviate these accidents, which might occur at any time, he believed it was best to reduce the case at once to its simplest expression by eliminating the pregnancy, which could always be done safely and easily, leaving the ovarian tumour to be dealt with according to uncomplicated indications.

Dr. Gervis suggested whether in these cases, when it was certain that rupture of the cyst had occurred, it would not give the patient, at all events, some slight chance in her favour if gastrotomy were performed, the ruptured cyst removed, the pedicle secured, and the peritoneal cavity cleansed.

Dr. Wiltshire remarked that no mention had as yet been made of the operation of ovariotomy in these cases. It appeared to him that, besides the induction of premature labour, at least two other courses were open—either to perform ovariotomy in the earlier months of pregnancy (as had recently been done by Mr. Wells with perfect success), or, if unhappily the patient were at full term and the tumour large, ovariotomy and

even Cæsarian section might in very serious cases be resorted to. In the few cases where it is possible to diagnose a unilocular tumour, tapping might advantageously be performed. Dr. Wiltshire then referred to the dangers likely to follow delivery owing to the tumour, no longer supported by the gravid uterus, falling about in the abdominal cavity, and thus giving rise to rupture and peritonitis; and he mentioned a case which was seen by the President with him in which this accident occurred.

Dr. Rogers thought that no uniform rule of practice could be laid down, for even rupture of the cyst during pregnancy was not necessarily fatal. Dr. Rogers had been consulted in five cases of pregnancy complicated with ovarian disease. One was tapp d before delivery; mother and child lived. Another went to full period without operation; mother and child did well. In two, premature labour was brought on; the mothers did well, the children died. In the fifth, which was a case of triplets, labour was induced at the fifth month; the children, of course, were not viable; the mother is living, having been tapped since. He wished to add that too high praise could not be given to Mr. Wells for his resolution in operating in the case of ruptured cyst referred to by Dr. Wiltshire.

Dr. Hicks suggested that a committee might be formed to collect evidence on the whole subject.

Dr. Hall Davis gave particulars of a case of ovarian tumour complicating pregnancy which had recently been under his care. The tumour was not a large one, nor did it increase during gestation; and there was consequently no indication for interference with it. The labour was tedious, and had to be completed with the long forceps. The child was born alive. The patient did well, and as she was able to suckle the child, the tumour during lactation would probably not enlarge. It occupied the left iliac region after delivery in the same position as before her pregnancy, although during pregnancy it had been displaced to above the umbilicus.

The President said that, with reference to the general question of the proper treatment of cases of this kind, he inferred from what had been said that the feeling of the Society would be in favour of inducing premature labour whenever the size of the ovarian tumour was such as to make it likely that the labour would be interfered with to a serious degree by its presence at term. The cases related by the various speakers were of the greatest practical value.

Mr. J. T. Mitchell read a paper on a case of Ruptured Uterus. The subject of this accident was a patient aged 42, suffering from progressive mollities ossium. Mr. Mitchell had arranged to induce premature labour on May 26 last, which would have been at about the seven-and-a-half month of her pregnancy; but on the 19th of the month she was greatly alarmed by the occurrence of a violent thunderstorm, and instantly felt a sudden agonising pain in the pelvic region and towards the left groin, followed by syncope. Peritonitis speedily set in, and within thirty-six hours labour pains came on. When the os was sufficiently dilated Mr. Mitchell introduced his hand into the uterus, and discovered a rent in it about three inches above the os. Delivery by version was effected without difficulty. After her delivery she suffered but little abdominal pain, but vomiting continued incessantly up to the time of her death, which took place in eight days and twelve hours from the time when the rupture occurred. No post-mortem was obtainable, but Mr. Mitchell believed that had there been one a degenerated condition of the organ itself would have been found to be the predisposing cause of the accident.

After some remarks by Dr. Gervis, Dr. H. C. Andrews, Mr. Collingwood, and Dr. Wiltshire,

Dr. Hall Davis stated that, in his experience of cases happening independently of external violence, in the great majority the labours were of short duration in women who had had several children, and in whom degeneration of the muscular fibres of the uterus had taken place before the organ had fulfilled its function. But he recollected one case where a woman, in good health apparently, who had not been worn by repeated pregnancies, but whose pelvis was deformed by rickets, had sustained a rupture of the uterus during the action of the ergot of rye exhibited by an ignorant midwife. In this case examination of the muscular fibre adjoining the laceration discovered no degeneration of fibre.

Dr. Martyn read a short paper on a case of Triplets.

The new Swansea Infirmary is to be formally opened on Wednesday next, and two days allowed for inspection by the public, previous to the removal of the patients from the old building.

ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.

Saturday, October 16.

Dr. Druitt, President, in the Chair.

At the first evening meeting of the session, at the rooms of the Scottish Corporation,

Dr. Druitt, the President, read a paper, entitled

A PRACTICAL OR "NATURAL HISTORY" VIEW OF INTEMPERANCE: ITS CAUSES AND CONSEQUENCES.

He began by adverting to the acknowledged hopelessness of religious and moral exhortations in deterring confirmed drunkards. He objected to the rhetorical statements often made that intemperance was the cause of half the crime, two-thirds the insanity that exist, and so forth, as being exaggerated and mischievous; for they leave out of account the number of persons who take to drink as a consequence of crime, or of an unsettled half-insane state of mind. He spoke with great respect of teetotalism, as being the discipline for inveterate drinkers; but said it was better to have a state of entire freedom both from a degrading vice and from a pledge never to use fermented beverages in moderation. As for notions of extinguishing the sale and production of fermented liquors altogether, he looked upon them as insane, considering that alcohol might be got from all vegetable food, and cost only 1s. 6d. per gallon. Failing these methods, the only plan was to study intemperance on the true natural-history method; to collect all the facts as to its origin and phenomena; and see how they follow one another, and how each is to be met. Man's life was perpetuated by his food; and food produced not only heat and muscular force, but thought, and, beyond this, *happy thought*, for man could no more live without an agreeable train of thought flowing through his mind than he could without heat. All food produced this in various degrees: those articles which produced it most quickly are called stimulants, of which alcohol was the chief, and was able to produce, under certain conditions, the amount of stimulation which were better sought from animal food, work, or recreation. The use of alcohol in emergencies was immense, and its use led but too easily to its abuse. Of those who abuse it, some seek in it a remedy for pain, melancholy, and despondency; others use it as a means of stimulation to produce the effects that ought to be got from wholesome food, air, exercise, and amusement. The first class were generally secret drinkers, a majority women—miserable wretches who hid their grief and represented the shortcomings of Medicine in leaving debilitating and exhausting diseases uncured, or the failure of religious consolation, or the woes of private life, especially those relating to husband and children. The second class were open, riotous, gregarious drinkers, jolly topers, who boasted of their bibosity, and considered conviviality the one secret of happiness. The effects of alcohol on the systems of both were the same in time, and Medicine could do much to help the reformation in the last case; but when legislation for dipsomaniacs is talked of, it is essential to bear in mind the differences between the first class, who are mainly invalids, and the last, who are mainly criminals. The author then went on to enumerate the various morbid conditions which led to secret drinking, and the morbid sensations complained of, and showed how hardly these bore upon women of middle life, when hope of offspring ceased; youth was passing away, the pelvic organs the seats of weight, congestion, and hæmorrhage. He spoke of the phenomena of periodic intoxication as quite dispersing the vulgar idea that drinking was a mere sin, to be dealt with by moral exhortations. He then spoke of the relations of insanity to drunkenness, and upholding the doctrine that drunkenness is usually a secondary and induced, and not a primary evil, he expressed his belief that the true statement was, not that drunkards go mad, but that half-mad people take to drink. He quoted instances of families with congenitally imperfect nervous systems—father epileptic, children eccentric, or suicidal, or gamblers, most of them remarkable for voracious appetites, and the immense quantity of urea excreted. Some of them drank as well; but the tendency to drink arose from the same cause as the tendency to bet—that is, the cravings of an ill-organised brain for excitement. With regard to dipsomania so called, it was a question how far incorrigible drunkenness was entitled to be called mania, as a substantive disease; but he believed that some women who had a dipsomania indulged in a kleptomania to enable them to pay for their brandy. Going on next

to the case of the open riotous drinkers, he said their existence was a sign of social maladministration; leisure was found for persons on Saturdays and Sundays who had no rational mode of employing that leisure. Man must be stimulated in order to live, and when no other stimulant was at hand, brandy unluckily filled the void. Shepherds in the bush, missionaries in the colonies, soldiers in garrison, all felt the need of excitement. How much can be done to diminish gregarious drinking is shown by the improved state of the upper classes in Scotland, England, and France during the last 150 years. The author wound up with the following conclusions:—1. That the secret drinkers, for the most part, may be restored by kind Medical treatment. 2. That public drinking can only be put down by improved public opinion, education, and circumstances. 3. That every possible restriction be put upon the sale of spirits, especially on Sundays, and that power be given to the ratepayers to veto the establishment or licensing of public-houses. 4. That habitual drunkards be encouraged to become teetotallers. 5. That the teetotal system operates beneficially, not by the pledge, which is often broken, but by the system of lectures and other means of moral and theological excitement. 6. That it were wise policy to provide rational amusement and wholesome refreshment at cost price for the masses. 7. That open drunkards be punished. 8. That drunkenness, together with the lesser forms of insanity, extravagance, gambling, betting, violence of temper, and other ruinous indulgences be subject to a Court of Chancery (?) at the instance of the persons on whom the care and maintenance of such drunkard, gambler, etc., would fall in the event of ruin. 9. That open drunkards be punished, and houses in which drunkenness is permitted be shut up. 10. That the common education of all classes is defective in moral teaching, and in training in the practice of abstinence.

NEW BOOKS, WITH SHORT CRITIQUES.

St. Bartholomew's Hospital Reports. Vol. V. Edited by Dr. Andrew and Mr. Callender. London: Longmans. Pp. 264.

***The contributors to this volume are, in order—Mr. Callender, Mr. Savory, Mr. Paget, Mr. Lowe, Dr. Tuckwell, Mr. Coleman, Dr. Gee, Mr. Godson, Mr. Lloyd Williams, Mr. Holmes Coote, Dr. Owen Richards, Mr. Thomas Smith, Dr. Church, Dr. Dyce Duckworth, and Mr. Vernon. One of the most interesting of the papers is one by Mr. Paget, entitled, "What becomes of Medical Students?" wherein he analyses the careers of a thousand of his old pupils. The statistics are most interesting. Another paper by the same distinguished author on "Residual Abscesses" is equally so. Mr. Callender on "Brain Shocks" is highly instructive, as is Mr. Savory on "Injury to the Spinal Cord." Dr. Tuckwell's paper on "Chorea" is excellent, and will repay study. Dr. Gee is well known as one of our most practical men, and he here clearly shows that the liver may be very greatly enlarged by hyperplasia of its connective tissue. Mr. Holmes Coote writes on "Rachitis," and Mr. Thomas Smith on a subject he has well studied, "Nævoid Elephantiasis." Dr. Church contributes to our knowledge of cerebral pathology, Dr. Dyce Duckworth of the action of ipecacuan. The final paper by Mr. Callender on "Hospitalism" is a most important contribution to the subject.

Anatomy, Descriptive and Surgical. By Henry Gray, F.R.S. 5th edition, with an Introduction on General Anatomy and Development, by T. Holmes, M.A., Surgeon to St. George's Hospital, etc. London: Longmans.

*** Mr. Holmes has made this work doubly valuable by his excellent introduction, which, although, as he modestly states in his preface, not intended to supersede or trench upon the treatises on physiology, nevertheless gives a clear instructive *résumé* of general anatomy and histology, without going too minutely into the more recondite and dubious parts of microscopic research. The text of this new edition has been carfully revised, and many new illustrations added from the pencil of Dr. Westmacott.

Practical Anatomy; a Manual of Dissections. By Christopher Heath, F.R.C.S., Assistant-Surgeon to University College Hospital, etc., etc. 2nd edition. London: John Churchill and Sons.

*** Mr. Heath's excellent work has attained a second edition; it has been carefully revised, more particularly as regards the anatomy of the brain. Several new illustrations have been added, the chief ones being those representing sections through the limbs, taken at different regions—a most useful addition, as many of the preparations the student will be called upon to recognise at the College of Surgeons consist of vertical, horizontal, or transverse sections of the limbs and trunk, brain and joints.

Human Osteology. Comprising a Description of the Bones, with Delineations of the Attachments of the Muscles and General and Microscopic Structure of Bone and its Development. By Luther Holden, F.R.C.S., Surgeon to, and Lecturer on Anatomy at, St. Bartholomew's Hospital, etc. Fourth Edition. London: John Churchill and Sons. 1869.

*** This new edition calls for no special remark further than that the plates have been redrawn, and in many cases improved, and that some slight alterations have been made in the text.

A Guide to the Examination of the Urine. By J. Wickham Legg, M.D., M.R.C.P., Assistant-Curator of the Museum of University College, etc. London: Lewis. Pp. 58.

*** This little volume is intended to serve as a guide to the student at the bedside, to clinical clerks, etc. Whilst far from exact in the information conveyed, it is well enough calculated for the specific purpose intended—that is, as an introduction to an important means of diagnosis. The tests given are not invariably the simplest.

Biography of Sheridan Muspratt (Honorary M.D.), etc., etc. By William White, formerly Honorary Secretary of the York Farmers' Club, etc., etc.

*** Dr. Muspratt could not have desired a more congenial spirit for his biographer than is Mr. William White. Muspratt is eminently demonstrative: so is Mr. White. To enumerate all the works announced as published by this voluminous writer would tire the reader—suffice it to say they amount to ten, with tolerably long titles, and three etc., etc.'s.; what these may amount to we shall not stop to inquire. Mr. White is evidently enamoured of his subject, and puts on the "colouring" with an unsparing hand.

"He plasters with rouge the natural red"—

at least, as much as there is of it. Dr. Muspratt, we are sure, from his well-known modest and retiring disposition, must feel keenly the pompously false position in which he has been placed by his friend. We cordially sympathise with him in the painful circumstances in which he has been placed.

Natural History of the Three Kingdoms; being a Series of Plates coloured from Nature, with their names in English, French, and German. Cassell, Petter, and Galpin, Ludgate-hill, London, E.C., and New York.

*** A capital little work, answering to the description of the title-page, and well adapted for elder children. It might have been scientifically arranged, which would have added to its value an idea of classification.

OBITUARY.

SAMUEL DICKSON, M.D.

On the 12th inst., in Bolton-street, Piccadilly, died a member of our Profession who, in his day, attracted a good deal of public attention. We say "his day," because, though he was in harness, we believe, to the last, his reputation had waned, and his books had become all but forgotten. Dr. S. Dickson was educated at one of the Scottish Universities, and in 1825 became a Licentiate of the Royal College of Surgeons of Edinburgh. He took the M.D. of Glasgow in 1833. He served for some time in the army, and was quartered in India for a period sufficient to enable him to publish a work of some merit, entitled "The Diseases of India." On retiring from the army, he established himself as a Physician in London, and made his *début* in that character by publishing a somewhat scurrilous work, entitled "Fallacy of Physic as taught in the Schools." In this he ridiculed and reviled the practice of Physic generally, and foreshadowed his own theory entitled "Chronothermal Medicine." It would appear that this antagonism to legitimate practice was successful, for future works appeared, all more or less abusive of the "Faculty" generally, and in some instances personally. These works were extensively advertised, and some of them passed through several editions. There is reason to doubt, however, whether, in the long run, the system worked to the advantage of its author. His advertisements became less frequent, and his practice, we understand, gradually failed. Dr. Dickson was a man of moderate ability and acquirements, but endued with a "talent for abuse," which he exercised to an unlimited extent. No one was too high or too low for him to attack. We may express our regret that Dr. S. Dickson's activity and ability were exercised in such a way as neither to make for himself a name which may be remembered with honour, nor to bequeath to the Profession or the public any improved methods of treating disease.

The inmates of the City of London Lunatic Asylum are to be regaled with roast beef and plum-pudding on the forthcoming Lord Mayor's-day, at the expense of the Lord Mayor-elect and the Sheriffs.

MEDICAL NEWS.

QUEEN'S UNIVERSITY IN IRELAND.—At the annual meeting of the University held on Thursday, the 14th inst., in St. Patrick's-hall, Dublin Castle, the following degrees in Medicine and Surgery were conferred, in the absence of the Chancellor and Vice-Chancellor of the University, by the Right Hon. the Lord Chief Baron :—

THE DEGREE OF M.D.

First Class.

Charles, T. W. Cranstoun, Queen's College, Belfast.
M'Keown, William Alexander, Belfast.

Second Class.—None.

Third Class.

M'Donnell, James O'Mally, Galway.
O'Brien, Daniel, Galway.

Unclassed.

Adams, Hugh Thomas, Belfast.
Anderson, Isaac Henry, Belfast.
Armstrong, Thomas Middeton, Galway.
Barnes, Leopold J. Joseph, Galway.
Cogan, Philip, Cork.
Cullinan, Michael, Cork.
Daly, George William, Belfast.
Davis, John William, Cork.
Davison, James, Belfast.
Dick, John, Belfast.
Douglas, William, Belfast.
Dwyer, Peter Joseph, Galway.
Enright, John Francis, Cork.
Hastings, William Joseph, Cork.
Hayes, John Roche, Cork.
Healy, Francis, Cork.
Hodges, John F., M.D., *honoris causa*
Irvine, Wm., B.A., Belfast.
Kearney, Michael, Cork.
M'Kellar, Alexander Oberlin, Belfast.
Mackenzie, Matthew B., B.A., Belfast.
M'Conaghey, William, Galway.
Maenamara, James John, Cork.
Martin, Daniel Nicholas, B.A., Cork.
Merrick, Alexander Stewart, Cork.
Millar, Alexander P., Belfast.
Moorhead, William Robert, M.A., Belfast.
Murray, William Wilkinson, Belfast.
Nason, John Harrison, Cork.
Norris, Patrick J., Galway.
Nunan, Francis, B.A., Cork.
O'Connor, Augustine D., Cork.
O'Connell, Matthew D., Cork.
O'Donnell, Thomas E., Cork.
O'Sullivan, Thomas, Galway.
Ritchie, William, Belfast.
Smyth, Frederick Henry, Cork.
Smyth, Joseph, Belfast.
Sweetnam, James Long, Cork.
Sweetnam, William Francis, Cork.
Spence, J. Beveridge, Galway.
Starkey, William, B.A., Cork.
Trousdell, Alexander, Cork.
White, John Bradshaw, Belfast.
Williams, William, Galway.
Wilson, William, Belfast.
Young, Samuel, B.A. Belfast.

THE DEGREE OF M.CH.

Adams, Hugh Thomas, Belfast.
Browne, J. M'Mahon, M.D., Cork.
Charles, T. M. Cranstoun, Belfast.
Cogan, Philip, Cork.
Cullinan, Michael, M.D., Cork.
Crowley, Timothy, M.D., Cork.
Donovan, Humphrey J., M.D., Cork.
Enright, John Francis, M.D., Cork.
Hayes, John Roche, Cork.
Hastings, William J., Cork.
Healy, Francis, Cork.
Kearney, Michael, M.D., Cork.
Irvine, William, B.A., Belfast.
M'Donnell, Jas. O'Mally, Galway.
M'Kellar, Alex. Oberlin, Belfast.
M'Keown, Wm. Alexander, Belfast.
Martin, Daniel N., Cork.
Millar, Alexander P., Belfast.
O'Brien, Daniel, Galway.
O'Connell, Matthew D., Cork.
O'Connor, Augustine D., Cork.
O'Malley, Michael, M.D., Cork.
O'Sullivan, Thomas, Cork.
Ross, J. Alexander, M.D., Galway.
Smyth, Joseph, Belfast.
Spence, J. Beveridge, Galway.
Sweetnam, James Long, Cork.
Sweetnam, William Francis, Cork.
Williams, William, Galway.
White, J. Bradshaw, Belfast.
Wilson, William, Belfast.
Young, Samuel, B.A., Belfast.

The following gentlemen passed the first University Examination in Medicine :—

First Class.

Browne, David Grahame, Belfast.
Simpson, William.

Second Class.—None.

Third Class.

Adams, Hugh Thomas, Belfast.
Adderley, John, Cork.
Allison, Hazlett, Belfast.
Ambrose, John, Cork.
Barnes, Leopold J. J., Galway.
Barry, Richard John, Cork.
Blood, Robert, Galway.
Boyd, S. Burnside, Belfast.
Brigham, John King, M.A., Belfast.
Browne, Andrew Lang, Belfast.
Budd, William, Belfast.
Charters, William E. Drew, Cork.
Concannon, William Augustus, Galway.
Coppinger, Richard William, Cork.
Corbett, Michael, Cork.
Cuppage, William Burke, Belfast.
Davy, Alfred, Galway.
Derham, Benjamin, Cork.
Derham, Thomas, Cork.
Derham, William, Cork.
Dick, John, Belfast.
Drury, Robert, Galway.
Dwyer, J. Jameson, Galway.
Edge, J. Dallas, Galway.
Fagan, Daniel, Belfast.
French, John Gay, Galway.
Gillman, Thomas Henry, B.A., Cork.
Glissan, Benjamin J., Galway.
Haines, Charles Henry, B.A., Cork.
Hamilton, Alex. Macleod S., Belfast.
Hare, Richard Isaac, Cork.
Henry, Richard, B.A., Belfast and Cork.
Holmes, Robert A. King, B.A., Belfast and Cork.
Johnson, William E., Belfast.
Johnston, David, Belfast.
Johnston, John, Belfast.
Joynt, Edward, Galway.
Kerr, James, Belfast.
Kerr, James King, Belfast.
Kerr, Robert A., Galway.
Killen, J. Moore, B.A., Belfast.
Knox, John, Belfast.
Laurence, James, Belfast.
Lee, Redmond, Galway.
Little, Charles, Belfast.
Lloyd, Christopher, Cork.
Mark, Joseph, Belfast.
Marshall, John, B.A., Galway.
M'Bride, Robert, Belfast.
M'Conaghey, John, Belfast.
M'Cracken, John Alexander, B.A., Belfast.
M'Donnell, Martin, Cork.
M'Kellar, Alexander Oberlin, Belfast.
M'Quaid, Peter John, Belfast.
M'Swinney, George Henry, Galway.
Morrow, John, Belfast.
Mountaine, John, Cork.
Murphy, William Kirkpatrick, Belfast.
O'Brien, Joseph, Cork.
O'Brien, Patrick C., Cork.
O'Connor, Bernard, B.A., Cork.
O'Connor, David Watkins, Cork.
O'Donnell, Thomas A., Cork.
O'Neill, Richard Francis, B.A., Cork.
Rathborne, Charles Atkinson, Galway.
Reed, Matthew, Galway.
Riddell, Robert, Belfast.
Robertson, Joseph, Belfast.
Robinson, William David, Belfast.
Ryan, Richard, Cork.
Saunderson, Robert, Galway.
Smith, James E., Galway.
Spencer, William F., Belfast.
Steele, John Wilson, Belfast.
Torrens, Hugh Rankin, B.A., Belfast.
Tolerton, William Ratcliffe, Cork.
Tuohy, Francis Joseph, Cork.
Vickery, George, Cork.
Wallace, Thomas, Belfast.
Walsh, David J., B.A., Cork.
Watson, J. Woodraw, Belfast.
Weir, Alexander M'Cook, Belfast.
Wheeler, John, Cork.
Wilson, John, B.A., Belfast.
Wilson, Joseph, Cork.
Young, William E., Belfast.

The prize in composition, limited to the competition of undergraduates in Medicine, was awarded, for the essay signed "Christopher North," to Joseph P. Pye, Galway.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, October 14, 1869 :—

Fox, Hugh Courtenay, Stoke Newington.
Plaxton, Joseph William, Hull.
Price, William, Bonvilstone, near Cardiff.
Thorpe, George Elisha Knight, Sheffield.

As an Assistant in compounding and dispensing medicines :—

Gillet, Daniel, Liverpool.

The following gentleman, also, on the same day, passed his First Professional Examination :—

Holroyd, William Stephen, St. George's Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

COOKE, EDWARD JONES, M.A., M.B.—House-Surgeon to the Dispensary, Worksop, Nottinghamshire, *vice* George Fisher, M.R.C.S.E., whose time of office has expired.

KEASHAW, JOHN, L.R.C.P., L.S.A., etc.—Certifying Factory Surgeon for Royton District, *vice* W. Kershaw, deceased.

SANDFORD, HORACE VAVASOUR, M.D. Hesse, L.R.C.P.L., to the Egloshayle and St. Kew District Bodmin Union.

NAVAL AND MILITARY APPOINTMENTS.

Dr. John Pringle, Assistant-Surgeon to the *Rocket*, and James S. Barry, Assistant-Surgeon to the *Thistle*.

Staff Surgeon-Major J. L. Holloway is to proceed to Colchester for the purpose of assuming the Medical charge of the 8th Depot Battalion, *vice* Staff Surgeon D. O'Donovan, about to be placed on half-pay.

The undermentioned Surgeons, having completed twenty years' full-pay service, to be Surgeons-Major, under the provisions of the Royal Warrant of April 1, 1867 :—William Perry, Arthur Rudge, and Edward James Franklyn, M.B. Staff-Surgeon Alexander Robert Kilroy, to be Surgeon, *vice* Surgeon-Major Henry Briscoe, M.D., who retires upon half-pay.

68TH FOOT.—Staff-Surgeon Thomas Knox Birnie, to be Surgeon, *vice* Edward McGill, M.D., deceased.

79TH FOOT.—Staff-Surgeon Stewart Aaron Lithgow, to be Surgeon, *vice* Andrew Knox Drysdale, deceased.

103RD FOOT.—Staff Assistant-Surgeon Edmund Farrington Boult, to be Assistant-Surgeon, *vice* Albert Egerton Hale, deceased.

MEDICAL DEPARTMENT.—Staff Assistant-Surgeon William Thomas Paliologus, to be Staff-Surgeon, *vice* Stewart Aaron Lithgow, appointed to the 79th Foot : Staff Assistant-Surgeon Thomas Stawell Barry, to be Staff-Surgeon, *vice* Thomas Knox Birnie, appointed to the 68th Foot ; Staff Assistant-Surgeon John Copeland Birnie, to be Staff-Surgeon, *vice* Alexander Robert Kilroy, appointed to the Royal Artillery.

BREVET.—Surgeon-Major Henry Briscoe, M.D., Royal Artillery, who retires upon half-pay, to have the honorary rank of Deputy Inspector-General of Hospitals.

BIRTHS.

ARMITAGE.—On October 8, the wife of S. H. Armitage, M.D., of a son.

WORKMAN.—On October 18, at 144, Castle-street, Reading, the wife of F. Workman, Surgeon, of a daughter.

MARRIAGES.

CARDELL—COOPER.—On October 15, at St. Paul's, South Hampstead, George Cardell, M.R.C.S.E., of Wincanton, Somerset, late Army Medical Staff, to Frances, third daughter of Edward Talden Cooper, Esq., of Wincanton.

FOWLER—M'NAB.—On October 14, at the Parish Church of Epping, Trevor Fowler, L.K.Q.C.P.I. and L.R.C.S.I., fourth son of George Fowler, Esq., of Dublin, to Annie Stuart, eldest surviving daughter of Duncan Robert M'Nab, Esq., Surgeon, of Epping, Essex.

GRAIN—BEAMAN.—On October 12, at St. Mark's, Hamilton-terrace, Augustus Grain, Esq., of Petersfield, Hants, to Jane Elizabeth, widow of the late George Hulme Beaman, Esq., M.R.C.S., of Covent-garden, London.

LALOR—MOATE.—On October 19, at the parish church, Hove, James Lalor, M.A., M.D., Surgeon H.M.'s Bombay Army, to Matilda, third daughter of C. Robert Moate, Esq., of St. Aubyn's, Hove, late of Enfield, Middlesex.

MARR—MILNE.—On October 12, at Ellon, George Murr, A.M. and M.D., Surgeon H.M.'s Madras Army, and Civil Surgeon of Moulmein, British Burmah, to Mary Ann Jean, daughter of Thomas Milne, Esq., banker, Ellon.

MOORE—ROGERSON.—On October 20, at the parish church, Leeds, by the Rev. A. R. Evans, M.A., J. Daniel Moore, M.D., F.L.S., of Lancaster, to Annie, eldest daughter of the late Edward Rogerson, Esq., of Woodlesford, Yorkshire.

VEITCH—CLEWER.—On September 9, at St. George's Church, Penang, Straits Settlements, John T. Veitch, M.D. and F.R.C.S., Colonial Surgeon of that island, to Celia Gertrude, youngest daughter of the late Joseph Clewer, Esq., of Worcester.

DEATHS.

BELL, ARTHUR, Surgeon 36th Regiment, at Peshawur, Punjaub, India, on October 10, aged 41.

DIXON, MARY GUNTHORPE, second daughter of Edward Dixon, Surgeon-Major in H.M.'s Madras 4th Light Cavalry, at Montreux, Chillon, Switzerland, on October 2, aged 25.

PUGH, RICHARD, Surgeon, second son of the late Thomas Pugh, Esq., Blamnillow, Radnorshire, at Bank House, Llandovery, on September 28, in his 27th year.

VINALL, CHARLES, M.D., late of Birling, formerly of Sutton Valence, Kent, at Chelsea, on October 16, in the 74th year of his age.

WILLIAMS, THOMAS, M.D., Staff Surgeon-Major, late of the 19th and 59th Regiments, at Ebury-street, Pimlico, S.W., on October 12, in his 67th year.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

ARGYLE DISTRICT ASYLUM.—Assistant Medical Officer. Applications and testimonials to Dr. Sibbald, at the Asylum, Lochgilphead, Argyleshire.

COVENTRY AND WARWICKSHIRE HOSPITAL.—House-Surgeon; must have both Medical and Surgical qualifications. Applications and testimonials to the Secretary, St. Mary-street, Coventry, on or before November 5.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, BROMPTON, S.W. —Resident Clinical Assistant; must have a Medical qualification. Applications and testimonials to the Hon. Sec., on or before the 30th. Candidates will be required to attend on the following Monday at 4 o'clock p.m.

LIVERPOOL ROYAL INFIRMARY SCHOOL OF MEDICINE.—Lectureship on Botany. Applications and testimonials to the Registrar on or before the 25th inst.

ROYAL ALBERT HOSPITAL, DEVONPORT.—Resident Medical Officer; must be registered under the Medical Act. Applications and testimonials to the Honorary Secretary, Royal Albert Hospital, Devonport, on or before November 3. Gentlemen whose attendance is required will receive notice to that effect.

ROYAL KENT DISPENSARY.—Resident Medical Officer; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Secretary, J. Carrtar, Esq., Catherine House, Greenwich, on or before November 8. Election on the 10th at 8 o'clock p.m.

ST. MARY'S HOSPITAL.—Assistant-Dispenser. Applications and testimonials to be sent in on or before the 30th inst. For further particulars, apply at the Hospital.

SHEFFIELD GENERAL INFIRMARY.—Assistant House-Surgeon; must be a Member of one of the Royal Colleges of Surgeons of the United Kingdom, and be L.S.A. or L.R.C.P.L. Applications and testimonials to J. Kirk, Esq., Secretary, on or before the 26th inst. Election on the 29th inst.

SUSSEX COUNTY HOSPITAL.—House-Surgeon. Applications and testimonials to A. Veysey, Esq., Sec., Brighton, on or before November 24.

SUSSEX COUNTY HOSPITAL.—Dispenser. Applications and testimonials to the Drug Committee on or before November 15.

SWANSEA NEW HOSPITAL.—House-Surgeon; must be legally qualified. Applications and testimonials to the Secretary, 23, Gower-street, Swansea, on or before November 24. Election December 1.

TEIGNMOUTH, DAWLISH, AND NEWTON INFIRMARY.—House-Surgeon. Applications and testimonials to the Chairman of the Committee, on or before October 29.

TOWER HAMLETS DISPENSARY.—Resident Medical Officer; must be L.S.A. or have some other Medical qualification. Candidates to attend personally with testimonials on November 1, at 7 o'clock p.m. Further information may be obtained of T. Stone, Esq., Hon. Sec., 5, Finsbury-circus, E.C.

WESTMINSTER GENERAL DISPENSARY, GERRARD-STREET, SOHO.—Surgeon; must be M.R.C.S. and be registered, and not practising Pharmacy or Midwifery. Applications and testimonials to the Secretary.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Barnsley Union.—Mr. Smith has resigned the Workhouse; salary £50 per annum.

Chippenham Union.—The Langley Burrell District is vacant; area 3566; population 1679; salary £18 3s. 4d. per annum. The Sutton Benger District; area 11,571; population 3190; salary £76 12s. 4d. per annum. And the Workhouse; salary £50 per annum.

Freebridge Lynn Union.—Mr. Philip C. Shephcard has resigned the First South-Eastern District; area 17,114; population 2386; salary £55 per annum.

APPOINTMENTS.

Axbridge Union.—Charles Wade, M.R.C.S.E., L.S.A., to the First District.

Cerne Union.—John Joseph Clapcott, M.R.C.S.E., L.S.A., to the Fourth District.

Kendal Union.—William Armistead, M.B. Edin., C.M. Edin., to the Burton District.

Penzance Union.—John Quick, M.R.C.S.E., L.S.A., to the Fifth District.

Taunton Union.—William F. Carter, L.R.C.S. Ire., L.R.C.P. Edin., to the Bishop's Lydeard District.

DR. ARTHUR GAMGEE, F.R.S.E., has been appointed to the Lectureship in Physiology, at Surgeons'-hall, Edinburgh, rendered vacant by the appointment of Professor Sanders to the Chair of Pathology.

THE October Sessional Examinations in the Faculty of Medicine in the Queen's University in Ireland, and the quarterly examinations in Medicine and Pharmacy at the Apothecaries' Hall, Dublin, were proceeded with during the past fortnight, and have now terminated. In the case of both institutions the candidates were examined at the bedside.

IN the late Netherland Exhibition filters and disinfectants were judged as not contributing to the material wants of the working classes, and therefore their exhibitors were not qualified for the reception of medals!

WE announced last week the death of Dr. W. H. Colborne, of Chippenham, from typhoid fever. Not long ago Mr. Peter Awdry fell a victim to the same disease. A writer in the *Devizes Gazette* asserts that Chippenham is now, and has been for some time past, "the chosen seat" of this disease. It has not been so fatal as prevalent, and "it is well known that a Medical authority in Chippenham offered to show Dr. Colborne's Medical attendants twenty or thirty cases of typhoid fever in Chippenham." The writer speaks with much severity upon the wretched sanitary condition of the town, and urges upon the inhabitants to represent their state to the Medical Officer of the Privy Council in order that the evil may be remedied.

MR. SANDS COX, founder of the Queen's College and the Queen's Hospital, at Birmingham, recently incorporated by an Act of Parliament, has conveyed to trustees a valuable site of ground, on the Longmoor property, in the parish of King's Norton, Worcestershire, for the erection of a church to the memory of his late father, Edward Townsend Cox. The late Mr. Cox held the appointment of one of the Medical officers of the Birmingham Town Infirmary for more than forty years, and discharged the duties of Medical officer at the Public Dispensary, and at the barracks in the absence of the Surgeon of the garrison, for a considerable period. The inhabitants of Balsall Heath owe to the exertions of the late Mr. Cox the church dedicated to St. Paul in that populous and increasing district.

UNIVERSITY INTELLIGENCE.—CAMBRIDGE.—The following is the list of examiners in Medicine and Surgery for the ensuing academical year. The election was at a congregation held on Monday last. *First M.B. Examination:* J. B. Bradbury, M.B., Downing, and T. W. Danby, M.A., Downing. *Second M.B. Examination:* Regius Professor of Physic; Dr. Robert Liveing, Christ's College; and Dr. Drosier, Caius College. *Third M.B. Examination:* The Regius Professor of Physic; Dr. Paget, Caius College; and Dr. Barclay, Caius College. *Examination for the Degree of M.C.:* Professor of Anatomy; C. Brooke, M.A., St. John's College; and Mr. Savory, F.R.S. and F.R.C.S. Dr. Paget was also appointed Assessor to the Regius Professor of Physic.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At the annual meeting of the College held, according to charter, on St. Luke's Day, Monday, October 18, the following officers were elected:—*President:* Dr. Banks. *Vice-President:* Dr. Freke. *Censors:* Drs. Freke, Atthill, Haydon, and Walter G. Smith. *Examiners in Midwifery:* Drs. Johnston and Jennings. *Treasurer:* Dr. Dwyer. *Representative in the General Medical Council:* Dr. Aquilla Smith. *Professor of Medical Jurisprudence:* Dr. Travers. *Professor of the Institutes of Medicine:* Dr. Law. *Registrar:* Dr. James Little.

THE MEDICAL CLUB.—We are requested to state that the next house dinner at the Medical Club, to be presided over by Sir Wm. Fergusson, will take place on Wednesday, November 3, instead of on Thursday, November 4, as previously announced.

HEALTH OF THE NAVY.—In the last annual statistical report of the health of the Royal Navy it is stated that the average number of men daily sick was 814·6, which is in the ratio of 37·7 per 1000 of mean force, being a reduction, compared with the preceding year, equal to 4·5 per 1000. The reduction in the ratio of cases of primary and secondary syphilis was equal to 10·1 per 1000 of mean force. There can be little question that this is altogether attributable to the beneficial influence of the Contagious Diseases Act, limited even as it at present is in its sphere of operation.

CLUB REMUNERATION.—The Preston Medical Society have unanimously resolved—1. That (on and after January 1) three shillings be the minimum charge per member per annum for attendance on all friendly societies and clubs for adult persons residing within the borough; 2. That no club Medical officer be required to attend club patients outside the limits of the borough, except on the payment of mileage as may be agreed on.

THE EDINBURGH INFIRMARY.—In the event of the resignation by Dr. Grainger Stewart of the post of Pathologist to this Institution, we believe it likely that Mr. Lawson Tait will offer himself as a candidate for this vacancy. Mr. Tait is an alumnus of the school, and has shown, by the varied contributions he has made to our own pages and to those of other Medical journals, that he is a hard-worker, devotedly attached to his Profession, and that practical morbid anatomy has received a large share of his attention. Mr. Tait's claim, in the event of a vacancy, demands the full consideration of the managers of the Infirmary.

NEW NATIONAL HOSPITAL FOR INCURABLES.—A prospectus has been issued of this proposed institution, which is sanctioned by some of the best names in the Profession and amongst the public. The well-known fact is quoted of the large number of persons in England and Wales affected with incurable (or presumed incurable) maladies, not admissible into ordinary Hospitals, and living with their friends who can ill bear the expense of the ample diet and skilful Medical attendance which such unfortunates mostly require. A convenient site has been given just outside the city of Oxford, and in a comparatively raised and healthy position; subscriptions have been commenced on a liberal scale, and, above all, an associated body of ladies, headed by Miss Sandford, propose to undertake the task of raising the funds and of administering the institution. The odious system of canvassing is not to be a feature of the National Convalescent Institution. Communications may be addressed to Miss Sandford, 4, Temple-street, Cowley, St. John, Oxford.

BRAVERY REWARDED.—The Paris correspondent of the *Daily News*, after speaking of the pranks of a skittish horse at Compiègne, which was stopped by a Carabineer, after nearly galloping upon the Emperor and his *aides-de-camp*, says:—"The moment Napoleon III. got home he sent the soldier a gold medal and a gratuity of forty francs. I think the man owes the distinction to the happy chance which brought him under the Sovereign's eye as much as to anything else. I read in the papers of another act which I am bold enough to believe quite as heroic as stopping a runaway quadruped; but I do not yet read that the devoted fellow of whom it is reported has been decorated with a medal even in silver. The scene is in the Hospital of the Cochin, behind the students' ball-room of the Closerie, invariably visited by the British tourist. A poor patient is suffering from diphtheria, the operation of tracheotomy is performed to relieve his breathing, but the instrument does not succeed in freeing the windpipe from a mass of purulent matter which chokes it up. The sufferer is at the last extremity, and gasping in agony on the bed, when the resident pupil, M. Bailly, removes the instrument, claps his mouth to the orifice, and with a deep breath clears the throat from the corrupt stuff that obstructs it, and rejects it from his mouth on the floor of the ward. The dying man is saved, but at what a risk!"

MORTALITY IN STEAM AND SAILING VESSELS.—From the last published report of the Emigration Commissioners, it is stated that the emigration to America during the past year was healthy and safe, the tables showing that the whole number of deaths among 7324 emigrants who went in sailing ships was forty-seven, and of 154,277 who went in steam-vessels was 108. Assuming the length of voyage of a sailing ship at thirty-five days, and of a steam-vessel at sixteen days, this would be equal to a mortality per annum of 66 per 1000 in sailing ships and of 15 per 1000 in steam-ships. Considering the class from which a large majority of the emigrants are drawn, this report must be considered as very satisfactory.

ROYAL COLLEGE OF SURGEONS, EDINBURGH.—At a meeting of the Royal College of Surgeons of Edinburgh on the 20th instant, the following office-bearers were elected for the ensuing year:—*President:* James D. Gillespie, M.D. *Treasurer:* John Gairdner, M.D. *Librarian:* Archibald Inglis, M.D. *Secretary:* James Simson, M.D. *President's Council:* James S. Combe, M.D.; Andrew Wood, M.D.; James Dunsmure, M.D.; James Spence; James A. Hunter, M.D.; Henry D. Littlejohn, M.D.; (*ex officio*) John Gairdner, M.D. *Examiners:* William Dumbreck, M.D.; Archibald Inglis, M.D.; Robert Ormond, M.D.; James Dunsmure, M.D.; Peter David Handyside, M.D.; James D. Gillespie, M.D.; Henry D. Littlejohn, M.D.; Patrick H. Watson, M.D.; David Wilson, M.D.; John Smith, M.D.; D. M. C. L. Argyll-Robertson, M.D.; Joseph Bell, M.D. *Assessors to Examiners:* James S. Combe, M.D.; William Brown; Adam Hunter, M.D.; James Spence. *Officer:* John Dickie.

CURIOUS CASE OF APHASIA.—In the report on military prisons just made by Captain Du Cane as Inspector-General, it is stated, on the authority of the governor at Aldershott, that a prisoner, being checked at drill by one of the warders, wished that "God Almighty would strike the warder dumb," whereupon the prisoner himself was struck dumb on the spot, and did not recover his speech for seven days. He was very much frightened, and on recovering his speech made great promises of amendment; but, adds the report, his good resolution vanished, and he was soon in prison again.

GOITRE IN SAVOY.—According to documents forwarded to the French Government by the préfet of Haute-Savoie, out of the 310 communes of which the department consists, there are scarcely ten which are exempt from goitre. The Medical Practitioners of the department attribute the disease to the prevalence of drunkenness, the unsanitary condition of the villages, and the bad quality of the water. Some experiments have been put into force on a large scale, especially upon school-children. To these lozenges were distributed, containing traces of iodine, and they were given filtered water to drink, as well as decoction of walnut leaves. Of 5000 children 2000 were, in this way, radically cured, and 2000 were sensibly ameliorated, no effects being produced in 1000. In spite of the lesson taught by these favourable results, it was found very difficult to get families to oblige their children to follow this treatment.—*Journal de la Soc. de Stat.*, August.

TROPICAL FRUITS AND FLOWERS.—Mr. Wallace, in his "Malay Archipelago," adverts to the erroneous impressions which prevail that tropical regions are the home of wild fruits of delicious flavour. What there are of these are of the most tasteless and worthless character, infinitely inferior to our blackberries and whortleberries. "I have met," he says, "with nothing superior to our crabs, haws, beech-nuts, wild plums, and acorns, fruits which would be highly esteemed by the natives of these islands, and would form an important part of their sustenance. All the fine tropical fruits are as much cultivated products as our apples, peaches, and plums." So too with regard to the flowers. Mr. Wallace states that he has never seen in the various tropical regions that he has traversed those brilliant masses of colour exhibited by our furze-bushes, heathers, hyacinths, buttercups, etc. "In the region of the equator, whether it be forest or savannah, a sombre green clothes universal nature. You may journey for hours, and even for days, and meet with nothing to break the monotony. Flowers are everywhere rare, and anything at all striking is only to be met with at very distant intervals." A principal cause of the erroneous belief in this matter is that at our flower-shows and hothouses we gather together the finest flowering plants from the most distant regions, and exhibit them in a proximity to each other which never occurs in nature. "True, there are a great number of grand and gorgeous flowers in the tropics, but the proportion they bear to the mass of vegetation is exceedingly small; so that what appears an anomaly is nevertheless a fact, and the effect of flowers on the general aspect of nature is far less in the equatorial than in the temperate regions of the earth."

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

Dr. B. W. Richardson's Lecture will appear next week.

Will *A. D. O.* send his name? We cannot publish unauthenticated correspondence.

G. H. W.—The only advice we can give you is to avoid advertising quacks, and to consult some respectable Physician.

Dr. Russell, Birmingham.—The communication stands over, and will, if required by Dr. Russell, be returned for any alteration he may see fit.

Materialism has many meanings, but it by no means implies of necessity a disbelief in a soul or a spirit world. The modern physiology is materialistic, as opposed to the exaggerated vital hypotheses of our fathers—*e.g.*, we have a material theory of animal heat where they held a vital one, which was, in effect, a confession of ignorance.

A Young Surgeon.—If the contract can be proved, he can recover.

Apothecaries' Hall, Dublin.—The inquest terminated in an open verdict. The draught sent from the Hall contained rhubarb merely. The patient was at the same time largely using a liniment of opium, belladonna, and aconite, supplied from another establishment.

Delta.—The fee must be regulated by the circumstances of the patient.

R. T.—There is no punishment for assuming the title.

Anonymous must send his name and address in confidence. We are acquainted with most of the facts.

Birmingham.—The allusion to Mr. Gamgee by the chairman of the Amalgamated Engineers was just and suitable. Mr. Gamgee is entitled to be regarded with affection and esteem by the working men of the town.

Licences of Beer-houses and Sellers of Drink.

Although at common law any person might keep an inn without any licence, some very early statutes required for the purposes of revenue that public-houses should be licensed for the sale of fermented liquors. All previous Acts were repealed by 9 Geo. IV., cap. 61, and upon this Act the existing law is based. By the 17th section of this Act no licence for the sale of any excisеable liquors to be drunk or consumed on the premises shall be granted by the Excise, unless the justices of the district have first granted a licence in the nature of a certificate that they are satisfied with the previous good character of the applicant, and of the necessity of the accommodation to the wants of the neighbourhood, of which they are the sole judges, subject to an appeal to the Quarter Sessions. The licence is thus granted with a proviso that it shall be forfeited if the applicant "knowingly permits persons of notoriously bad character to assemble and meet together" at his house, or permits gaming or drunkenness to be carried on.

Thus matters stood till by the 11th Geo. IV. and 1st Wm. IV., cap. 64, a relaxation was made in favour of beerhouses, whereby the magistrates' certificate was dispensed with, and no investigation into previous character was required. A certain rental and rating are the sole qualifications. A similar proviso to that before mentioned was, however, a condition of the Excise licence, as well as a limitation to certain hours both on week days, Sundays, and Good Fridays. This was a condition of the public-house licence also.

By 23 Viet., cap. 27, the same privileges were extended to confectioners and eating-house keepers for the sale of foreign wines by retail, subject to a like proviso.

By the 32 and 33 Viet., cap. 27, the Wine- and Beer-house Act, 1869, the original principle has been reverted to, and all such houses are now required to obtain the magistrates' licence or certificate before the Excise licence can be granted. The justices are entitled under this Act to require satisfactory evidence of good character, and the certificate may be refused to a previously established house if of a disorderly character, or frequented by thieves, prostitutes, or persons of bad character; or if a previous licence has been forfeited at any time by misconduct; or if applicant has at any time previously been adjudged disqualified from misconduct from receiving such licence; or if the applicant or his house is not duly qualified by law.

Rotherham.—The founder of your Hospital is a Fellow of the College.

Psychologist, Devizes.—The proprietor and Medical superintendent of the lunatic asylum mentioned does not appear, according to the Register or the Medical Directory of Messrs. Churchill, to possess the title "M.D."

H. B., Dover.—Write at once to the President, enclosing a certificate from the Medical man of your illness, when perhaps you may be allowed to register.

A Metropolitan Teacher.—The return which appears in another column is officially correct. Our contemporary obtained the information by writing a second time to other teachers besides yourself. There is no truth whatever in the other statement. Write to the Secretary of Apothecaries' Hall.

The Foot and Mouth Exanthem.

By Lawson Tait.

As a wish is expressed in the last number of the *Medical Times and Gazette* for information on this epidemic, and as it has been very severe in South Yorkshire, and has come a good deal under my notice, I venture to record the following note regarding it.

The name "Eczema epizootica" is a very bad one, as it gives no idea whatever of the disease; indeed, to me it is quite unintelligible that it ever could have been invented. The disease is evidently an exanthem, with a period of incubation, of progress, climax, and subsidence, and, as far as I can find, can be propagated by contagion only. A very telling instance illustrating this point I found at the farm attached to the West Riding Asylum, where a large number of pigs are kept in pens arranged in two long rows facing each other, and separated by a narrow path. Nearly all the pigs contained in the pens of one row have been attacked, but not a single animal in the row opposite, and the reason of this is evidently that the pigs attacked have been allowed to mingle with affected cows in a yard, while the other pigs have not been exposed to contagion.

Of all the exanthemata affecting the human subject, measles most resembles this disease, and for the following reasons:—The period of incubation is probably long, while the duration of the disease is very short, and the mortality very slight; catarrhal symptoms, though not invariable, are common; and I have seen upon white pigs an eruption extremely like that of measles, which is followed by slight desquamation. When, also, we remember that the seat of pathological alteration in both diseases is in the subepithelial tissue, the resemblances are striking.

What is known as the "slough" in the mouth has been described as a diphtheritic exudation, but I am quite certain that this is incorrect. It is a mere alteration and death of the epithelium, the change being always very circumscribed, and seldom passing through the entire thickness of the layer, ending in a very superficial and easily healed sore only occasionally, most frequently being cast off without apparent alteration of the surface, and for these reasons it is totally different from the ever-spreading adventitious exudation of diphtheria.

Although we are surrounded with the disease and the milk used as usual, not a single case has occurred to cause the slightest suspicion either that the disease can be communicated to the human subject, or that the use of the milk is in the least detrimental. Measles is not prevalent here at present, and scarlet fever only occasional. I have not seen any mouth affections such as described as common in London and Glasgow.

In the West Riding Asylum the milk is used, and my friend Dr. Crichton Brown, a cautious and careful Physician, and an acute observer, has not found that it makes the slightest difference.

I have examined the milk carefully by the microscope, and can find no alteration in mild cases. In more severe cases, and in an extra (and therefore unused) teat of one mild case, I found the colostrum corpuscles unusually abundant; but no one would assert that this would be likely to prove objectionable save to very young children. In the only fatal case I have seen, death took place from gangrene of the epithelial lining of the milk glands, and the secretion there was only a thin sanguinolent discharge, little in quantity, and of offensive smell—such as not even the least conscientious of milkmen would sell—and abounded in bacteria.

Animals are reported to have suffered severely from bronchitis and pneumonia—another point in favour of my view of its resemblance to measles.

When pigs are severely affected they show it most on the forefeet, and the toes of these feet very frequently are shed.

Farmers here all express the opinion that in every epidemic since 1830 (four or five in number) the disease is less severe than in the preceding one, and they all deprecate interference of any kind save the administration of salt.

October 18.—I have this morning taken the temperature of the vagina of a cow at the height of the disease, and find that it is only 100 degrees. The proprietor is using the milk for his children without any inconvenience. My friend Mr. Naylor, a distinguished Veterinary Surgeon of long experience, tells me that the young of cows and sows do not die when the dam is affected, unless the disease is so bad as to arrest the secretion of milk.

Wakefield.

Medical Etiquette.—Dr. James Palfrey has written us a long letter in reply to the complaint made against him by Mr. J. T. F. Firth. Dr. Palfrey does not deny that he saw Mr. Firth's patient in his absence, pronounced the case to be one of typhus fever *in extremis*, and advised the man's wife and children to leave the house very late at night. Dr. Palfrey excuses himself from not meeting Mr. Firth that he arrived late at the patient's house, that Mr. Firth lived two miles off, that he was tired with overwork, and that no good purpose could have been secured by his meeting Mr. Firth. Dr. Palfrey then gives a somewhat elaborate account of the difficulties which beset him on arriving at the patient's house, and of the symptoms of his malady to show that the opinion given by him (Dr. Palfrey) with reference to the nature of the disease was correct. But all this is beside the real question at issue. Dr. Palfrey did see the patient of Mr. Firth in his absence, acknowledged nothing was then to be done, pronounced the case to be one of typhus fever, in opposition to Mr. Firth, and advised the removal of the family late at night. Now, we must say this does appear to us to have been imprudent and hasty. We can well conceive its effects upon the neighbours of the patient. But was there any real occasion for this hasty conduct? We think not, and we must say Mr. Firth appears to have just cause of complaint.

Parochial Vaccinators.

To the Editor of the Medical Times and Gazette.

Sir,—Your correspondent "A Public Vaccinator of Twenty-three Years' Standing" thinks the Vaccination Act works well, and possibly I might take the same view where I a public vaccinator and, like him, equally indifferent as to one's neighbours' rights.

Your correspondent says, "I think every Medical man should vaccinate the children whom he brings into the world, and that the parents should pay him," and backs his opinion by vaccinating the children of "two respectable farmers (not his patients)," and certainly from his letter one is led to infer that his Medical friend was not consulted prior to the vaccination being performed, and also to conclude that he receives the fees for the operations from the parish authorities, thus depriving his brother Practitioner of his legitimate claims.

Allow me to suggest to your correspondent an easy plan whereby he may run no risk of being accused of "touting," nor burden the parish with fees that people in good circumstances ought to defray—viz., give the "respectable farmers" a capillary tube or two of lymph from the chosen child, and let them take it to their own Medical man. This is a rule I invariably adopt in similar cases, and all parties are well satisfied with the arrangement.

As to the other parts of my letter which your correspondent criticises, I have nothing either to add or retract. I am on friendly terms with the Medical man, but only know the Registrar by sight, so there is neither "Professional jealousy nor misunderstanding" involved. The opinions I expressed are founded on facts, which are only strengthened by your correspondent's letter.

I always do what I can to persuade parents to have their children vaccinated, but I feel certain that vaccination will never be universally performed till every Medical man is allowed his fee by the guardians in cases where the parents refuse to pay for the reasons stated in my former letter; and considering that registrars and public vaccinators are paid officers, and private vaccinators in two cases out of three are unpaid, I think it only just that the latter should merely have to attach their signatures and the date to the certificate.

I am, &c.

October 13. Alpha.

M.D., Salisbury.—Sir William Fergusson, Bart., is a Fellow of both Colleges and a Deputy-Lieutenant of Peeblesshire.

A Fellow, Manchester.—You will find an account of the last election of Fellows into the Council of the College of Surgeons in the *Medical Times and Gazette* of July 4, 1868, on which occasion Mr. Erasmus Wilson, since unanimously elected Professor of Dermatology, polled 108 votes, with five plumpers. At present there is only one vacancy in the Council, caused by the resignation of Mr. Joseph Swan.

Bibliopole.—From the last published Calendar of the Royal College of Surgeons, it appears that during the past year 458 volumes, comprising 115 new works, and 417 tracts, pamphlets, etc., have been added to the library, which now contains 32,566 volumes, consisting of 13,465 works, and 35,656 tracts, pamphlets, reports, and theses.

A. B. will find some interesting and valuable information on the subject in "The Parks, Promenades, and Gardens of Paris," by W. Robinson, F.L.S., which has been noticed in the *Medical Times and Gazette*.

B. M.—The Earl of Derby was a trustee of the Hunterian Collection, having been elected in 1836.

Dipsomania.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The able, well-considered, practical paper read by Dr. Symonds at the meeting of the Social Science Congress at Bristol, on this important and now national subject, as coming from so distinguished and estimable a Physician, has a strong claim upon Professional and public attention, whether it be considered a moral or physical question, or a compound of both. It appears to me we should rally round Dr. Symonds in agitating for further enactments on drunkenness until the Legislature will take it up. Our older members, like myself, must have witnessed many miserable scenes illustrative of the views of Dr. Symonds, in which they must have lamented their inability to do any good to the drunkard or his wretched and poverty-stricken family. I presume it will be admitted that repetition of acts, whether of a moral or physical description, constitutes habit, and habit is aptly termed a second nature. If certain maladies gain strength by repetition, as epilepsy or ague, to depress and injure the general health, that drunkenness does so in a twofold sense is well known, so as to injure mind and body. I have been acquainted with many persons who, when sober, much feel their sin and the misery they bring on themselves and others, yet acknowledge they cannot resist the temptation of the public-house, or keep a resolution to be temperate, or keep the teetotal pledge for any length of time. Are not such persons to be cared for and protected by their own confessions from evils which they would wish to escape, but cannot of themselves? How far the offspring of such persons may receive and entail hereditary taints is also a question. Any legal measures which may repress drunkenness and improve the drunkard, together with the puerile and absurd objection of interfering with his liberty, Dr. Symonds has well met and answered in a way which every drunkard when sober would or should respect. To arrive at the best method of carrying out his views is, therefore, a desideratum; but now this question is well started, and not, we trust, to die away, some efficient plan from so many thinkers on the matter will doubtless turn up. Educators and teetotalers advise us to wait their march on the public mind, but their march is and must be so slow, and, let me say, uncertain in its power to put down the evil, that we shall be letting, as it were, weeds grow up and seed, instead of pulling them up, in waiting for an ideal remedy. The expense, too, of a legal machinery to deal with the calamity can be well met by striking a balance *per contra* of the cost to the nation and the unions of the expenses entailed by drunkards for crime and destitution on the public and private purses.

Nailsworth, October 12. I am, &c. THOMAS STOKES.

COMMUNICATIONS have been received from—

Sir HENRY THOMPSON; Dr. GRAY; Dr. BRADBURY; A. D. O.; Dr. P. A. SIMPSON; Dr. H. V. SANDFORD; Mr. JOHN THOMAS; Mr. LAWSON TAIT; Mr. JOHN WOODMAN; Mr. SERGEANT; Dr. THOMAS ANDREWS; G. H. W.; Mr. G. WINSTANLEY; Mr. W. SANDS COX; Dr. ARTHUR GAMGEE; Dr. PHILLIPS; Dr. RUSSELL; Dr. JOHN D. HILL; MEDICUS; Mr. JAMES ROBERTSON; Mr. JOHN KERSHAW; Mr. E. J. COOKE; Dr. J. DANIEL MOORE; Dr. LOAY MARSH; Mr. SPENCER WELLS; Dr. GERVIS; Mr. KESTEVEN; Mr. J. CHATTO; Dr. CAREY P. COOMES.

BOOKS RECEIVED—

The Shipwrecked Mariner, July—Journal of the Scottish Meteorological Society, No. 23—Tanner's Clinical Medicine, 2nd edition—Williams's Climate of the South of France, 2nd edition—Report of the Metropolitan Board of Health, New York—Statistical Report of the Health of the Navy, 1867—Truth: a Libel by Law—British Journal of Dental Science, No. 159—Bulletin Général de Thérapeutique—Wickham Legg's Guide to the Examination of Urine—Ormie's Introduction to the Science of Heat—British Journal of Dental Science, No. 160—Andrew's Bakerian Lecture On the Continuity of the Gaseous and Liquid States of Matter.

NEWSPAPERS RECEIVED—

Devizes and Wiltshire Gazette—La Tribune Médicale—L'Union Médicale—Gazette des Hôpitaux—Gazette Hebdomadaire—Medical Press and Circular.

VITAL STATISTICS OF LONDON.

Week ending Saturday, October 16, 1869.

BIRTHS.

Births of Boys, 1009; Girls, 1044; Total, 2053.
Average of 10 corresponding weeks, 1859-68, 1911·4.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	676	629	1305
Average of the ten years 1858-67	612·6	591·6	1204·2
Average corrected to increased population	...	...	1321
Deaths of people above 90	...	...	...

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-cough.	Fever.	Diarrhœa.	Cholera.
West	463388	...	2	10	2	4	5	6	...
North	618210	...	4	41	1	12	11	12	...
Central	378058	...	5	26	2	7	3	10	...
East	571158	4	10	76	5	24	9	9	...
South	773175	4	6	71	4	13	8	14	...
Total	2803989	8	27	224	14	60	36	51	...

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·823 in.
Mean temperature	54·5
Highest point of thermometer	73·1
Lowest point of thermometer	39·6
Mean dew-point temperature	50·1
General direction of wind	W.S.W., S.W., & S.S.E.
Whole amount of rain in the week	0·25

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, October 16, 1869, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the year 1869.	Persons to an Acre. (1869.)	Births Registered during the week ending Oct. 16.	Deaths. Corrected Average Weekly Number.	Deaths. Registered during the week ending Oct. 16.	Temperature of Air (Fahr.). Highest during the Week.	Temperature of Air (Fahr.). Lowest during the Week.	Temperature of Air (Fahr.). Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3170754	40·7	2053	1462	1305	73·1	39·6	54·5	0·25	25
Bristol (City)	169423	36·1	106	76	*77	74·9	42·5	56·8	0·48	48
Birmingham (Boro')	360846	46·1	253	175	165	73·5	42·9	55·5	0·30	30
Liverpool (Boro')	509052	99·7	320	295	255	70·1	37·9	53·4	0·68	69
Manchester (City)	370892	82·7	249	210	*191	74·0	43·0	55·2	1·23	124
Salford (Borough)	119350	23·1	82	60	72	74·5	42·8	54·8	1·09	110
Sheffield (Borough)	239752	10·5	172	126	100	75·0	41·7	54·8	0·52	53
Bradford (Borough)	138522	21·0	62	71	73	69·9	42·5	55·4	0·26	26
Leeds (Borough)	253110	11·7	135	129	111	73·0	42·0	56·1	0·24	24
Hull (Borough)	126682	35·6	69	59	55	69·0	34·0	51·4	0·49	49
Nwestl-on-Tyne, do.	130503	24·5	64	69	59	...	...	...	...	...
Edinburgh (City)	178002	40·2	120	86	58	64·7	37·0	51·5	0·50	51
Glasgow (City)	458937	90·6	374	268	211	68·3	36·6	51·3	0·80	81
Dublin (City, etc.†)	320762	32·9	162	158	138	74·1	32·6	54·0	0·34	34
Total of 14 large Towns	6546587	35·5	4221	3244	2870	75·0	32·6	54·3	0·55	56
Paris (City)	1889842	...	...	...	752 Week ending Oct. 9.	..	...	...	...	...
Vienna (City)	(1863) 560000	...	...	...	249	...	...	Week ending Oct. 9. 53·8	...	...

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·823 in. The barometrical reading decreased from 30·07 in. on Sunday, Oct. 10, to 29·11 in. on Saturday, Oct. 16.

The general direction of the wind was W.S.W., S.W., and S.S.E.

Note.—The population of Cities and Boroughs in 1869 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous.

* The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

† Inclusive of some suburbs.

APPOINTMENTS FOR THE WEEK.

October 23. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m. King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 1½ p.m.

25. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 1½ p.m.; St. Peter's Hospital for Stone, 2½ p.m.

MEDICAL SOCIETY OF LONDON, 8 p.m. Mr. Peter Marshall, "On a Case of Hydatidiform Mole, with Specimen." Mr. Haynes Walton, "On a Case of Dislocation of the Humerus with Fracture." Dr. B. W. Richardson, F.R.S., "Thermometrical Readings on Animal Heat."

26. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.

27. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.

HUNTERIAN SOCIETY, 8 p.m. Dr. Beigel, "On Chorea."

28. *Thursday.*

Operations at St. George's, 1 p.m. Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

29. *Friday.*

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

TO THE ELECTORS

OF THE

UNIVERSITIES OF GLASGOW AND ABERDEEN.

GENTLEMEN,—Your former Member having intimated his acceptance of a high judicial office, and being thus precluded from continuing to sit in Parliament, you will soon be called upon to elect another Representative to the House of Commons.

Since it has become known that a vacancy would occur in the Representation of your Universities, I have been requested by a large number of the Electors again to offer myself as a candidate; and having in the contest of last year been honoured by the support of nearly one-half of the constituency, I feel encouraged to comply with the request, and I now most respectfully solicit your suffrages.

The contest of last year is so recent that my general political opinions must be already well known to you.

I have had the advantage of some Parliamentary experience, and I may be permitted to refer to the many and important Legislative measures which, while in office as Lord Advocate, under the late Government, I was enabled successfully to carry through Parliament. During that period the interests of the Universities of Scotland were not neglected. In the face of considerable opposition adequate Representation for our Universities was secured, and Grants were made by Parliament to aid in the completion or improvement of University buildings, and in the foundation of Chairs—an expenditure of public money which I consider to have been proper and expedient, made, as it was, towards the support of public Educational Institutions exercising a very important influence on the education of all classes of our countrymen, and not possessed of rich endowments. As a member, along with your late representative, of one of our University Courts, I have had occasion to consider not merely questions of detail relating to the government of a single University, but also questions of a more general character connected with the literary and professional branches of instruction in Scotland. I have thus such a practical acquaintance with the working of our University system, as may, I trust, justify your giving me your support as your Representative in Parliament.

The subject of Primary Education in Scotland received considerable attention during the past Session of Parliament. I hope that the period is not distant when this most important question will be satisfactorily settled. I am sincerely anxious that opportunities of obtaining education should be available to all the children of Scotland; and that the system of National Education which has hitherto been administered with so much success and advantage should be extended, with such changes as shall accommodate it to the altered circumstances of the country. In any Educational measure I regard it as of the first importance that the independence of the teacher should be respected.

A marked feature in the education which has hitherto prevailed in our parochial and in most of our other Schools, and which I am desirous should be continued, has been that the children have had the opportunity of obtaining instruction in religion of a scriptural and unsectarian character. Whilst I hold that no educational measure can be considered satisfactory which does not acknowledge such religious instruction as a part of the National system, I am most anxious to see provision made that, as heretofore, no violence shall be done to conscientious convictions; the right of the parent to withdraw his child from such religious instruction being clearly recognised.

I disapprove of the application of any rules to our primary Schools which would tend to lower the high standard of education that has hitherto prevailed in the greater number of these Schools. The Improvement of the Burgh Grammar Schools is also a matter well worthy of the attention of the Legislature.

I think that the system of Normal School training is important, and ought to be continued, and even extended to each University Town, so that students preparing for the profession of teachers may have opportunities of receiving a sound and sufficient elementary education, to be followed or preceded in all proper cases by the further advantage of attendance at a University.

The question of compulsory education has been matter of frequent discussion. I am favourable to the principle of compulsion in the event of neglect by parents to educate their children; but it is obvious that there are many difficulties in the way of reducing the principle into practice. The provisions of the Factory Acts and of the Workshops' Regulation Act, 1867, passed by the late Government, are valuable as practical measures in the direction of compulsory education, and, if efficiently carried out, will secure the instruction of a large class of children.

With regard to education in Ireland, I am aware that the existing National system is not free from defects, and I hope that the Commission now inquiring into its operation may be able to suggest important improvements. But I am prepared to oppose any attempt to supersede that system by such a denominational system as would practically hand over the management of the Schools exclusively to ecclesiastics.

There are some matters of legal regulation, in regard to which, in my opinion, the members of the Medical Profession have just grounds of complaint. I shall deem it my duty, if elected as your representative, to give my careful attention to these matters in the hope of being able to obtain redress.

During the ensuing Session an effort will be made to settle what is called the Irish Land Question. A general system of leases, such as prevails in Scotland, would probably be the best protection both for Landlord and Tenant; but if that is unattainable, at least immediately, I would be prepared to support a measure giving reasonable compensation to the Tenant for what are truly permanent improvements.

I trust that, in the discussions of the next Session of Parliament relating to Ireland, extreme and violent counsels will not prevail; but that men of moderate opinions will unite to pass such measures as shall satisfy the just claims of all classes of the community, and that they will give no countenance to the spirit of disaffection expressed in the language of threats—concession to which would only invite still more unreasonable and violent demands.

I have the honour to be,

Gentlemen,

Your faithful Servant,

EDWARD S. GORDON.

Edinburgh, 2, Randolph-crescent, 14th October, 1869.

ORIGINAL LECTURES.

LECTURES ON EXPERIMENTAL AND PRACTICAL MEDICINE.

By BENJAMIN W. RICHARDSON, M.D., F.R.S.

ON HYDRATE OF CHLORAL.(a)

GENTLEMEN,—In these lectures on Experimental and Practical Medicine I have in view one or two distinct objects, which your continued recognition tells me most eloquently and forcibly are good objects. I aim to keep up in this country the study of Medicine by experiment as well as experience. I aim to be ready at any time to bring before the working members of the Profession, and to demonstrate to them, every new advance that may be made in any part of the world, if the advance do seem to bear the stamp of usefulness, integrity, and true science. I aim to bring forth for your criticism or commendation, each alike approved, such new thoughts and researches as I may myself make; and, lastly, but not leastly, I strive to help towards perfection the science and art by which we all hold, or we had better not exist, a profession, the science and art of curing disease.

Not to tease you longer with preliminary words, I ask your attention more especially to-day to a new remedy which modern chemistry places at our command. It is called *hydrate of chloral*. The remedy is intended to produce insensibility to pain with prolonged sleep.

At the onset, however, let us understand this point: the insensibility and the sleep this hydrate produces (and, whether it act well or ill, it has the virtue of producing both states) is not an insensibility and not a sleep intended to represent or to rival in action the action of the volatile anæsthetics we use for the abolition of pain during Surgical operations.

True, it would not be inconsistent to apply it for operations; for although it is not, as we use it, readily applicable, it might be administered for the Surgeon by the mouth, as, in the old time, mandrake was recommended to be given by Dioscorides and Pliny. But it is not, I repeat, the intent to set up in this new substance a rival to the well-known volatile anæsthetics, because it is not so good for the purpose as many other agents with which we are familiar—not so good because not so ready, and perhaps not so safe.

Whatever of useful intention there is in the introduction of hydrate of chloral is included in the virtue it possesses of causing prolonged sleep. We meet every day of our lives with cases of disease in which we wish to give the patient a long and peaceful sleep—a sleep which shall represent faithfully the natural rest—the sleep

> "That knits up the ravelled sleeve of care,
> The birth of each day's life, sore labour's bath."

And we try, by artificial means, to induce this sleep. Do we succeed?

For the accomplishment of this great and merciful end we have had in our hands for ages one grand remedy; we call it often our sheet-anchor. The remedy is opium. How we prize it! We know it so well, we do not readily appreciate what it would be to have it taken from us, nor feel that, in its absence, half our art of usefulness in this world would be lost. We learn to apply it in different ways and in different forms of combination; and it is to be admitted, by all candid minds, that we succeed marvellously. Dr. Dover, for instance, when he invented that magic powder which bears his name, did a something in science which, for practical usefulness to the human race, surpasses a thousand more brilliant discoveries. But, after all, with endless manipulation and practice, opium does not answer each of our desires. It commonly causes nausea, sometimes vomiting; it leaves behind it headache; it destroys appetite. Wanted, therefore, a remedy that shall have the advantages of opium, and none of its disadvantages. We look anxiously for this remedy. The intention of hydrate of chloral, be the result good or bad, is to furnish the remedy in question. I do not pretend for a moment to say that it perfectly supplies the want, but this must be considered to be its intention; and I now proceed to relate how far, according to our present knowledge of it, it answers to the call. Perhaps, if it does not answer every particular expectation, it may answer some particulars. We will strive to learn the exact truth, and that we may learn systematically we will in turn look at the chemical, physical, physiological, and practical nature of the new agent.

A sentence before we proceed as to the introduction of hydrate of chloral into Medicine. In chemistry the substance has been known as a curiosity for full thirty-eight years. The great Liebig discovered chloral (from which the hydrate is made by simple addition of water) in the year 1832; but the introduction of the hydrate into Medicine is a fact of the present year. Its introducer, in this respect, is the learned Liebreich of Berlin, whom we know up to this time chiefly from his theory of protagon—a man original in thought, bold in conjecture, and fervid in work. The research and the thought which have led to the announcement of hydrate of chloral as a medicine, form a singularly good illustration of a modern advance in therapeutics—that, namely, of determining the action of a substance on a theoretical estimate, based upon a precise knowledge of the chemical and physical properties of the substance. I have many times illustrated, in respect to the series of bodies which produce anæsthesia, that it is possible to predict, on the knowledge of the composition and the physical properties alone, the action of any one of the class upon the living organism. Well, here is an evidence of the same truth—a truth which will extend to every medicine that may be discovered in future—a truth which, received now as the dream of the enthusiast, will soon be accepted as a fact of science, and as soon afterwards will be treated as a truism, to doubt which will drive the doubter outside the pale of science, a gadding heretic.

CHEMICAL AND PHYSICAL PROPERTIES OF HYDRATE OF CHLORAL.

Hydrate of chloral is a chemical combination of water and the substance chloral on which I have spoken. Chloral itself is a substitution product from common or ethylic alcohol, in which chlorine becomes the substitute for some part of the hydrogen of the alcohol. We make chloral by treating pure and *perfectly anhydrous* alcohol with chlorine. Chloral, however, is not the first product of this action; the first product is the substance known as aldehyde, of which I hand round a specimen.

The change in the first step is as follows:—Alcohol is composed of C_2H_6O. When, then, the alcohol C_2H_6O is acted upon by chlorine, two equivalents of chlorine take away two of hydrogen from the alcohol, forming two of hydrochloric acid, and leaving aldehyde C_2H_4O. By continuing the action of chlorine the aldehyde is, in turn, decomposed. Acted upon by six equivalents of chlorine, three equivalents of the hydrogen combine with three of chlorine to form three of hydrochloric acid, while the remaining three equivalents of chlorine take the place of the three of hydrogen and form chloral C_2HCl_3O. In theory this action seems to involve a very simple process, in practice the process is amongst the most difficult: first, because the production and preservation of large quantities of really absolute alcohol bring serious practical obstacles; and secondly, because the action of chlorine upon alcohol tends to the formation of deeper products of decomposition, thereby greatly diminishing the yield of chloral. Hence, up to this time the product is always comparatively small, one pound of alcohol yielding, as our friend Dr. Versmann finds practically, less than an ounce of chloral; whereas theoretically the pound of alcohol should yield more than three pounds of chloral. This fact necessarily keeps up the price of the article. It cannot be supplied for less than 16s. an ounce.

When the chloral is produced and purified, it appears as an oily liquid, colourless and of pungent odour. It is an irritant to the skin. Its specific gravity is 1500 as compared with water at 60°; its vapour density is 74, compared with hydrogen as unity; and its boiling point is 99° C., 210° Fahr.

When chloral is mixed with a small quantity of water, there is solidification with evolution of heat, and the product, a white crystalline substance, is the hydrate of chloral. The crystals are rhombic. If more water be added to the hydrate, it dissolves, but on evaporation the hydrate is again left. In the formation of the hydrate, about eight parts of chloral combine with one part of water, forming nine parts of the crystalline substance. Hydrate of chloral, therefore, contains 90 per cent. of chloral. The hydrate, although a solid, volatilises, like camphor, without decomposition. I have placed a little here in a long glass tube, and will heat it. You observe it all disappears; but I let the tube cool, and you will find, as the cooling takes place, the hydrate is deposited in various parts. The hydrate dissolves in water so freely that a saturated solution contains 50 per cent. It dissolves also in alcohol and in ether.

(a) Delivered on Tuesday, October 5.

It would divert me from, and would not elucidate, our present work, if I were to follow the decompositions of the hydrate of chloral in contact with other active chemical substances; but it is necessary to notice one particular change. When the substance is acted upon by an alkali, potassa, soda, ammonia, it is decomposed into a formate and into chloroform. We will perform the experiment. We will take a solution of the hydrate and add to it solution of potassa in a burette. Chloroform is at once formed, and causes a milkiness of the fluid, and in time settles at the bottom of the tube. The odour of the chloroform, as you will find, is now most distinct. The decomposition is as follows:—The potassa, KHO, removes one equivalent of the carbon from the hydrate, and the one equivalent of oxygen combining, there is formed formate of potassium—$CHKO_2$, or, in other words, formic acid, CH_2O_2—in which one equivalent of hydrogen is replaced by potassium. There is thus left chloroform, $CHCl_3$. In the decomposition seven parts of hydrate of chloral yield five parts of chloroform by weight, three and a third by measure.

Hydrate of chloral dissolved in excess of water is agreeable to the taste. I have made a solution of it in the proportion of half a drachm to an ounce and a half of water, and will pass it round that you may try it. The odour of the hydrate is pungent, with a singular odour of ripe melon.

PHYSIOLOGICAL ACTION.

We may pass now to consider the physiological action of hydrate of chloral. Up to the present time it has been administered in solution with water, either by subcutaneous injection or direct by the mouth. The best solution is made by mixing one grain of the hydrate with two of water. I shall show you, however, a new fact in a little time—namely, that the substance can be administered, to some extent, by inhalation.

The hydrate appears to act on all classes of animals. I have tested it on frogs, on fishes, on birds, and on herbivorous and carnivorous mammals. In this respect it resembles all derivatives from the alcohols, while it differs from opium, which, on pigeons and other herbivorous birds, is practically negative. The dose which produces effect varies considerably, according to the size and weight of the animal. Pigeons weighing from 8½ to 11 ounces are thoroughly narcotised by 1½ to 2 grains, and die when the dose administered exceeds 2½ grains—*i.e.*, if the dose be injected subcutaneously. Rabbits weighing 83 to 88 ounces are fully narcotised by thirty grains. A frog weighing six drachms is well narcotised with half a grain; a mouse weighing four drachms with a third of a grain. An adult human being will take, by the mouth, one hundred and twenty grains as an extreme dose.

In all cases, whether in experiment or otherwise, the solution of the hydrate should be tested for reaction. If it be found acid, it should be neutralised with a minute quantity of ammonia; but extreme care must be taken in adding the ammonia, or some of the hydrate will be decomposed into formate of ammonium and chloroform.

Before proceeding further, I pause to place before you the theory of the action of the hydrate of chloral as propounded by Liebreich. We have seen that when the hydrate is treated with an alkali it is resolved into chloroform and a formate. The blood is an alkaline fluid; therefore, says Liebreich, when the hydrate is introduced into the organism, every small particle of it will consume the surrounding quantity of alkali, and the decomposition will be completed only after the required amount of alkali has been furnished by the blood. In the smallest point of time the minimum quantity of chloroform is formed, and passes to the first place of action—viz., the ganglia cells of the cerebrum. The action with the increase of chloroform in the blood extends to the ganglia of the spinal cord; lastly, it extends to the ganglia cells of the heart. The action corresponds with the slowest possible application of chloroform, and he concludes, in reference to the ultimate removal of the chloroform from the body, that it is not resolved by oxidation into carbonic and hydrochloric acids, but passes off as chloroform. This agrees with the researches by Snow and by myself in regard to extrication of chloroform simply. Such is the theory of action of chloral by Liebreich. He gives in addition a splendid array of experimental facts relating to the phenomena produced in animals and men by this agent when it is administered by the mouth or by subcutaneous injection. From all his researches we gather from him:—

(*a*) That the hydrate in efficient dose produces deep sleep quickly after administration, and, when carried far enough, complete anæsthesia.

(*b*) That the action is without excitement.

(*c*) That the agent leaves no bad after effects.

(*d*) That the nervous power of the heart is the last that suffers.

(*e*) That the agency at work is chloroform, chemically made, we may say, in the body.

I will move now to a recital of my own experiments and observations, illustrating by experiment as I pass along. We will in this way follow the action of chloral from the lower to the higher classes of animals.

Effect on Frogs.—Frogs come rapidly under the narcotic influence of chloral. To a full-sized frog, half a grain acts as an efficient dose in from six to nine minutes. Three-quarters of a grain will be borne by some frogs, but as a rule this animal sleeps to death under so large a dose. So soon as the agent begins to take effect there is drooping of the head, relaxation of the limbs, closing in of the eyes and profound stupor. The animal is cataleptic in regard to motion, its limbs remaining in the state in which they were left. It will lie in this torpid condition for a period even of twenty hours. You see before you two frogs thus sleeping. The one in which the breathing is imperceptible has had a large dose of the narcotic, and is *possibly* dead. The other, which is softly breathing, has had a smaller dose, and about this time to-morrow, if the temperature of the air be not over 60° Fahrenheit, will begin to wake up. There is no sensibility in animals thus sleeping; there is not even reflex sensibility. They sleep on when every function of life is at rest except one—the circulation. In illustration of this fact, you will see a remarkable phenomenon in the web of a frog's foot which Dr. Sedgwick has placed under the microscope. The animal before being placed under the microscope was put to sleep profoundly with a full dose of chloral. It is sleeping now so deeply that it would pass for dead; and yet you will see in the web of its foot that the most perfect circulation is going on—in fact, in the midst of all this death, there is some feeble motion of the heart. Liebreich's view that the heart is the last part which dies under chloral is thus confirmed, and the fact tends also to confirm his theory that chloroform formed within the organism is the cause of the sleep; for, as some of you will remember, I took occasion to show last year that, under chloroform purely, the heart is the last organ that dies.

When a frog recovers from the deep narcotism we have seen, it recovers perfectly. No bad symptoms remain behind.

Fishes.—Fishes are readily narcotised by the hydrate of chloral. We may administer it to them by inhalation—that is, by mixing the agent with the water in which they float. They absorb slowly in this way, but at last fall asleep. Here is a large carp lying as deeply asleep as you could wish to see. It breathes regularly and gently, and is altogether oblivious and insensible. This animal has absorbed the narcotic by the gills; but here is another large carp which Dr. Sedgwick has put into deep sleep by subcutaneous injection of five grains of the hydrate. It, too, is oblivious, and will remain so probably for four or five hours. To insure its recovery, the water it floats in must be frequently changed, so that the eliminated products may be quickly carried away; the subcutaneous injection of a fish for the production of narcotism is a novel experiment.

Mice.—Mice are readily narcotised with the hydrate. For a mouse weighing half an ounce, a quarter of a grain is sufficient to secure a long sleep. Mice thus put to sleep lie precisely like dormice in the state of hybernation. They pass into sleep without any excitement; they recover without any baneful symptom.

Birds.—Pigeons weighing from eight to eleven ounces are readily narcotised with from one and a half to two and a half grains of the hydrate. No excitement precedes sleep; but the birds, as after chloroform, usually show signs of nausea as they become drowsy. The character of the sleep and the degree of insensibility vary with the dose. A dose of one grain and a half produces drowsiness in ten or twelve minutes at most; deep sleep in one hour and a half, and an interrupted sleep of three hours. During this period the time of complete anæsthesia may be short—not more than five or six minutes. At other times there are reflex movements, and the animal, when moved, wakes to a semi-consciousness. A dose of two grains produces sleep in ten minutes, with perfect insensibility lasting twenty-six minutes. The sleep continues three hours. A dose of two grains and a half by the mouth produces drowsiness, with complete insensibility, in one hour. The perfect insensibility may last fifty minutes, and the drowsiness continue after this from two to three hours. In one case recovery from this dose was accompanied by convulsive movements, and danger seemed imminent for a time, but in the end the recovery was perfect. A dose of two grains and a half will produce com-

plete anæsthesia usually in twenty minutes, and the anæsthetic condition will last from one to two hours, and in thirty or thirty-five minutes there will be restoration of consciousness, still with drowsiness. Recovery is accompanied with tremors, and is completed in six hours. In one instance this dose produced an insensibility which lasted three hours and a half; and, for a time, the evidences of life were so reduced that the bird was supposed to be dead. Nevertheless, recovery was perfect. A dose of five grains produced insensibility of the profoundest kind in sixteen minutes, with death preceded by convulsive movements in fifty to sixty minutes. A dose of seven grains and a half produced insensibility in five minutes, and death in forty-seven minutes, preceded by convulsive movements. In all the cases on which these facts are based the odour of chloroform was distinctly perceptible in the breath of the animals shortly after the administration. The odour lasted a very few minutes. In every instance there was one prominent and persistent effect following upon the administration, which effect deserves to be named separately. There was decrease of animal temperature extending through the whole period of the action of the hydrate. One grain and a half brought down the temperature two degrees Fahrenheit; two grains and a half, five degrees; and five grains, eight degrees.

Rabbits.—The hydrate produces in rabbits the most perfect and prolonged sleep, without any preliminary excitement, sign of oppression, or disturbance. The administration may be made by the mouth or by subcutaneous injection, the dose by either method being the same. The quantity of the dose varies with the weight of the animal. A rabbit weighing from seventy to eighty ounces will be narcotised completely with a dose of thirty grains, but it would bear forty grains without being subjected to serious danger; a rabbit weighing twenty to thirty ounces will go to sleep under a dose of nine to twelve grains, but will bear fifteen. Drowsiness usually commences in from fifteen to twenty minutes, without any sign of preliminary excitement; then follow want of muscular power, beginning in the hinder limbs as under chloroform, dilatation of the pupil, dilatation of the vessels of the ear, universal muscular relaxation, and soon deep sleep.

Of the character of the sleep you can judge for yourselves, for there are animals before you in all the stages of narcotism. One is just passing into sleep; one is recovering; one is in a very profound stupor, insensible to every external impression, and is so mobile that in whatever position you place the limbs or bend the body the position is retained; a fourth is in deep sleep, but appears impressionable, for when you touch it ever so lightly there is an involuntary start. I noticed this condition—which we may, perhaps, call hyperæsthesia—in the very first experiments I made with hydrate of chloral, and Demarquay, of Paris, has since observed and dwelt upon the same fact with much force: as I become better acquainted with the action of the hydrate this symptom appears to me of less moment. I doubt whether the movement is anything more than reflex—that is to say, I doubt altogether whether in any sense it is due to consciousness of impression—pain.

The sleep will last from four to five hours, and the animal will recover as from natural sleep, except that drowsiness will be more prolonged. The desire for food after the recovery is urgent, and no untoward event marks or mars the process of recovery.

In other animals the same series of phenomena are observable after a dose of the hydrate. Here is a young cat to which an excessive dose has been administered, so that she shall sleep to absolute death. There is evidence of life in this animal, for there is gentle breathing and action of the heart, but in every other respect there is perfect death; gradually the breathing will cease altogether, and then the heart. It is impossible to describe the gentleness of this mode of death; indeed, there is a period when it is hard to say whether there is life or death, so gradual is the transition.

Man.—In man the same series of symptoms extending to the extreme changes would without doubt be induced by an efficient dose of the hydrate of chloral; for in so far as the symptoms have been traced, they tally with what we have seen in the lower animals. Long sleep lasting over several hours has been caused in men and women by doses of the remedy varying from thirty to sixty grains, and men in the frenzy of acute mania have been brought into quiet and sleep by doses of one to two drachms. The sleep is gentle, seems to be attended with no symptom of distress, and leaves no serious evil behind. Nausea is, however, occasionally felt after recovery.

In the case of every animal, from the lowest to the highest, the sleep is induced not merely without pain, but with expression of pleasure. Rabbits arrange themselves to sleep in the most natural manner, and cats purr as they pass into rest in obvious comfort of repose.

I have spoken once or twice incidentally on the weight of the animal as influencing action of dose. This deserves particular notice. In the lower animals there is, we may almost say, a common rule in respect to weight of animal and dose of hydrate; thus an animal weighing, say, three ounces, requires one grain of the narcotic to be brought fairly and fully under its influence. If the proportion of dose be beneath this, the symptoms will be imperfectly developed; if it be much exceeded, the symptoms will end in fatal sleep. In the human subject allowance would have to be made in relation not only to size and weight, but to obesity or leanness, to natural habit, and actual state of body in respect to sensibility. But, in spite of all these modifying influences, the rule respecting dose given above would, I believe, be approximately true, and the knowledge of it accounts for the fact of the large doses which have recently been administered in France, apparently with impunity, to the human subject.

Hitherto I have confined my observations to facts which, in the main, support much that Liebreich says respecting the action of the hydrate of chloral. I now add some other observations supplementary and new in kind.

(*To be continued.*)

ORIGINAL COMMUNICATIONS.

ON THE CONDITION OF THE SEMINAL SECRETION IN DISEASE.

By M. LIÉGEOIS,
Surgeon of the Hôpital du Midi, Paris.

(*Continued from page* 381.)

Some authors pretend that the testicles become atrophied in consequence of epididymitis. This is an error. Of more than three hundred cases of both double and simple epididymitis which have come to my notice, I have never been able to detect this atrophy. Six or seven times I have observed a diminution in size of the affected testicle, but in no instance amounting to atrophy.

It is also generally believed that the retention of the seminal fluid situated beyond the stricture may, especially during coition, determine a certain amount of tension. One patient only has described to me a sensation of heaviness in the testicle, augmenting especially after emission.

Does the spermatic secretion persist in case of epididymitis? The fact needs no proof as far as the first few months following the affection are concerned. Sir A. Cooper, Gosselin, Godard, and Curling have demonstrated that the ligature or the excision of the vasa deferentia in animals—dogs, cats, and rabbits—does not suspend the spermatic secretion, and that the seminal fluid, charged with spermatozoa, accumulates beyond the point of lesion, so as to distend the epididymary ducts. Godard has moreover observed that the semen thus imprisoned contained spermatic cells in the act of generating new spermatozoa, which proves that the cells found in the distended portion of the epididymis are not exclusively composed of old elements, but that a certain number have just been produced and are incessantly created.

I once examined an obliterated testicle with spermatocele; it was brought to me from the dissecting rooms, taken from a subject aged 25 or 30 years. I found the head and the body of the epididymis considerably dilated by a whitish liquid, but it contained no spermatic filaments. The same results have been obtained in six autopsies, and which I have already cited, made by M. Duplay. I conclude, therefore, that the generation of spermatozoa ceases after epididymitis, and that the secretion, though continuing to form itself, is simply composed of a liquid which is reabsorbed as fast as fresh quantities are produced. This, however, in the majority of cases, interferes in no way with the virile faculties, for every one knows, and I have myself given an example, that the cryptorchides are very apt at coition, though their seminal fluid is totally deprived of spermatozoa.

What is the character of the seminal fluid in bilateral epididymitis? The quantity is variable, often nearly normal, from 1 to 3 grammes; but I have also seen 4 and even 8 grammes—*i.e.*, more than normal—furnished by a single emission. It appears that the liquid which in the healthy state unites with the humour of the testicle in order to form what is called mixed

semen, can be secreted in case of double obliteration of the epididymis equal in quantity to that in health.

This does not agree with the remarks made by Godard, who, as we have seen, thinks that the obliteration causes an atrophy of the corresponding seminal vesicle. But this interpretation which Godard has given of his two observations seems to me inexact. Let us remember that the two patients in question died, the one eighteen, the other twenty days after the appearance of a simple orchitis. The seminal vesicles corresponding to the side of the diseased testicles were found shrunken; but as the microscopical examination of these reservoirs was not made, and considering the recent stage of the disease, it appears to me that this diminution in size might have been due to an excess in the contractility of the vesicles, produced by inflammation or by the pus itself, which very often exists in the semen of individuals suffering from epididymitis, and which probably comes from the inflamed epididymis. In two autopsies practised by M. Gosselin under similar circumstances, the seminal vesicles were found full of fluid, although there existed an obliteration of the vas deferens. The same thing has been observed by M. Gaussail in a patient dead from a blennorrhagic orchitis, also by M. Hardy; in this latter case the seminal vesicle corresponding to the diseased testicle was larger and harder than the one of the healthy side.

It may also happen that the prostatic secretions are exaggerated, and thus add considerably to the quantity of the ejaculated fluid. In a patient who had had a first epididymitis nineteen, and a second sixteen years ago, the emission amounted to the enormous quantity of 8 grammes, but this fluid contained nothing but abundant spermatic granulations, which gave to it quite an opaline aspect; the prostate was hypertrophied, owing, doubtless, to a functional superactivity of the gland.

If we compare these facts with the cases in which the parenchyma of the testicle is destroyed, and where the emission is reduced to a few drops of fluid—if we compare them to those in which the two testicles are absent or arrested in their development, and in which cases there is no emission at all—we are led to believe that the testicular secretion in bilateral orchitis suffices for the maintenance of the equilibrium of the other genital secretions, just as it suffices in the great majority of cases for the preservation of the virile powers.

The odour of the semen in bilateral epididymitis offers the same characters as in the normal condition, which is a good proof that the spermatic odour does not depend upon the fluid from the testicles, but on the other humours which concur in the formation of this liquid. In a negro attacked with double orchitis of long standing this odour was extremely penetrating, highly ammoniacal, so much so that I should have believed it to be the result of decomposition had not the examination been made two hours after emission, and in a temperature of 12°.

The colour of the seminal fluid offers great varieties. I have generally found it opaline, whitish, and transparent, but rarely of a milky-white, as in the normal state. This latter coloration, however, existed when the prostatic granulations or the leucocytes were in great abundance. I have remarked that when the leucocytes were present in large proportions, the fluid had a purulent aspect, yellowish, and like pus; it became viscous by the addition of ammonia.

These three elements, spermatozoa, fatty granulations, and leucocytes, reflect a white light, and they give, consequently, if their proportion is sufficiently large, the same coloration to any fluid. This is the reason why, on the simple inspection of the ejaculated product, we can never positively affirm that it contains such or such elements, excepting the leucocytes, which fall to the bottom of the vessel, to form a layer of pus, easily recognisable with the naked eye.

The viscosity of the seminal fluid can also present variable characters, but they are of no interest in this question, because these varieties can exist in health as well as in disease.

I have found in the semen all the elements which it normally contains excepting the spermatozoa in case the spermatic outlets were obliterated. Fatty granulations of the prostate gland, pavement epithelial cells, crystals of phosphate of magnesia, and of phosphate of magnesia and ammonia existed in most cases. I have also met with sympexions. These elements, little known and first described by M. Robin, generally present themselves in the shape of irregular plates of greyish colour, and of variable forms, sometimes spheric or elliptical. Their origin remains as yet unknown; they are not dissolved by acetic acid nor ammonia—proof that they do not come from concretions of mucus—but they are easily dissolved by the liquid which is secreted by the glands of the urethra, and this is the reason why the sympexions rapidly disappear if the semen is agitated. These elements give to the recently ejaculated semen the flocculent aspect. We should also find, according to M. Robin, in the seminal fluid of persons attacked with bilateral epididymitis, little nuclei of ·004 mm. to ·005 mm., with decided contour, translucid, and resembling little rings with pale greyish granulations in their centre. These nuclei are said to exist only in small number in the normal state, and M. Robin thinks they probably originate from the epithelial cells of the vasa deferentia. But in spite of my greatest care in search of these elements, even with a powerful lens such as that author recommends, I have never been able to find them. Lastly, the seminal fluid in bilateral epididymitis, as well as in the normal condition, contains vibriones which are developed from the contact of the air.

We have thus far limited our study to epididymitis without taking into consideration parenchymatous orchitis—*e. g.*, the inflammation of the secreting element itself. Godard and Cullerier say that inflammation of the glandular parenchyma of the testicles ends in azoospermia. But we can scarcely admit such to be the case in epididymitis, inasmuch as the inflammation is generally limited to the epididymis, and does not extend beyond the body of Highmore.

Let us examine what takes place in simple unilateral epididymitis. All authors agree that patients attacked with epididymitis of one side only, the other remaining healthy, are potent and fertile; consequently their semen contains spermatozoa. But what is the degree of activity of the healthy testicle? Nothing is said of it! Not knowing, therefore, at the onset of my researches that the examination of the seminal fluid in unilateral epididymitis could offer anything worthy of interest, my patients in whom I have investigated this matter are only sixteen in number. Of these sixteen patients, aged from 20 to 30 years, thirteen entered the Hospital for treatment of the disease; the epididymitis of the remaining three was of old date, and they were examined incidentally. The seminal fluid of each of the thirteen patients contained but a small quantity of spermatozoa—from one to thirty and forty—only one of them possessed 100 to 150. The epididymitis of all, with the exception of this latter patient, was of blennorrhagic origin. This one had contracted the disease from practising coition on his knees; there was no coexisting discharge from the urethra. It is very probable that in this case the functions of the diseased side had been restored, which gives new proof of the distinction between accidental and blennorrhagic epididymitis. The facts just cited scarcely agree with what was to be expected. We should naturally suppose that the obliteration of one of the testicles ought only to diminish by one-half the number of spermatozoa, and which would still leave us several hundred of them. What may be the cause of this great diminution of the spermatic elements? Two suppositions can be made: Either involuntary excretions of semen take place during the disease, which clear the spermatic channels of a portion of their contents, or else the inflammatory process existing in one of the testicles lessens the secretion of the other gland. In order to satisfy myself as to the truth of my first hypothesis, I questioned a certain number of patients attacked with unilateral epididymitis, and who, it is well known, are not wanting in the Midi Hospital. I found, in fact, that this affection acts as a very efficient cause in producing nocturnal pollutions. It is rare to find patients in whom the orchitis has lasted from fifteen to twenty days who have not had at least one involuntary emission, sometimes two and three, and even in those patients who ordinarily do not suffer from these ejaculations, though they are often abstinent for some length of time. The knowledge of this particularity gave me the solution of a problem which had always puzzled me. It was this—How is it that individuals attacked with bilateral epididymitis dating from fifteen to twenty days no longer present spermatozoa in their seminal fluid? What had become of those which previously existed in the seminal vesicles? Surely they had not been dissolved, for, of all anatomical elements, none probably resists longer molecular disaggregation than the spermatozoa. They can be preserved for entire months in putrefied liquid, years in acetic acid or ammonia, and the most energetic nitric or sulphuric acid does not destroy them. This is a remarkable fact when we remember that the most innocent fluid in appearance—the fluid of the ovule—has the power of rapidly dissolving them. Lest, therefore, we admit that the humour of the seminal vesicles, in which the spermatozoa are held in suspension, exercises a dissolving action upon these elements analogous to the liquid of the ovule, and which is scarcely admissible, we find a very plausible explanation of their absence in the

pollutions which are so frequent in persons attacked with epididymitis.

But to return to our subject. It is certain that one, two, and even three ejaculations during twenty days occurring in a healthy man could not reduce the spermatozoa, as we find them in patients with unilateral epididymitis. I believe, therefore, that the nocturnal pollutions come in but for a very small share of the scantiness of the spermatozoa in unilateral epididymitis, and I admit by exclusion that the secretion of the opposite testicle is very much diminished.

Let us now look at the results obtained from the last three of the sixteen patients; that is to say, those who had been cured of their unilateral epididymitis.

1. A patient, 32 years old, had a blennorrhagic epididymitis of the right side seven weeks ago. The epididymis is indurated, the one of the opposite side is healthy. The seminal fluid—three grammes—is opaline and viscous, with exceeding rare spermatozoa, sometimes necessitating as many as seven and eight preparations to find but one or two of them.

2. A patient, 27 years old, had a blennorrhagic epididymitis of left side two years ago. The induration of the cord still exists. The testicle of the opposite side is normal. The seminal fluid—1·50 gramme—only presents from one to four spermatic filaments. Prostatic granulations and leucocytes exist in large quantity.

3. A patient, 29 years old, had an orchitis of the left side twelve years ago. The disease had developed itself without sexual intercourse, and was considered of a rheumatic character at that time. This patient is attacked with a blennorrhagic epididymitis of the same side four years afterwards. The right side has never been affected. The left testicle is smaller than the right. The seminal fluid—two grammes—contains from five to ten spermatozoa.

These three observations seem to prove that blennorrhagic epididymitis, both of long or recent date, diminishes the secretion of the testicle of the opposite side. I should attach to these observations—too few in number to venture a conclusion from—but little importance if they were not confirmed by other facts, and which might have been deduced *à priori* from certain ideas previously emitted. If, in fact, venereal excesses on the one hand, and constitutional diseases ending in death on the other hand, are the most accepted causes which diminish the secretion of the testicles, we must admit, supposing this secretion already diminished in unilateral epididymitis, that in the latter case these two causes must easily bring about a suspension of the spermatic secretion.

First about the venereal excesses. M. Hirtz, in the work already cited, joins to the two observations which I have already given, another, appertaining to an individual of excellent health, who at the age of 25 years was attacked with an intense epididymitis. The induration of the parts persisted for five years. The semen contains no spermatozoa, although his genital functions have always remained in perfect condition. "I remember to have observed," says M. Hirtz, "other similar cases where persons with unilateral orchitis, and who were perfectly cured of the disease, never had any children afterwards." "There exists in some authors," he continues, "a mention of sterility consequent upon orchitis of one side only. I do not look for an explanation; I only note the fact."

We next come to the constitutional diseases ending in death.

(To be continued.)

COMPOUND FRACTURE OF THE PATELLA—RECOVERY.

By J. P. ALDRIDGE, M.D., F.R.C.S.

On Christmas morning last I was called to a woman, aged 53, who had sustained a severe injury. On arriving, I found a transverse fracture of the patella, with a wound laying open the cavity of the knee-joint, and extending round the knee on either side as far as the outer and inner boundaries of the popliteal space. The leg lay in a flexed position, exposing the cavity of the joint, but the lateral ligaments were not ruptured. Part of the fractured patella protruded through the wound; there was considerable hæmorrhage, but not requiring the tying or acupressing of any vessel. I may here mention that the patient had inflammation of the joint, with deep-seated abscesses in the thigh, some years before, which resulted in partial stiffening of the joint.

On the morning above named she was proceeding upstairs in the dark, and fell stumbling down two steps, her leg doubling under her. She states her knee struck on one of the steps, which caused the mischief; but probably the violent doubling up of the leg caused the contracted muscles of the thigh to bear violently upon the patella, the ligamentum patellæ resisted, and the bone gave way. Be that as it may, the injury was severe, and one requiring no small consideration. After careful examination, I resolved to try and save the limb, so, with the aid of my assistant, Dr. F. W. Smith, replaced the parts into their proper position, and brought the edges of the wound together by means of silk sutures and adhesive plaister. The parts were most accurately and carefully adjusted, a few turns of a bandage placed around the thigh to prevent muscular contraction, as also over the calf of the leg. I laid the knee in a pillow-splint, raising the leg a little. At noon the same day found her very restless, and administered an anodyne, which soon composed her, and she expressed herself easy, and slept several hours.

26th.—Still quiet; no fever; pulse 79.

27th.—Slight constitutional disturbance; pulse 84.

28th.—More composed, and passed a good night.

29th.—Removed sutures and applied more strapping; found the whole extent of wound united by first intention, and skin natural and cool. Left the knee exposed to the air and covered lightly with a fold of blanket placed over a cradle.

Since then, recovery has been most complete, and without the slightest constitutional disturbance, free from pain, and enjoying good rest; to use her own words, "I have been quite easy, Sir, ever since you took out the threads."

A month after the accident the patient could sit up, and in six weeks, with some assistance, walked into another room.

I would only make this one remark in forwarding this most interesting case to your valuable journal. How wonderful are the reparative powers of Nature when left to herself, especially when placed under favourable circumstances! Had the woman been removed from her family and friends, or had the limb been exposed to the concussion and displacement consequent on such removal, in all human probability inflammation would have set in, followed by extensive suppuration, gangrene, etc., necessitating the loss of limb; but now, happily, the leg is even more useful than before, and she can walk with comparative ease and comfort.

Dorchester.

CARIES OF THE FOOT—EXCISION—RECOVERY WITH A SOUND AND USEFUL LIMB.

By A. S. G. JAYAKAR, M.R.C.S. Eng., etc.,
Assistant-Surgeon, Bombay Army.

Notwithstanding the rapid strides that have been of late made in England and on the Continent in the department of Conservative Surgery, it is really astonishing what a poor reception it has met at the hands of Surgeons in India. This may be accounted for in one of two ways. It often happens that those patients who are the fit subjects for excision and other conservative operations are the very men who are most impatient of being able to leave the Hospital soon. It is not less common, on the other hand, that the means or number of assistants left at the disposal of the Surgeon are poor. So Conservative Surgery has never up to this date had anything like a fair trial in India. The operation of excision was undertaken in the following case chiefly on account of the patient refusing to have his foot amputated. It has often been a puzzle to what extent the tarsal bones may be removed so as to leave a useful limb behind. The following case will more than illustrate that we may with safety remove, indeed, a larger number than is usually done.

Jeewa M., aged 30, was admitted on January 23, 1869, into Hutteesing's Hospital, Ahmedabad, with a number of carious sinuses situated in the inner aspect of the right foot. On exploration the disease was found to be extensive. It was of twelve months' duration, and first commenced with inflammation and suppuration after a slight hurt. He was weak and scrofulous in his appearance on admission, and was therefore placed on cod-liver oil and iron, with a liberal diet. On February 2, having been brought under the influence of chloroform, an incision about three inches in length was made on the inside of the foot, commencing at the inner malleolus. This incision was extended on the dorsum of the foot to

the extent of an inch and a half, about half an inch from its commencement. The flap having been carefully separated, the scaphoid and internal and middle cuneiform bones were entirely removed; the disease having been found to have invaded the head of the astragalus also, it required to be sawn away. All the tendons and the principal blood-vessels were carefully preserved. The limb was placed on one of McIntyre's iron splints, with a foot-board. The flap having sloughed away in a day or two, on account of the unhealthy condition of nearly all the structures, the wound was dressed from the bottom with carbolic acid dressing (one to ten parts). By February 9 the wound had taken on a healthy action, and was fast granulating from the bottom. His general health kept on gradually improving, the wound in the meantime slowly healing up. On April 17 he had so far recovered as to be able to walk about with the aid of a crutch. The wound had then almost entirely healed.

May 15.—Wound entirely healed, leaving two indolent sinuses behind. Galvanism was ordered to be applied every other day, under which the sinuses showed a great tendency to contract and heal. He left the Hospital on July 13 unexpectedly, to my great regret, as I wished to take a sketch of his foot.

Condition of the Foot.—The sinuses had entirely healed, and he was able to walk about without the assistance of a crutch or a stick. The foot itself appeared smaller than the healthy one, and there was a hollow about half an inch in depth on its internal aspect, where was also situated a hard puckered-up cicatrix.

This case will also illustrate the value of galvanism in indolent unhealthy sinuses.

Ahmedabad.

LEPROSY IN NORWAY.

By DAVID H. STIRLING, M.D.

Having lately had an opportunity of visiting the Leper Hospitals in Bergen, I send you a few notes in the hope that they may prove interesting to those who have not seen the disease. Mr. Hutchinson will, no doubt, give a graphic account of it, but it is probable that his notes will embrace a much wider field than mine can pretend to.

Leprosy in Norway is almost entirely confined to the west coast. A stray case may appear elsewhere, but when the history is carefully investigated, connexion with the coast is almost always traced. There are from 25,000 to 30,000 lepers in Norway. Bad house accommodation, poor and insufficient diet and clothing—in short, a generally bad sanitary condition—is believed sufficient to produce it. Its hereditary character is too well known to be disputed, but it originates *de novo* under the conditions mentioned above. It is now a well-established fact that Swedes and Norwegians who come from upland districts to the coast, and live in the same manner as the poor native population, contract the disease even more readily than those brought up in the district. The converse of this is equally interesting—lepers who leave the west coast of Norway in the early stage of the disease and emigrate to North America very often recover, and continue free from it afterwards.

Damp cold weather increases, and dry warm weather diminishes, the number of cases throughout the country.

Two varieties of leprosy are well marked, the tubercular and anæsthetic, but many cases are of a mixed character. In the mixed cases sometimes one form, sometimes another, predominates.

The tubercular form usually appears first in the skin of the eyebrows. Small nodules form, hard, without much, if any, discoloration, which soon assume a dusky yellowish or brownish hue. The nodules or tubercles press upon the hair bulbs, destroy them, and cause the hair to fall off. The disease does not produce any uneasiness in this early stage, and the patient rarely seeks advice. There is no weakness nor pain, the ordinary occupations are followed, and in this condition the leper may live, and work, and marry, the disease remaining stationary or advancing slowly. The rapidity of progress or the reverse depends apparently on hereditary predisposition and the external surroundings of the patient. Where the former exists, other things being equal, the advance is more rapid and less amenable to treatment than where it is not; and when the latter vary, at one time better, at another worse, so does the disease retrograde, remain stationary, or advance. When it advances the eruption spreads over the face (rarely, if ever, appearing on the hairy scalp), body, and extremities, is seen on the conjunctiva, tongue, and entire buccal cavity, and, as post-mortem examination shows, equally affects internal organs. In the acute form the eruption spreads rapidly and without any constitutional disturbance. Should the case now prove favourable, the eruption ceases and begins to disappear. During this stage the system suffers severely, there is active febrile disturbance, high pulse, furred tongue, and great prostration of strength. I saw one case in which Dr. Danielssen informed me the patient had been four months confined to bed. The eruption had been extensive, but was then entirely gone. The sufferer, a young, well-built, and tolerably nourished man, seemed quite prostrate; his pulse above 100, and weak. The skin over the whole body seemed of a dusky hue, but whether the peculiar colour depended on the disease or other causes I could not make out. The cases that progress unfavourably, and they unfortunately constitute 90 per cent. of the whole, are marked by very sad changes. The tubercles increase in size, the face becomes almost shapeless from the masses seated closely over it, the lips and nose are sometimes enormously swollen, and the whole surface of a mottled brown and livid colour. Small tubercles appear on the conjunctiva; the tongue is covered with hard nodules from the size of a small pea to that of a field bean; the voice becomes husky from laryngeal deposit; often there is complete aphonia, not seldom blindness. The feet and hands become affected, and the extremities tuberculated, livid, and swollen. The poor sufferer is now comparatively helpless, but, as long as no internal disorder shows itself, is able to undertake certain duties, netting, carpentry, and such-like, and can enjoy life to some extent among his leprous companions. Men and women are alike occupied so long as their strength admits of work, and it is wonderful as well as pleasing to see the industry and cheerfulness of many of the patients even in later stages of the disease, when ulcerations have rendered them pitiable objects and great sufferers. Old non-ulcerated cases are seen in which the eruption is principally confined to the face and ears, and which are marked by no constitutional disturbance. The patient is hideous to look upon, but strength does not appear impaired, and the body is well nourished. How long such cases may continue I could not very well make out—downward progress sooner or later ensues. The ulcerative stage is characterised by foul sores, healing here, breaking out there, until in time the body is covered with the scars of old and the dressings of open sores. The bones of the nose are often destroyed; the lips ulcerate; fingers, toes, and even larger portions of the extremities are removed, and the smell meanwhile such as can be mitigated by no amount of skill and attention. Disinfectants of all kinds are freely used, but the sores are too much for them. Death takes place from exhaustion, the immediate cause usually some pulmonary, gastro-intestinal, or renal affection. The only post-mortem appearance peculiar to tubercular leprosy appears to be enormous development of large connective-tissue cells in and around the tubercles.

The anæsthetic form begins with the formation of a red spot or spots, which may be seated on any part of the body. Pain is felt at once, and is generally severe; in consequence of this the sufferer seeks assistance at a much earlier stage of the disease than those attacked with the tubercular form do. To this earlier treatment is attributed the larger proportion of recoveries in anæsthetic cases. The spots enlarge, the skin feels thickened, but not elevated; gradually slight elevation above the surrounding skin is felt, but there is no approach to a tubercular condition. The thickening and elevation of surface seem to depend on effusion into and under the skin. Should recovery now ensue, the spots assume a brownish hue, gradually changing to white, having then a puckered appearance, almost like a cicatrix, caused by interstitial absorption. The white spots are at first devoid of sensibility, but as recovery progresses this is restored. When the disease advances the connective tissue surrounding the nerve fibrils increases in quantity to such an extent as to gradually destroy by its pressure the nerve structure. Pain is now excruciating in and around recent spots and along the course of the affected nerve. The nerves of the extremities and the fifth pair of cerebral nerves are most commonly and severely affected. On the peculiar condition of the nerves all the after changes depend. The ulnar nerve is felt rolling under the finger, as it passes over the inner condyle of the humerus, like a thick hard cord. As long as the sensory fibres continue to transmit impressions distinctly, pain is severe, at times excruciating; when changes have advanced so far as to greatly impair or destroy their function, pain subsides, and anæsthesia follows. When the fifth pair are implicated the eyes are fixed and lustreless, the jaw droops, the facial lines of health disappear, and the expression of the patient is not unlike

that of dementia. If to this is added the ulceration of parts caused by deficient innervation, the aspect of countenance is, if possible, more painful than that of the tubercular variety.

In those parts of the body to which the diseased nerve distributes fibrils the temperature is lowered, the skin shrivels, the surface cracks, and an intractable form of ulceration follows. Partly by ulceration, partly by interstitial absorption, the fingers and toes disappear, the eyeballs may burst and leave only a shrunken fibrous structure in the orbits, the bones of the nose become necrosed or carious, sores appear over various parts of the body, and ultimately the patient dies exhausted. The downward progress is usually very slow, and many years may be passed of lingering death. The only post-mortem appearance peculiar to anæsthetic leprosy is seen in and around the affected nerves. Connective tissue is in unusual quantity, and this, along with effusion into the sheath, compresses and alters the nerve tubules. I could not make out to what extent the actual fibril with its axis cylinder is supposed to be affected, but Dr. Sand, of Molde, with whom I conversed particularly as to the pathological appearances, was certain as to the enormous development of connective tissue. The delicate conducting substance in the axis cylinder appears to be wholly destroyed, and this in consequence of pressure from without.

One is tempted to speculate on the nature of a disease the course of which is so terrible, and the pathological appearances peculiar to it apparently so simple; but I fear it would be both unprofitable and vain.

Leprosy is not considered by the Norwegian Physicians to be infectious in any sense. It cannot be transmitted by inoculation. Treatment consists principally in securing favourable sanitary conditions and improving the general health. An equable and rather high temperature is considered beneficial. It affects all ages, is almost entirely confined to the poorer classes, and, when recovered from, is apt to return. Those who have suffered from one variety may be attacked by the other, or suffer from the mixed form at any after period.

Dr. Sand asked me if any parts of our country were damp and cold, and inhabited by poor, ill-clad, ill-fed, and badly housed people. I answered there were plenty such. He replied, "Look there for leprosy, and perhaps you will find it is not confined to Norway."

The Norwegians, as a race, are kind and hospitable, our Professional brethren so courteous and friendly as to make one feel quite at home in a strange land.

To Dr. Danielssen, Dr. Sand, and Mr. Wiesner I owe my warmest acknowledgments.

Perth, August 24.

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Medical Times and Gazette.

SATURDAY, OCTOBER 30, 1869.

DR. ANDREW WOOD AND THE MEDICAL COUNCIL.

We have always regarded Dr. Andrew Wood as being eminently a man *qui a le courage de son opinion*, but we certainly did not appreciate the extent of that courage till we read his defence of the Medical Council.(a) There is so much truth in the saying *qui s'excuse s'accuse* that it required no little courage in a member of the Council to undertake its public defence at all, though, if the thing was to be done, no better and more fitting member could perhaps be found to do it than Dr. Andrew Wood; for he is one of its most able, hard-working, and useful members, an eminent representative of all its best qualities and virtues, while some would say that he also eminently displays that proneness which is attributed to the Council to convert by excess the grace of eloquence into the defect of loquacity. But if any vindication of the Medical Council by one of its members required some courage, much more was the courage needed to undertake it when no more could be said in favour of that body than Dr. Andrew Wood has found it possible to say; for of all the acts and works selected as the grounds of his "Vindication," there is but one that has not before received full public acknowledgment and praise. And the solitary exception is this—"One of the duties of the Medical Council is to elect its President; that it has failed in that duty can hardly be said, when we recall the names of Sir Benjamin Brodie, Mr. Green, and Dr. Burrows, who have successively held the chair, and of Dr. Paget, who now so worthily occupies it." Now, we freely confess that we never have praised the Council for this, and we must further confess that we should have hardly thought it respectful to have noted as especially remarkable or praiseworthy the fact that a body of men, who are all eminent, or prominent, in their Profession, had chosen eminent men to preside over them. For all the other works mentioned by Dr. Andrew Wood as entitling the Medical Council to honour and glory, we ourselves, and others, have given it ample credit over and over again.

The work of compiling an official register, and keeping it accurate, can hardly be said to be one of a very high character, or one requiring great ability or complex machinery; still, the Council has performed it, and has not neglected the higher duty of "preserving it pure."

The present British Pharmacopœia has been everywhere received with grateful appreciation and praise; it is so valuable a work, and so well done, that, if it is not too often and too persistently flourished in our faces, we will not be so ungracious as to allude to the first edition of it.

The successful labours of the Council in the cause of preliminary education, the degree of improvement that has attended its efforts to improve Professional education and its work in preparing a new and complete scheme for this, the usefulness of its visitations of examinations, and the industry and ability of its committees on various subjects, have all, we venture to say, been duly acknowledged and fully appreciated.

That the conduct and actions of the Medical Council have been subjected to free, and at times severe, criticism, we do not for a moment deny, but we contend that the criticism has, as a rule, been fair and just. The Council is a public body, a very costly one to the Profession, and it has been in existence eleven years; and the general indictment against it is, not that it does "nothing but indulge in talk and personal reflections," but that, considering the length of time it has existed, it has not done nearly as much for the Profession and the public as might have been fairly expected from it. And as its partial failure seems to be attributable to its faulty constitution, a demand has risen for its reformation; and, at the same time, for large amendment of the Medical Act by which it exists, and which it has to administer. Dr. Andrew Wood himself acknowledges the deficiencies and defects of the Act, which the Medical Council has entirely failed to get amended; and he admits, as it seems to us, most of the charges brought against the Council. He is "not prepared to deny that it has at times shown a certain degree of

(a) The Medical Council and its Critics: a Vindication. By Andrew Wood, M.D., F.R.S.E., F.R.C.S.E., Member of the Medical Council.

timidity—nay, if you will, of vacillation and procrastination—which is certainly not deserving of commendation." It is surely not a sufficient answer, when reproached with such faults as these, to say that it would have been worse to have "acted rashly, hastily, and imperiously." And in considering whether or not the Medical Council has acted tardily and timidly, it is to be remembered that it had not to originate, or to take the lead in carrying out, entirely new ideas, but rather to guide, to give practical effect and if necessary greater impulse to already existing ideas and widely-spread tendencies and movements. Improvement in education is one of the most general demands of the day, and had affected our Profession as well as other classes of the nation. And we may observe that even as regards preliminary education the Society of Apothecaries of London had instituted an examination in general education years before the existence of the Medical Council, and had gone further even than the Council has yet dared to do, for in their examination some knowledge of Greek was compulsory.

Clinical examinations also are not, we think, entirely a creation of the Medical Council, for we believe that the University of London instituted them in at least some of their examinations for Medical degrees before the days of the Medical Council; and in this connexion, as the Americans would say, Dr. Andrew Wood has, no doubt unwittingly, done an injustice to the London Society of Apothecaries, when he says that they have "not yet adopted" clinical examinations. They had not when members of the Council visited their examinations in 1866, but they have done so for at least the last two years.

Dr. Andrew Wood's "Vindication" is, no doubt, ably and powerfully written, but we think that he fails to answer the accusations generally made against the Medical Council, while we can hardly believe that he really wrote in reply to such an exaggerated charge as that the Council were "doing nothing but indulging in talk and personal reflections;" and we would suggest that to notice such a charge at all seriously was the very way to invest it with a degree of weight and importance it would otherwise have failed to carry.

YELLOW FEVER IN CUBA.—SEÑOR D. HERNANDEZ POGGIO AND THE SURGEON OF THE "BARRACOUTA."

The experience of Medical service in the army and navy of Spain throughout the last ten years has been of an uncommon cast. Even dating from the war of Morocco, where the cholera exhibited hideous proportions, we have next the expedition to Mexico, the war in St. Domingo, the warlike operations against Chili and Peru, and now again the intestine conflict in Cuba. Experience in epidemics has accumulated with these undertakings. There are now cholera, yellow fever, and dysentery existing in this queen of the Antilles. Our contemporary the *Siglo Medico*, under the head of "Correspondencia de Cuba," has recently published some letters from an able and active officer, Señor D. Hernandez Poggio, dated from the General Military Hospital at Havanah, and written in July last. To the information contained in these we invite our readers' attention.

In February there was really no cholera in St. Jago de Cuba; yet for the two years preceding it had smouldered in different parts of the island, appearing capriciously here and there. Since that date it has lighted up with alarming violence, principally at the points where the Spaniards succeed in occupying posts held shortly before by the insurrectionary forces. The chief foci at the time of writing were Puerto-Padre, las Tunas, Minas, Alta Gracia, and all the line of operations from Puerto-Principe to Nuevitas. There seems a present intention of raising at Puerto-Padre a Hospital of temporary character, but sufficient in its dimensions to be of advantage for all three epidemics. The ravages of yellow fever are now found to be extreme. Several of the Faculty have died, and other persons of note, among the rest Señor D. José Lacunza, one of the most worthy and important members of the Mexican court and minister during the brief empire of Maximilian I. He had resided three years at Havanah, and was 70 years of age at the time of his decease. Many are dead who have been driven into the towns through the unsettled state of the country. Such persons think themselves proof against the yellow fever from being creoles and acclimatised. There are also many of the Faculty who lend themselves to this idea and speak of it, when found in such persons, as biliary fever. The author of these letters has shown in other publications that acclimatisation is not possible against miasms, and this is plainly seen in Cuba. The fact is of first importance as regards troops in the colonies. The French Physicians have so far modified their nosology as to construct a particular species—"the yellow fever of the creoles and acclimatised"—but this is quite unnecessary. The icterus in biliary fever is found to occur early, that of yellow fever much later; besides which, critically considered by microscopical and chemical tests, the matters vomited are very different. We should take account more than we do of the liver as a blood-forming organ, as well as of its more special function in forming bile for digestion. We shall derive instruction perhaps from an episode that is interpolated in this correspondence, which turns on a visit of the Medical officer of the *Barracouta*, Dr. Laurenton Pasley, to the General Military Hospital in Havanah when Dr. Poggio was in charge. "See here," says the Spanish Physician, "two strongly contrasted fever cases:—One of these patients is a man in an early stage of the second period of the fever; the skin of a pale yellow and spotted with petechiæ of various sizes, mostly on the chest and arms. The conjunctiva has not that strong yellow tint that mostly accompanies icterus. The urine is thick, of yellow ochre colour, not betraying with nitric acid the presence of the biliary principle. The other patient has counted six days of the second period, and has presented in due sequence all the symptoms above enumerated. The petechiæ have now disappeared; the conjunctivæ as well as the skin have a dark yellow colour; the urine is thick, and of an orange-yellow hue, and in the analysis made of it you may observe, as the drops of nitric acid fall into the test-tube, there are formed in the middle of the liquid, as it were, mucous filaments of a greenish-yellow colour, like lemons when they begin to ripen, and their rind takes on a greenish-yellow cast. Here, then, we have two examples of the fever with the yellow colour in both that has served to give a name to this affection; but the difference in the colour as to its cause is radical. In the first the tint is caused by a modification of the blood such as it undergoes when a bruise or ecchymosis creates a stain in the tissues, as happens in its decline; in the second case there is bile everywhere, and the tissues are stained by its colouring principle. This distinction is of first importance as regards treatment of the cases.

"Let us pursue our course round the wards. Some we see vomiting the black matter that gives character to this affection (*vomito negro*); others, wild with delirium, springing from their beds on the slightest occasion, and rushing madly through the wards, in sad contrast with debility and prostration found otherwise in them; some with ataxie, others with adynamic phenomena; some on the mend, others getting very much worse; some in whom a copious and fœtid secretion from the parotids necessitates a full use of the carbolic acid; or maybe a diarrhœa of filthy matter replaces the black vomit, with icterus and other symptoms present which show it to be the yellow fever as endemic in the Gulf of Mexico.

"Let us sketch the programme of treatment exhibited in these letters, which is that most approved in the Spanish colonies. Take a soldier in the Hospital wards, with a sweaty cheek which is also pale and somewhat full; the conjunctivæ injected; the eyes both brilliant and moist; a very intense cephalalgia; sharp pain in the lumbar region, and often extending to the dorsal; in the limbs and articulations a sense of bruising

and pain; extreme prostration; the skin both hot and dry; full pulse; a tongue with red edges, moist, and narrow, with a yellow-white coat; the buccal mucous membrane red, and transuding blood on slightest pressure (a symptom quite proper to this complaint, first insisted on in Cadiz by one of our colleagues); the breath with characteristic fœtor; faltering step, and walking sometimes impossible. With such an assemblage of symptoms, we take three grammes of ipecacuanha infused in ninety grammes of water, and give the strained liquor at one dose, favouring the action of the emetic by aid of lukewarm water; for experience has shown that relief will follow in proportion to the vomiting. The straining efforts are mostly followed by notable prostration of strength, after which sleep is got for some hours, and, on waking, the patient feels relieved, most of the bad symptoms having left him, such as the cephalalgia and pain in the limbs, etc. With this medicine there was prescribed vegetable diet and vegetable lemonade, which must be very strictly adhered to. Five hours after the action of the vomit, if in spite of the relief we find the same appearance of the tongue, fœtid breath, and fever continuing, we then prescribe as follows:—Castor oil thirty grammes, almond oil and lemon-juice each sixty grammes. Mix, let it be taken at once; continue with lemonade and diet; and during the twenty-four hours give four or six emolient enemata with oil. Unless there is great action of the bowels with some accompanying prostration, you still solicit their action by giving, on the following day, almond oil sixty grammes, lemon-juice thirty grammes for a single dose, with four or five of the same glysters repeated during the day, and if this is not enough, a seidlitz powder, with the same diet as before. Generally the patient improves with some degree of appetite, but we must adhere to the vegetable diet. Should the fever disappear, and the skin lose its dryness and resume an agreeable feel, give then some slightly sudorific powder by way of inducing a critical sweat; if such succeed not, a Dover's powder. On the disappearance of the symptoms, you seek to sustain the strength by diet that cannot fatigue nor yet overstimulate the stomach enfeebled by previous vomiting, using some slight bitter such as this:—Infusion of Roman chamomile ninety grammes, alcohol of melissa one gramme. The patient may now have vegetable diet alternately with animal broth, fortified with a spoonful or so of sherry.

"But, supposing that, instead of favourable symptoms, the patient displays intense cephalalgia and heat above the forehead, much pain in the limbs, heat of skin rather increasing than on the wane, pulse strong, but yet compressible, the countenance like mahogany, the breast and arms appearing of a clear yellow hue, with some petechiæ, the breath and also evacuations fœtid, tongue unimproved, but also a little dry, saliva tinged with blood, great anxiety in the epigastrium, while pressure by the hand gives pain, and the cœliac trunks are felt to pulsate powerfully—in such a case as this, for the vegetable lemonade you substitute the sulphuric, and rub over the stomach with the following liniment:—Chloroform 60 grammes, alcohol 120 grammes, almond oil 30 grammes. Foot-baths may be also used; applications to the forehead with acetic or sedative lotions; and, to lessen the fever, you give at discretion, every half-hour or every hour, a spoonful of the following mixture:—Tincture of digitalis 2 grammes, water 250. Mix. As the fever declines you suspend the digitalis, or give the chamomile and melissa, for a roborative, as above. If there is nausea or bilious vomiting, you administer Seltzer water, and also the broth with wine is also better given cold. With hæmorrhage from nose and mouth, perchloride of iron 2 grammes, water 250 grammes. A spoonful each quarter of an hour, half-hour, or every hour. If the vomit is black, the anti-emetic potion of Riverius;(a) and if neither this nor chloroform gives success, try a sinapism to the epigastrium. If the tongue be dry, inclining towards a point, and of a dark red colour covered with a blackish coat, if there is delirium and the pulse is getting weaker and smaller, the following potion may then be given, a spoonful at a time:—Chamomile tea 250 grammes, sulphuric ether 2 grammes, soft (*blando*) extract of bark 7 grammes. Mix. You may add valerian, asafœtida, according to the indications; flying sinapisms to the extremities; enemata of chamomile; and extract of bark, with or without sulphuric ether, giving always the preference to the extract of bark over quinine on account of its astringent qualities. We rarely see the hiccup, an advantage which we think we owe to chloroform; in such few cases as it has existed, we combat it with chloroform or the sulphuric ether. For such condition, whether of ataxia or adynamia, special directions need scarce be given. They will occur to experienced Physicians.

"Blood is never taken away, for we consider the whole mass to have undergone a great change. By drawing blood you hurry on the second stage, and, when convalescence ensues instead of a recovery, which is proverbially rapid, you have long suffering and anxiety and tedious complications.

"Such is the treatment of the General Military Hospital of Havanah. It differs much from some we have seen, and especially from that of Copland, much in favour with some foreign Physicians. What is of highest importance is a rigid attention to diet; and woe to the Physician who is tempted into allowing an increase of food on account of the deceitful remission between the first and second period. He will surely repent such indiscretion."

Such was the tableau, and such the programme of treatment, as we learn from Dr. Poggio, which he placed before the English Doctor by whom he was subsequently invited to pass on board the *Barracouta*. Here he met with an agreeable reception from the commander and officers, and sat down with them to *hinch* (*sic*), which is the second breakfast of the English. After which he was accompanied by them on board the mailed frigate the *Defence*, with the pennant of commodore flying. In passing through the quarters of this vessel he became aware of the peculiar odour which characterises yellow fever, and spoke of it to Dr. Pasley. Its value as a prodromic symptom has been very much insisted on by Dr. Bertullus, of Marseilles, and cannot deceive those once acquainted with it. Sure enough, on that very evening no less than sixteen sailors of the *Defence* were seized with *vomito negro*. "I felt that it was not without warranty," says Dr. Poggio, "that I had called attention to it; but I abstained from reverting to the subject afterwards, lest I should be thought too fussy and intrusive (*petulante*) by my English acquaintance." The commodore made speedy arrangements for departure. The gunboats of the squadron put out to sea that very night. Dr. Poggio has no further news of them, but we at home may supply this hiatus. A letter from Rear-Admiral Wellesley has subsequently reached England. The vessel arrived in Halifax from St. Domingo on the evening of September 9, having left St. Domingo on August 3, with seven cases of yellow fever on board, one of which died that very day. There had occurred then two accessions of the fever—the one before reaching St. Domingo, the other afterwards. In the passage to Halifax all recovered on board the *Defence*, and on arrival this ship's crew was generally healthy.

Some interesting meteorological remarks occur in these papers of Dr. Poggio. Impressed by the opinions some have expressed as to the subjection of this fever to cosmical disturbances, he addressed himself to the College of Jesuits at Havanah, where a meteorological department is maintained with a considerable degree of spirit. Señor D. José Maria Velez, one of the brethren in this college of Belen, presented to him his own tables of terrestrial magnetism, as well as those of Padre Secchi. But on an analysis day by day with the variations of the disorder in the Hospital, no correspondence to them could be found in the maximum of the declinometer and double-wire instrument (*bifilar*) in any sense, nor with the different oscilla-

(a) That is, the effervescing draught of lemon-juice and bicarbonate of potass.

tions, of which, indeed, there were often more to be remarked when there was least of the disorder in Hospital, so that the result of a very careful investigation was total disappointment. True it is that Messrs. Ampère and Barlow attribute terrestrial magnetism to the action of electric currents coursing round the globe; and Cuba, like the other islands that surround the bank of Bahama, is influenced by the Gulf Stream, whose hot water, mixing with the cold, should certainly develope electricity agreeably to the observations of Captain Duperrey on the influence of maritime currents upon the magnetic needle. Yet so it was. The inquiry as regards yellow fever was rather interesting and instructive than in a direct sense profitable. "I did not take account," he says, "sufficiently in flattering myself with these hopes that the variations of terrestrial magnetism decrease towards the equator, and are more frequent towards the poles, and those of the barometer the same; so that it was not here that we should look to it as a cause of disease, but rather in colder climates. Still, it is possible, however, that new and more refined meteorological observations may designate a new path of research."

MARRIED SOLDIERS' BEDDING.

We have frequently expressed our opinions on the subject of imprudent marriages, especially with reference to soldiers, whose marriages in almost all instances, chiefly from causes beyond the control of the men themselves, are imprudent. We are no advocates for special charitable provision being made for the results of such marriages in general; but, so far as soldiers are concerned, we think the peculiarity of their circumstances renders exceptional treatment of an indulgent character necessary. The fact has been so frequently brought to public notice that the condition of the wives and families of our soldiers, even of those "married by leave," is in many instances one of such constant privation and discomfort as, in addition to being a source of heavy demands on regimental funds, to have rendered necessary the organisation of private means of relief at Woolwich and other garrisons, that we should scarcely again allude to it, were it not a lately published War Office circular has brought the matter forward in a manner directly antagonistic in spirit and effect to any efforts at relief.

It appears that a married soldier is entitled to the same quantity of bedding as his bachelor comrade, but that his children are not entitled to any. Hitherto, as we have been informed by an officer of experience, bedding was issued according to the full regulated strength of regiments, the result being that practically, in consequence of regiments being seldom up to the strength, from men being in Hospital, on furlough, or on detachment, there was always a certain amount of bedding left at the disposal of commanding officers, who, knowing the circumstances of married soldiers, were in the habit of issuing to them the spare bedding according to the requirements of the individual cases. This privilege has now been withdrawn. If a married soldier requires extra bedding for his children, he will have to pay for each set at the rate of "one halfpenny per night," or fifteen shillings per annum; and a pretty high rate of interest this, we should say, for a Government to demand from its own servants—25 per cent. per annum, assuming the bedding to be worth £3 a set. The *Army and Navy Gazette* calculates the estimated saving to Government at £2000 yearly, but at what cost? So long as our terms of military service retain their present form, it seems to us that the health and efficiency of those soldiers who have been permitted to marry ought, as a matter of public policy and of true economy, to be maintained with the same care as is displayed towards the unmarried. The contrary, however, is the case in many particulars. The Hospital stoppages are the same to both, and form a serious obstacle to the married soldier's application for Hospital relief, as being so much subtracted from the means of subsistence of his family; the consequence is that illness which might have been trivial has often become serious, or even beyond treatment, before the admission of the patient. The rations are the same to each; consequently, unless supplemented by the labour of the wife, in washing, domestic service, or suchlike employment, must fall very short of the requirements of the family. Extra duties often devolve upon the married soldier, to supply the place of his unmarried comrade while undergoing Hospital treatment or imprisonment earned by vicious indulgences. And now, in addition to all these relative disadvantages of the married soldier, a privilege trifling in its nature as affects the public, but of great importance to the individuals concerned, has been withdrawn. To General Balfour, the head of the new Control Department, is attributed the credit or discredit of the paltry economy under notice. It says more for his ingenuity in saving than for his judgment in devising where the saving ought to commence, which certainly ought not to be in the "halfpenny per night" system of hiring out bedding to the children of our soldiers. Nor is the approach of winter the time to adopt for the economical experiment.

THE WEEK.

TOPICS OF THE DAY.

The Council of the Royal College of Surgeons have passed a resolution in favour of the unification of examinations for admission into the Medical Profession in each division of the United Kingdom. They have also determined that the preliminary examination ought no longer to be conducted specially by the College, but that it may be delegated to the national educational bodies approved by the Medical Council. The Council of the College certainly deserves no small praise for its ready assent to changes which cannot but seriously diminish the revenues of the College, and, *pro tanto*, place it on a level with the other examining bodies, above which it has hitherto maintained an apparent and, as judged by a pecuniary standard, a substantial superiority. No one doubts that the Royal College of Physicians will be ready and eager to join in the formation of a joint Board, for it would be greatly to the benefit of its languishing exchequer. The Society of Apothecaries will scarcely refuse to join the two Colleges, provided that fair terms of amalgamation are offered. But it is clear that if the Board is to be amicably arranged, there must be no attempt on the part of one or two of the existing bodies to obtain an undue influence in it, to the exclusion or depreciation of others. If there be any disposition shown to claim an unfair advantage, it may be safely prophesied that it will be met by decided resistance, and a storm will be raised which may lead to the wreck, partial or total, of the whole scheme.

It would seem from the address of Mr. Smith, of Jordanhill, delivered at a recent meeting of graduates of the Universities of Glasgow and Aberdeen, held in Edinburgh, that the Medical section of electors has but little chance of obtaining any special Parliamentary representation in the person of the member for those Universities. If any admissions could illustrate the extent of the error involved in the non-appearance of a Medical candidate, they are those made by Mr. Smith, who coolly tells the graduates in Medicine that "it is unreasonable to expect either Mr. Gordon or himself to pronounce decided opinions on questions affecting the Medical Profession directly or indirectly—questions which neither of them had any opportunity of studying, and on which they were asked to give an opinion without even having heard both sides." Now, to ordinary people, it might appear reasonable that, when a candidate for a place in Parliament wooes the suffrages of a special constituency, one of the largest portions of which are bound together by community of profession, status, and interest, such a candidate, before applying to the constituency for support, should make himself acquainted with the special questions affecting those whom he wishes to represent. But

Mr. Smith is above all such considerations; he has neither had opportunity nor time to study the questions which affect Medical men, and he has formed no opinion upon them. He hints that Mr. Gordon is in the same predicament of unfitness for representing a Medical constituency. Mr. Gordon, however, may think fit to disclaim a share in Mr. Smith's sublime ignorance or indifference. But, be this as it may, can the Medical Profession receive a more pointed lesson on the necessity of being represented in Parliament by members of their own body?

Dr. George Harley, F.R.S., has, we understand, resigned the office of Physician to University College Hospital, to be the better able to devote his time and energies to the duties of increasing private practice.

The squabble between the Guardians of St. Pancras and the Poor-law Board is still dragging on its slow length. The interview between Mr. Goschen and the guardians, although the President of the Poor-law Board administered some sharp castigation to the local junto, may be claimed as a triumph by the party of retrenchment, inasmuch as Mr. Goschen admitted that the parish of St. Pancras neither required the whole of the Highgate Infirmary nor the whole of the new schools; and, although he declined to take the Infirmary off the hands of the guardians, he proposed to join another parish with St. Pancras which should share the space and bear part of the expense. According to Mr. Goschen's admission, therefore, it is clear that there has been extravagance, and this alone is a justification of the opposition which the plans of the late board of guardians aroused. The vulgarity and smallnesses which have been recorded in the daily papers as distinguishing characteristics of the present board must not be allowed to diminish the force of the fact that its election was the result of a valid grievance. We have always held that the erection of palatial infirmaries and schoolhouses is an injustice to small ratepayers and an encouragement to pauperism, and that Mr. Gathorne Hardy's Bill was a piece of spasmodic legislation, the result of a not disinterested cry. The course of events has amply borne us out in our opinion. But all local questions in reference to the subject of pauperism must before long be merged in the general one. The pauperism of England is the subject of all others which demands the attention of the legislature. How far the Poor-law system is responsible for it is a question that cannot long await discussion. One thing is certain—that the two advance together *pari passu*, or rather that pauperism seems always to receive a fresh impetus from, or to keep a little ahead of, the legislation for its relief. England stands at present alone amongst the nations of Europe in the unenviable possession of the sore and the nostrum. It is not that our population is beyond our means of support, for in proportion to area we are far outnumbered by Belgium and the Netherlands. Our Poor-law and our pauperism are the bad heritage bequeathed to us by the Tudor convulsion, and we need a new Reformation to rid us of the consequences of the former one.

The death of the Earl of Derby has left a vacancy in the highest post in the first of British Universities. The election of his successor in the Chancellorship of the University of Oxford will have an interest, though perhaps not so intense a one, for the Profession of Medicine as for those of divinity and law. The principal claims at present canvassed are those of the Marquis of Salisbury, Earls Stanhope and Carnarvon, Mr. Gladstone, and Sir Roundell Palmer. Besides these the names of Lord Churston, Sir Stafford Northcote, and the Earl of Harrowby have been mentioned. At present Lord Salisbury seems to be the favourite.

The exposure of the shams and shortcomings at St. Bartholomew's Hospital has been taken up by the general press, and we are heartily glad of it. But we would remind our lay contemporaries, who are justly shocked at the idea of some hundreds of patients being "seen" in a morning by a single Physician or Surgeon, that the farce is by no means confined to St. Bartholomew's. Has not the general press been the means by which the vicious system has been, to a great extent, patronised and encouraged? Are there no Hospitals which live, or endeavour to live, on the publication of enormous weekly or daily totals of patients who, either with sublime assurance or faith, are said to be "relieved?"

A murmur is rising from the learned and scientific bodies which have been promised rooms in Burlington House. Little or no progress has been made during the past three months in the construction of the apartments for the Royal and other societies which are to be in the buildings facing Piccadilly. It is said that some error in the estimates has occasioned the delay.

The treatment of nurses at St. Bartholomew's Hospital is no new theme of complaint and remonstrance. It may be in the memory of old students that more than twenty years ago a memorial on the subject was presented to the authorities of the Hospital by some amongst the leading students, but was received with the incivility and dogged resistance which seem to be traditional amongst the St. Bartholomew's authorities. At that time the complaint was that the nurses were overworked and underpaid; that there was no proper accommodation for them; and that the condition in which they were kept was not such as to allow them to perform their office faithfully to the sick, who were therefore the sufferers. No answer whatever was given to the memorial, but the dressers who had been active in getting it up were privately told by the Surgeon under whom they served that they had better mind their own business and not interfere with the affairs of the Hospital. Since that time it is true that the nurses have been relieved from the work of scrubbing the floors of the wards, but in other respects but little change seems to have been made in their duties or in their condition. Each ward has twenty-five beds, and is under the superintendence of a sister and three nurses. On an average each nurse is on duty seventeen hours a day. Twice a week she has night as well as day duty, and on each of these occasions she is in attendance on the sick for twenty-three hours without intermission. In payment she has eight shillings a week, the major part of her board, and a couple of dresses per year. The small amount of sleep she is allowed she has to get in an ill-ventilated box, without either window or fireplace. Occasionally she is liable to be on duty for thirty-six hours on a stretch. This condition of life, as may be supposed, is not without its effect on the health of the women. Last year 60 per cent. of the nurses were warded, and the average annual death-rate amongst them is 3 per cent. The fact is that although their duties are far more onerous, fatiguing, and difficult than those of maidservants in the houses of the upper middle classes, they receive no higher wages, and they are far worse provided for. That there is no more complaint or the general performance of the nurse's duties in the Hospital, speaks volumes in favour of the women. But this by no means exculpates the Hospital authorities, who are responsible no less for the health and well-being of their staff of servants than of the sick.

The Medical Profession will be glad to notice that the citizens of Edinburgh have shown a proper appreciation of the distinguished services rendered to science, the human race, and the Medical School of Edinburgh by their fellow townsman, Sir James Y. Simpson. On Wednesday last Sir James Simpson was received by the Lord Provost and the Town Council in solemn conclave, and was presented by them with the freedom of the City of Edinburgh. The Corporation of the City of London might well take a lesson from the example set by the northern civic magnates. The honours of the City of London are not often conferred on men who have distinguished themselves in promoting the well-being of mankind by scientific research and advance. There seems to be a general idea in England that science, like virtue, brings its own reward, and

that to offer it any outward and substantial acknowledgments would be a piece of gratuitous impertinence. When Mr. Lowe refused to vote a sum for a memorial to Faraday, he knew that he was merely expressing the stereotyped popular notion. The Scottish people are undoubtedly more ready to recognise scientific and intellectual eminence than are the English.

The City Commission of Sewers certainly will not imperil their dignity by rapidity of action. Like other great and potential bodies, their movements are not hurried. It is now two years and a half since the question of providing carriages for persons suffering from infectious diseases and the erection of a public mortuary were referred to the Sewers Committee. The date of the reference was March 12, 1867. On October 26, 1869, the committee report that there is a great necessity for these improvements. However, "better late than never," a mortuary is to be erected in Golden-lane at the cost of £13,000, where there are to be a chamber for the reception of twenty-four dead bodies and rooms for post-mortem examinations, the storing of conveyances for the sick, and the disinfection of clothing, etc.

We do not diminish scarlet fever. Last week there were 233 deaths from it—a greater number than in the week previous. The whole death-rate of London is above the estimated amount, but the chief excess is from zymotic disease. The deaths last week were 1476, the estimated amount being 1349. The deaths from zymotic disease were 509, the corrected average number being 364.

The question of the propriety of holding inquests on all persons dying in workhouses has come prominently before the public in consequence of the quarrels in the parish of St. Pancras. The guardians of St. Pancras represented to Mr. Goschen that the resident Medical officer of the infirmary encouraged unnecessarily the holding of inquests on persons dying in the infirmary, and hinted that his motive for so doing was to obtain the fees allowed for giving evidence and making the post-mortem examinations. They represented also that certain jurymen had remonstrated at the indiscriminate way in which inquests were held. With regard to the fee question we may dismiss it with the remark that the former Medical officer of the St. Pancras Infirmary voluntarily proposed to give the fees for inquests to a charitable purpose. But the important question remains whether it is right that an inquest, as in the case of persons dying in prisons, should be held on the body of every person dying in a public workhouse. This appears to be Dr. Lankester's opinion. If it be a well-grounded one, a more severe censure upon the management of workhouse infirmaries could not be passed. If there were proper Medical superintendence and inspection of workhouse infirmaries, there could be no more reason for holding inquests on all persons who die in them than on all persons who die in public Hospitals. The increase to the rates, were inquests universal, would be enormous. That such an opinion should be held by many respectable persons, however, shows the distrust with which all that pertains to the public relief of the poor is regarded. The appointment of Medical inspectors to visit constantly the workhouse infirmaries in town and country would have gone far to remove this distrust as far as the sick are concerned. This piece of necessary reform was, however, prevented by the combined influence of the Earl of Devon and the Secretary of the Poor-law Board. The course of recent events at St. Pancras shows how real is the necessity for constant—not merely occasional—supervision of these infirmaries by a disinterested Government Medical officer.

An inquest was held on Wednesday last, by the Deputy Coroner for East Middlesex, on the body of a child poisoned by its mother with salts of sorrel (binoxalate of potash). The viscera were examined by Dr. Letheby, who said that the tongue showed the presence of a corrosive or caustic agent, and that from a pint of sanguineous fluid obtained from the child's body, which fluid gave a highly acid reaction with test-paper, he had obtained two and a half grains of oxalic acid. The deceased's mother, a woman named Freedman, had also attempted to poison herself. An inquiry is also now going on at Penge into the circumstances of the death of a stockbroker's wife named Fowler, who is supposed to have died from taking strychnia. Her body was found stretched on the balcony outside her window. In the former case the poison was bought from a chemist named Marshall; in the latter the source from which the poison was obtained has not yet been shown.

The sixty-fourth anniversary of the battle of Trafalgar fell on Thursday last week. Amongst the published list of surviving officers we notice the name of one Medical man—Deputy-Inspector of Hospitals Peter Suther, Surgeon of the *Swiftsure*.

The Medical Officer of the Privy Council has issued a circular on the reappearance of relapsing fever in London. It was absent from 1855 to 1868, but in and after July, 1868, a few cases were received into the Fever Hospital and the German Hospital, Dalston, the patients being chiefly Polish Jews, who had lately come to Whitechapel. The first patient admitted into the Fever Hospital was, nevertheless, an Irishwoman living in Whitechapel. It is, however, possible that she may have caught the infection from some of the recently arrived Jews in the neighbourhood. The disease had for some time previous to this date been epidemic in Russia, and was especially prevalent in St. Petersburg when cerebro-spinal meningitis was raging in East Prussia, in which district subsequently typhus, apparently mixed with relapsing fever, extensively prevailed. At first the patients received into Hospital here were exclusively Polish Jews—a wretched hungry class—but afterwards the disease seemed to spread more through London, chiefly, in all probability, by the agency of tramps, with whom, indeed, the fever is most frequently associated. Up to the evening of October 15, 143 cases had occurred in London. Mr. Simon assures the parochial authorities that the Hospitals, both general and special, have been taxed to their utmost, and that they must not look to these for any further assistance in the reception and management of their sick poor.

RELAPSING FEVER.

From inquiries which we have made at different Hospitals it would appear that the rate of mortality in this disease is extremely small, and this may in some measure tend to allay the alarm which has been excited in consequence of the great prevalence this autumn of zymotic diseases. Nor, indeed, does this fever seem to be associated with absolute want, for in only a few of the cases has the cause been traced directly to actual starvation; hence the name of relapsing fever is better than that of famine fever. Many years ago it was usual to mix up cases of relapsing and typhus fever, and so an erroneous idea of the danger of this disease was common; even in this epidemic several cases of typhus fever have appeared, but it is to be hoped that, with the improved sanitary conditions we at present possess, it will not spread to any great extent in the metropolis. With regard to diagnosis, the thermometer is likely to be of much use, as the increase of temperature is very rapid, and is usually higher than in cases of typhus or typhoid fever. Even when the symptoms are very much like those in a typhus patient, the sudden defervescence about the seventh day will at once show the nature of the disease. As far as we have observed, the change of temperature precedes the fall of the pulse by a short time, and soon after the tongue begins to be moister and clean at the edges. This fever seems to attack all ages, and the majority of cases occur under 30 years of age; in typhus, on the contrary, the average age of the patients attacked is higher, and the mortality, especially in old people, very high.

PROVINCIAL MEDICAL SCHOOLS.

In the return published last week in the *Medical Times and Gazette* of the number of students pursuing their Professional studies at the eleven recognised metropolitan Hospitals, an increase was shown over the number of the preceding year. The gross number now registered exceeds that of the year 1860, and amounts to 1237. The returns just compiled for Dr. Cursham, the Government Inspector of Provincial Anatomical Schools, show also a great increase over the number of last year, and nearly approaching that of 1860, when they amounted to 333; this year they number 330, against 284 of the preceding year, although one institution—the Hull and East Riding School of Medicine—has disappeared, and the returns from the Cambridge University School have not been received. Taking the schools in numerical order, it appears that there are at—

	Dissecting pupils.
1. Birmingham, the Queen's College (with which, it is stated, the Sydenham College is amalgamated)	96
2. Manchester Royal School of Medicine and Surgery	86
3. Liverpool Infirmary School of Medicine	40
4. Leeds School of Medicine	38
5. Newcastle-upon-Tyne College of Medicine	29
6. Bristol Old Park Medical School	26
7. Sheffield Medical Institution	15
8. Cambridge University School	
Total	330

It therefore appears that there are in the

Metropolitan Schools	1237
Provincial Schools	330
Making a total of	1567

gentlemen pursuing their studies in order to become qualified members of our Profession. We wish them success.

THE SUPPLY OF SUBJECTS.

We notice that one or two of our contemporaries have taken this matter in hand, and have treated our remarks with the best intentions, but with rather misguided sentiment. It evidently strikes them that burking, body-snatching, and the like are shortly to become the employment of those who must dissect and teach, and they thus fail to see the drift of what we call attention to. There is no need for such proceedings, nor do we suppose such proceedings possible, supposing there were; but we do see the need of a revised code of administration of that Act which was the result of the outcry against such barbarities. Until teachers themselves meet together, and carefully talk the matter over, and bring the real state of things before the authorities of the Home Office, we cannot see how the dearth of subjects for our most important study is to be remedied. We have already pointed out the main cause—a matter better understood by ourselves than by our lay friends—and it is clear that hints of body-snatching and its attendant horrors cannot advance our cause. With the best intentions, these writers have not thoroughly understood the unfortunate position of anatomical teachers and pupils.

THE MILITARY BEARD.

There is a strong feeling upon the part of the army at home in favour of being allowed to wear the moustache and beard. It is difficult to understand upon what grounds the prohibition of wearing the beard can be defended by the military authorities. The metropolitan police have lately had the privilege of wearing the moustache and beard granted to them, and, from the general acceptance of the boon, it would seem to be regarded by them with high favour. On the score of appearance, saving of trouble, and of its conducing to health, the wearing of hair on the chin is to be recommended.

THE MEETING OF POOR-LAW MEDICAL OFFICERS.

It is unnecessary to call attention to the proceedings of the meeting of Poor-law Medical Officers, a report of which will be found in another column. The indefatigable President, Dr. Rogers, gave an account of his late visit to Ireland, and called attention to the large proportion which Medical relief bears to total relief in that part of the empire. His conclusion was that good Medical relief prevents pauperism, inasmuch as the sick labourer is speedily cured and enabled to maintain his family. There is good sense in this so far as it goes, though it is but a very small part of a large matter; anyhow, we may say that good Medical relief, administered by skilful and well-paid Medical officers, is cheaper than the cold or negligent attendance which a man underpaid may be supposed too apt to give.

A POOR-LAW DOCTOR: HIS WORK AND PAY.

Dr. Lyel, one of the district Medical officers of Shoreditch, having lately died from fever caught in the performance of his duties, the guardians appointed Dr. Timothy as his successor. This gentleman soon found the work so excessive and the pay so inadequate that he resigned his appointment. In his letter of resignation Dr. Timothy says that he had to attend daily thirty-six people, and to see ten or twelve more in the evening. For this he got five shillings and sixpence—something less than three-halfpence an attendance. Yet, on accepting his resignation, the guardians congratulated themselves upon knowing that there were many gentlemen ready to succeed him. Whether this be true or not, there can be but one opinion as to the remuneration of the Medical officers; it is disgracefully inadequate.

MR. JOSEPH SWAN.

This distinguished member of our Profession, whose resignation of his seat in the Council of the Royal College of Surgeons we lately announced, has just received from his former colleagues in that institution the following testimonial. At a quarterly meeting of the Council of the Royal College of Surgeons of England on Thursday, October 14, 1869, it was resolved unanimously:—

"That the Council, in accepting the resignation of Mr. Joseph Swan, cannot forget that in his earlier years he enriched the Museum by his dissections of the nervous system, and they now beg to express to him their regret that his health should compel him to retire from a position in which his strictly honourable and upright feelings have ever tended to promote the best interests of the College and of the Profession.

(Signed) "Edward Cock, President."

Mr. Swan, who was the father of the Council of the College, was admitted a Member of that institution so long ago as October 1, 1813, and in 1817, and again in 1819, he carried off the Jacksonian Prizes; in 1822 and in 1825, the Collegial Triennial Prizes; in the latter year the Council awarded him the honorary gold medal of the College; in 1831 he was elected a member of the Council in the vacancy occasioned by the resignation of Mr. Richard Clement Headington, Surgeon to the London Hospital; and in 1843 was elected, with other members of the Council, an honorary Fellow of the College. We join with his numerous friends in expressing a hope that his valuable life may be prolonged for some years.

THE HIGHLANDS OF SOUTH AMERICA.

We solicit the attention of our readers to observations on another page which relate to the climate of the Andes and also of a range of mountains comprised within the boundaries of the Argentine Confederation to the north of the river Plate. These observations we owe to Dr. Scrivener, for many years resident and traveller in South American countries. He brings before our notice the ready accessibility of the last-named range of mountains, their advancing colonisation, their present convenience for residence, and their highly favourable tendency

in cases of phthisis pulmonalis. These papers are mainly a reproduction of his earlier and more ample communications to the very able periodical the *Revista de Buenos Ayres*.

"THE SIGNING OF SCHEDULES."

A CORRESPONDENT has drawn attention to a statement in the *Lancet* of October 16, under the above heading, respecting the practice of signing the students' schedules by the dean of the school or other one authorised person, instead of requiring the signature of every professor or lecturer. Had the writer, instead of singling out one London Hospital only as having obtained permission for *one* lecturer instead of all to sign the schedule, referred to the regulations of the College, or to the *Medical Times and Gazette* of October 24, 1868, he would have found neither novelty nor grievance in the matter. For when the attention of the late President of the College—Mr. Hilton—was called to the great inconvenience occasioned both to teachers and students at the various metropolitan and provincial Hospitals by the multiplicity of signatures required by the College, he brought the subject before the Court of Examiners, and it was decided that the signature of *one* trustworthy officer appointed for that purpose should be sufficient. An intimation to this effect was accordingly made to *all* metropolitan and provincial Hospitals without distinction. So much for "*audi alteram partem*."

THE ROYAL ALBERT HOSPITAL, DEVONPORT.

To cut the Gordian knot which has arisen from the misunderstanding between the Medical officers attached to this institution and some of the authorities, the Lords of the Admiralty and the Committee of Management have resolved to appoint a resident officer to have sole charge of the Lock wards of the Hospital. The appointment will be a good one, the salary amounting to £250. Several candidates are already in the field. Their relative claims are to be decided by the principal Medical officer of the Royal Naval Hospital, Devonport, in conjunction with the Chairman of the Committee, Joseph May, Esq., Senior Consulting Surgeon to the Hospital. The examination will take place on or after Wednesday, November 3. It is perhaps a matter for regret that the original proposal to give to Dr. Armstrong, Director-General of the Naval Medical Department, the selection of the candidates, or at least a list of them, has not been carried out. In such a case the less local interests are introduced the better.

THE "JOHN BULL" ON THE ARMY MEDICAL SCHOOL.

THE *John Bull* for the 16th inst. presents an article on the Army Medical School at Netley which strikes us as being in bad taste. The writer puts into the mouth of an army Medical officer the expression that there are so many Doctors in the service that a soldier cannot go to the rear without having one in attendance, and misinterprets the word "rear" as meaning "wash-house" in military parlance. Army chaplains who read or contribute to the *John Bull*—among whom, by the way, we observe, from the subsequent number of the *John Bull*, that the chaplain of Netley Hospital occasionally takes his place—will know very well the true construction of the expression, and we leave it to some of them, as clergymen and gentlemen, to say whether it is the general feeling among their body that such expressions should pass unnoticed when applied to a body of officers in her Majesty's service with whom they are connected by official as well as, in many cases, friendly bonds. The article proceeds to animadvert upon the pay, allowances, relative rank, and uniform of Medical officers in a style quite in keeping with the above specimen. It also contains distinctly personal and easily recognised allusions to gentlemen connected with the Army Medical School. We shall not further notice the unworthy attack except to remark that one of the charges brought against the present system of administration of the Army Medical Department is that the competitive examinations for admission to the Medical service of the army and the further course of instruction at Netley are unnecessary in the case of men who have already obtained their qualifications. This shows such complete ignorance of the subject that we mention it merely as a curiosity, and to add that, from many a dreary hour spent in irksome silence while practically experiencing the "foolishness of preaching," we can only wish most devoutly that in many instances a similar process of elimination were applied to candidates for admission to holy orders.

EFFECTS OF SANITARY WORKS ON HEALTH.

MR. MIDDLETON, of Salisbury, in a communication to the *Times*, gives his experience of fifteen years' sanitary works in that town. The results may be summed up as follows:—For twelve years immediately preceding sanitary works the average annual death-rate of Salisbury was about 27 in 1000. For twelve years after good drainage and water supply the average fell to 20 in 1000, and for the last three years it has been only 17 in 1000. Fever has been all but unknown, and cholera, which destroyed nearly 200 in 1849, before sanitary works, killed only 14 in 1854, when these works were in progress, and all of these deaths occurred in premises then remaining in their old dirty and undrained state. In 1866 not one case of cholera originated in Salisbury. For twelve years before the drainage the total births were 3320, the total deaths 3015; for twelve years after drainage the births rose to 3413, and the deaths fell to 2213.

HOT WATER.

A PARAGRAPH has been going round the papers to the effect that the Hon. Edmund Burke, when ill, used hot water as a panacea. He used to pour it hot from a tea-kettle into a basin, and sup it with a spoon as one would soup. Hot water consumed in this way forms what the ancient Medical world would call a diluent, deobstruent, and diaphoretic. The water, be it observed, should be hot—not what we call *lukewarm*, or, as our fathers would have called it, *hlcaw;* for the word *lew*, or *luke* (which is a corruption), expresses the whole idea, and the compound word *lukewarm* is, as Horne Tooke said, an unnecessary reduplication, just as if one should say *coolwarm* or *hotwarm*. *Lew* or tepid water makes man puke; but water, as hot as can be sipped, stimulates the stomach, assists it in pushing on ill-digested or half-digested food, moves the bowels, and provokes perspiration and urine. The addition of a squeeze of lemon-juice to the hot-water makes it extremely palatable if the tongue is flabby or ill-tasted; and any purgative, followed by this hot drench, acts quickly in a half-dose. Some years ago, dyspeptics were to be seen sipping hot water just after dinner for the prevention of gastrodynia and waterbrash; but even Physicians have fashions, and this one has gone to its own place.

FROM ABROAD.—DUPUYTREN'S STATUE—MORTALITY OF INFANTS.

IT is much to be regretted that M. Nélaton did not delay his recognition of Dupuytren as the "most glorious" of French Surgeons until the inauguration of his statue at Pierre-Buffière, near Limoges, which took place a few days since. He would have been saved the impropriety of expressing his sentiments on Medical matters through so unseemly a channel as the *Figaro* newspaper, and he would have been able to protest as far as in him lay against the indifference and apathy with which the ceremony seems to have been regarded. Never, in fact, did anything of the kind go off so flatly. The only persons of any note present were—M. Cruveilhier, who officiated as President, M. Larrey, representing the Institute, and M. Brierre de Boismont, the alienist Physician, representing the *Union Médicale!* Not a member of the Faculty or the

Academy of Medicine, not one of the Paris Hospital Surgeons was present or forwarded letters of apology. The local Practitioners and functionaries mustered in pretty good force, just as they might on any other festive occasion; but as for a worthy attempt at the commemoration of so great a name in French Surgery none was made. The inconvenient distance from Paris and mismanagement in regard to the invitations are among the explanations offered, but they are of little avail; and the occurrence is certainly a remarkable example of how soon (Dupuytren has only been dead thirty-five years) the highest reputations lose their popularity when founded upon mere personal qualifications, unsustained by high principles, enlarged views, or important discoveries. The comparative enthusiasm with which Laennec's statue was inaugurated last year furnishes an instructive contrast.

One of the most interesting addresses (although, like all the others, very much too long) delivered during the discussion now going on at the French Academy of Medicine on the Prevention of Infantile Mortality, is that of M. Fauvel. The chief point he had in view was criticising the report upon the subject delivered in by the Committee appointed by the Academy, which, he believes, erred in the excessive minuteness of the regulations it recommended to have enforced with respect to nurses.

It is certain, M. Fauvel observes, that the mortality of nurse-children is enormous, whether this be taken at 51 per cent., as stated by the Committee, or at 71 per cent., as declared by M. Boudet; but it is to be regretted that, in place of laying down minute regulations, the Committee had not more thoroughly investigated the causes of this great mortality. These may, in fact, be all reduced to three—an original debility which is oftenest met with in natural children; defective care, and insufficient or bad nutriment; and, although all these causes are often united, the last — insufficient alimentation—is by far the most influential. To judge from the report, it would be supposed that defective surveillance is at the bottom of the mischief; but, in point of fact, good nurses are very disproportionate to the number of children, and bad ones are necessarily resorted to. Here, as in other cases where the demand exceeds the supply, all sorts of frauds are practised. A small number of nurses belong to an easy class of society in the country, and these readily get advantageous employment; but the majority of those who pursue this occupation are in a very necessitous position, and quite unfit to furnish suitable milk. Even the more select nurses, chosen and watched over by the municipality, have to be aided by gifts and assistance of various kinds, and, in spite of the excellence of this establishment, the guarantees it gives to families, and the encouragement to nurses, so great a repugnance have the one and the other to submit to its minute regulations, that it is going fast into decay, the private offices, with far less securities, being preferred in consequence of the greater degree of personal liberty allowed. There would, in fact, be more good nurses, did not these vexatious regulations prevent many eligible women pursuing the occupation. The application of these may prevent bad nurses being employed, but they in no wise augment the number of good ones.

The evil with which we have to deal may be summed up in this concise formula, explaining the sequence of events—penury of money, penury of milk, exaggerated mortality—a mortality which, at the lowest computation, is 51·68 per 100 for nurse children, while, for the same period of life, on the total of births, the mortality in France is but 17·51 per 100. As a remedy for this state of things the importance of maternal suckling need not be insisted upon; and, in the well-to-do classes, Medical Practitioners yield far too readily to the supposed inability to suckle. It is true that the infants in this class, being provided with good nurses, do not suffer in consequence; but then these nurses are diverted from the infants of women who really are unable to suckle, and this is one source of the scarcity of good nurses. In the shopkeeping class, the habit of women engaging so much in business in France often precludes their suckling; but, in this class, the pay being in general good and the children well looked after, the mortality from this cause is not great. It would, however, be a great mistake to supersede the active surveillance of families by an official superintendence. The nurses for the working and lower classes are, for the most part, quite unfit for their task; and M. Fauvel believes that, in place of encouraging them, it would be better to furnish assistance to the mothers who would suckle.

Regarding a great extension of maternal suckling among the working classes as hopeless in France, and objecting to any increase in the number of nurses, paid as they are at present, M. Fauvel asks whether artificial feeding should be objected to to the extent it is at present. It is true that great mortality attends bringing up infants by hand, but this arises in a great measure from the injurious use of aliments unsuited to the age; and in those departments of France in which this practice so prevails as to have become an object of industry, one woman undertaking the charge of many children is unable to bestow on these the necessary care. Still, even under these circumstances, the mortality does not equal that attendant upon the employment of bad nurses. The good results which often attend upon artificial feeding, under the careful inspection of the mother, have often been exemplified; but it has yet to be ascertained how far these can be realised under less favourable circumstances. For a full trial of this or any other means calculated to improve the condition of these infants, money is indispensable, and, although M. Fauvel would prefer having recourse to private charity for this, he does not believe that an enduring supply would be forthcoming, and would therefore seek it at the hands of the State, believing that pecuniary subventions are quite as justifiable for the purpose of saving human life and health as for improving the breed of horses or any of the other purposes to which they are now applied. The distribution of money so supplied should be undertaken by societies which would put in force the necessary inspection of the condition of the children put out to nurse, as well as that of those belonging to the nurses.

M. Decaisne, in a note addressed to the *Gazette des Hôpitaux* commenting upon M. Fauvel's proposals, observes that he quite agrees with those who think that children may often be well brought up by artificial food, but that this requires so much care, attention, devotion, and intelligence that it ought never to be trusted to mercenaries. Among the poor children in large towns it may be looked upon as impossible, and every child attempted to be brought up by means of the sucking-bottle in Paris may almost certainly be regarded as a dead child.

ROYAL COLLEGE OF SURGEONS.

The proceedings of the Council of this institution have, as usual, been suspended in the hall of the College for the information of its Members. A letter from Dr. Hawkins was read forwarding a copy of the following resolution of the Medical Council:—"That the attention of the several Medical corporations be drawn to the recommendation (being No. 4 of the recommendations and opinions issued by the Medical Council relative to the preliminary examination)—viz., that the examination in general education be eventually left entirely to the examining boards of the national educational bodies recognised by the Medical Council, and that their opinion be asked whether the time has not now arrived when this recommendation should be carried into effect."

Whereupon it was moved by Mr. Charles Hawkins, seconded by Mr. Curling—"That it is the opinion of this Council that the examination in general education should be entirely left to the national educational bodies recognised by the Medical Council."

On the demand of Messrs. Hawkins and Curling, the names of those voting for and against the motion were directed to be entered on the Minutes, viz.:—

Majority for the Motion, 12.—Messrs. Thos. Paget, Lane, Curling, Clark, J. Paget, Hawkins, Hewett, Spencer Smith, Simon, Humphry, Holden, and Erichsen.

Minority against the Motion, 5.—Messrs. Quain, Solly, Hancock, Birkett, and Gay.

The motion was consequently carried.

It was then moved by Mr. Quain, and seconded by Mr. Erichsen—"That, in the opinion of this Council, it is desirable that a single board should be appointed in each division of the United Kingdom to conduct the preliminary examination in general education of Medical students."

On the demand of Messrs. Hewett and Humphry, the names of those voting for and against the motion were directed to be entered on the Minutes. They were:—

Minority for the Motion, 6.—Messrs. Quain, Solly, Thos. Paget, Lane, Gay, and Erichsen.

Majority against the Motion, 11.—Messrs. Hancock, Curling, Clark, Jas. Paget, Hawkins, Hewett, Spencer Smith, Birkett, Simon, Humphry, and Holden.

The motion was therefore lost.

The Council then proceeded to the discussion of a letter from Dr. Parkes, chairman of a committee appointed to consider the report and evidence on Medical education submitted to the Medical Council.

Whereupon it was moved by Mr. Hawkins, seconded by Mr. Curling, and resolved—"That the report of the Committee of the General Medical Council, forwarded by Dr. Parkes, so far as it relates to Professional education, be referred to the Court of Examiners to consider the same, and to report thereon to this Council."

It was then moved by Mr. Hawkins, seconded by Mr. Spencer Smith, and resolved—"That it is the opinion of this Council that there should be instituted a single examining Board for each division of the United Kingdom, before which every person who desires a licence to practise should appear, and by which he should be examined, and that a diploma from either of such examining Boards should entitle the holder to practise Medicine, Surgery, and midwifery in any part of Her Majesty's dominions."

Dr. Acland, as Chairman, forwarded a report of the Committee of the General Medical Council on State Medicine, and invited the opinion of the Council upon it.

Whereupon it was moved by Mr. James Paget, seconded by Mr. Quain, and resolved:—"That the Council agree with the resolution of the General Medical Council on the report of their Committee on State Medicine, that in any amended Medical Bill which may be prepared for Parliament by the Council, it is desirable that the requisite permissive clauses for registering a qualification in State Medicine be inserted in addition to any of the qualifications sanctioned by the Medical Act."

DEATH FROM BICHLORIDE OF METHYLENE.

At the first meeting of the Medical Society of London the President, Mr. Marshall, narrated the following case of death from bichloride of methylene:—"A fatal case of administration of the bichloride of methylene having occurred at Charing-cross Hospital this day week in my hands, and as it is the first case of the kind that has taken place, it is important to know all the facts. The patient was a man 39 years of age, the subject of malignant disease of the left antrum, extending upwards and pressing upon the malar bone, producing slight ecchymosis under the eye, the tumour also protruding from the nostril. There had been one or two attacks of hæmorrhage during the progress of the disease, which had been rapid. From the unfavourable aspect of the case, Mr. E. Canton, under whose care the patient came, refused to operate, but on the following day the friends of the patient and the patient himself strongly urged its performance; and as a day's delay would lessen the chances of his recovery, it was decided to be performed at once. Mr. Canton having called upon me to explain the nature of the case and the patient's knowledge of the risk he was to run in all its bearings, I agreed to administer this anæsthetic. The patient, when brought into the operating theatre, looked somewhat pale and anxious, the pulse was a fair medium one and not frequent. One drachm (by measure) was put into the mouthpiece, which was capacious, and this was administered slowly and cautiously for about three minutes, as nearly as I can judge, not being timed by the watch, the House-Surgeon keeping the left radial under his finger while I kept mine on the right, at the same time observing the breathing. The methylene being exhausted, I now put half a drachm, first examining the pupil which was slightly dilated. The countenance changed, but not suddenly. I called the attention of the Medical staff to the condition of the patient, with the view of asking whether I should proceed further, when his head gradually fell back; the pulse, which had become feeble, now ceased, but there was no stertor nor lividity of countenance. He was removed from the chair and laid in a horizontal position; artificial respiration and galvanism were applied with no good result. I presume that this death was owing to a combination of circumstances rather than to any single cause—1st, his feeble condition arising from hæmorrhage and the exhausting effects of the disease, from which he had suffered for about three months; 2ndly, the mental depression; 3rdly, the want of expiratory power (if I may use the term), which was increased by the necessary bandage round the abdomen to prevent struggling during the operation. I may add that my confidence in the bichloride of methylene is in no way shaken; the case was one *in extremis* where Medical and Surgical aid was invoked against hope. I have said that the cause of death was to be traced to a combination of circumstances, but I have no doubt that the actual, though unforeseen, determining cause was the mechanical inability of the patient to expire as his weakened muscles began to feel the paralysing influence of the anæsthetic. There was no period whatever of excitement, and the death was so perfectly calm that at first it was almost imperceptible."

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

A quarterly meeting of the Poor-law Medical Officers' Association was held on Wednesday evening last, at the Freemasons' Tavern, Great Queen-street. After the chair had been taken by Dr. Rogers, President of the Association,

Dr. Dudfield, the hon. sec., read the report of the Council, from which it appeared that their efforts to strengthen the Association had been fairly successful, seven additional honorary secretaries having been appointed, and nearly one hundred new members enrolled. The Council observed with pleasure that steps are being taken in various unions and parishes of the metropolis with a view to the establishment of dispensaries, and also expressed a hope that, after the various amalgamations now in process should have been completed, the dispensary system would be universally adopted, and medicines be provided at the public cost. The report concluded with an expression of regret at the loss by death of Dr. Colborne, of Chippenham, a former officer and an energetic member of the Association.

The President then proceeded to deliver his address. He began by saying that, in previous addresses, he had brought before the notice of the Association the system of Medical relief which has been in operation in Ireland for the last seventeen years, and pointed out its economical advantages and admitted efficiency. This year he determined to take his autumn holiday in that country for the purpose of collecting further information and making himself practically acquainted with the working of the system. The first dispensary he visited was Rathmines, a suburb of the South Dublin Union. He found everything in order and remarkably neat and clean. The dispensary was supplied with absolutely all that could be required in the treatment of disease. To his inquiries the Medical officer stated that no objection was ever made by the dispensary committee to any application of his drugs or other appliances. His dispensary duties averaged, he said, about two hours daily, Sunday being a *dies non*. He was the registrar and vaccinator of his district. He had held office both under the old and the new system, and he emphatically expressed his opinion as to the great benefits conferred by the Medical Charities Act on the health of the poor. In the past year he had attended 1068 cases at the dispensary, and 289 at their own homes; the population of the district was 15,747. The President's next visit was to the rural district of Rathfarnham. At the time of his arrival the Medical officer was engaged in attendance on the dispensary committee, which sat monthly. On making himself known he was invited to be present and witness the proceedings of the committee. He was struck by the intelligence and

business habits of the members as they went through the examination and confirmation of the requisitions for drugs, passing the monthly accounts, etc. Great astonishment was expressed to him (Dr. Rogers) at the enormous increase of Poor-law expenditure in England. He afterwards found that the committee was mostly composed of *ex-officio* guardians who were gentlemen of property in the neighbourhood. In this district there are three dispensary stations. Attendance is not given at these daily, but the times are so arranged that they alternate with adjacent dispensaries. A midwife is attached to this district. On his return to town, Dr. Rogers paid a visit to the South Dublin Union Workhouse, of the state of which he spoke in the highest terms of approbation, and contrasted the providing of four visiting Physicians to this establishment with the utter absence of any such provision in English unions, where, as in St. Pancras, large establishments are intrusted to the care of resident Physicians, who are mostly young and inexperienced. This arrangement in St. Pancras was made when the guardians, under Mr. Wyatt, were in close relations with the Poor-law Board. If a visiting Medical officer had been appointed to superintend the Medical arrangements of the house, the late scandals could never have occurred. Dr. Rogers next visited the city dispensaries, and witnessed their mode of proceeding. He saw that full and proper attention was given to each case, and the medicines ordered were such as would be prescribed in the out-door department of the best appointed London Hospital. The dispensary Physicians are at the same time the registrars and vaccinators. The Medical officers said they decidedly preferred coming to these dispensaries to receiving poor patients at their own houses. On going among the poor, he was much struck with the respectful bearing of the poor towards the Medical officers. The absence of persons stamped with small-pox struck him particularly. The total number of Medical officers is 795 for 718 districts. In 1868, 584,604 cases were prescribed for at the dispensaries, and 183,155 visited at their own homes. The average extent of a district is 28,384 acres; average population 8099. In 125 districts midwives are appointed. Before leaving Ireland Dr. Rogers called upon Mr. B. Banks, the Chief Clerk to the Commissioners, and in reply to the Doctor he gave it as his opinion that the Medical Charities Act had been of immense advantage to the poor of Ireland. The President spoke also of the good feeling and relations existing between the Medical officers and the Irish Poor-law Commissioners, as contrasted with the antagonism shown at Gwydyr House towards the Medical service. The President next adduced a number of statistics to show how in Ireland a more liberal expenditure on Medical relief had brought about a considerable saving of Poor-law expenditure, whereas in England neither the Legislature nor the Poor-law Board had yet come to regard sickness and the want of Medical relief as one of the main elements of pauperism. Even in districts where a more liberal policy in this direction had been adopted by the guardians, the Poor-law Board had in several instances opposed it. The President concluded by an energetic appeal to the meeting to press the adoption of the dispensary system from motives of humanity to the poor, justice to the Medical officers, and economy to the ratepayers.

Mr. Benson Baker (Marylebone) maintained that the question of expense ought never to be one in which a Medical man should be interested in prescribing for the sick poor. When a more expensive drug would produce more good they were often compelled to use a cheaper one that was less advantageous, forced to it by the present vicious system.

The Rev. J. T. Kitto gave an account of the introduction of the dispensary system at Poplar, and showed by detailed statistics that it had been productive of a great saving to the ratepayers as well as of comfort to the poor and relief to the Medical officers.

Dr. Edmunds (a guardian of St. Pancras) explained the difficulties under which the new guardians stood in consequence of the enormous infirmary and schools which the late guardians had hurried on. The present guardians were desirous of doing all they could for the poor, but the difficulties and expense with which they were beset completely paralysed them.

Dr. Cornwall (of Gloucestershire) spoke of the indiscriminate manner in which relieving officers gave orders for Medical relief, and of the immense pauperising influences of this want of discrimination in his neighbourhood.

Mr. McCullagh Torrens, M.P., expressed his conviction that the interests of the whole country were involved in the establishment of the dispensary system. He coincided with Dr. Rogers as to the great good effected by the Irish system, and exposed the ignorance shown by Mr. Goschen on this subject in Parliament. He agreed with Dr. Edmunds that the aggregation system was a gigantic mistake, and would lead to an enormous expenditure without producing adequate results.

A number of other gentlemen likewise addressed the meeting, which closed with a vote of thanks to the President and Council.

ARGENTINE REPUBLIC.—SANITARY CHARACTER OF THE MOUNTAINS OF CORDOVA AND THE ANDINE HEIGHTS.

By Dr. SCRIVENER.

We will suppose our readers acquainted, to some extent at least, with the recommendations that have been bestowed both on the Cordilleras of the Andes and on the plateaux of Mexico for the cure of phthisis pulmonalis. In speaking of the last-named locality Dr. Jourdanet strongly insists that this beneficial effect is altogether, or in greater part, due to elevation in soil, and not to the degree of latitude. Dr. Smith,(a) whose experience was gathered from Peru, expresses himself as follows:—"Incipient tubercular phthisis, with more or less hæmoptysis, is one of the most common pulmonary affections known in Lima and other parts of the coast of Peru. . . It is a disease that is certainly cured by removing the patient from the coast to the open inland valley of Zanja, which runs from ten to twelve thousand feet above the sea level. . . This fact has been known and acted upon from time immemorial by the native inhabitants and Physicians; and I have," says Dr. Smith, "sent patients from the capital to Zanja in a very advanced state of phthisis, with open ulcerations and well-marked caverns in the lungs, and have seen them again, after the lapse of a little time, return to their homes free from fever, and with every appearance of the disease being arrested, but in many instances it would, after a protracted residence on the coast, again become necessary to return to the mountains, to prevent a recurrence of the disease." Dr. Scrivener expresses himself in the following terms—"I have traversed these mountains on many occasions, and am therefore able to form an opinion of the salubrity of the climate, as also of that on the route from the province of Cordova to the Pacific. All over this vast tract of land, that fatal enemy to man, the tubercular phthisis, so justly feared by the inhabitants of Lima and Buenos Ayres, is entirely unknown. During a residence of nearly ten years in different and widely spread districts of the whole country, I never saw nor heard, either directly or indirectly, through my intercourse with others, of the existence of that disease. In the mountains of Cordova, as well as on the Andine heights, the patient will find his disease alleviated and in time removed (let him come from what quarter of the globe he may) by the hand of Nature. There pulmonary complaints are never known to originate, and there those who suffer from it on the borders of the Parana and the river Plate, seek and find a permanent cure for their ailments proceeding from all affections of the lungs. We would recommend," he further says, "the mountains of Cordova to consumptive patients in preference to the Andine heights of Bolivia, as being nearest the river Plate, and containing a greater variety of objects to divert the attention and amuse. The facility of transport, the shortness of the passage, combined with a well-founded hope of renovating the health, will be of themselves sufficient reasons for undertaking the journey. The mountains of Cordova are 4000 feet above the sea, and about 800 miles from La Quiaca, the northern boundary of the Argentine Confederation, where commences the Bolivian territory, and here the Cordilleras of the Andes, or otherwise the Andine heights, are seen in all their splendour and magnificence. Between the two territories, however, the journey is made by mules; there is no carriage road."

It behoves us next to inquire how far and with what facility the heights of Cordova are accessible to patients proceeding thither from Europe. Let us suppose all of war at an end, the distant echoes of which are now heard brokenly on the road, and the journey already adventured on. The passage from England to Buenos Ayres may be made in as short a period as thirty-four days. There are several lines of merchant steamers

(a) See his "Climate of the Swiss Alps and of the Peruvian Andes compared."

from London and Liverpool, as well as the Government vessels from Southampton and Bordeaux, which arrive at Buenos Ayres every month. From this port you embark in a steamer for the port of Rosario, which is most beautifully situated on the banks of the river Parana, and is the finest port in the Argentine Confederation, at which you arrive in about twenty-six hours. From thence you take the Argentine Central Railway, and arrive at the city of Cordova upon the same day. Here commence the serraicas or mountainous districts, which extend to the valley of Rimac, comprising an area of about a thousand leagues. "We believe," says our author, "that at no distant time a public establishment will be founded in the mountains of Cordova for use of consumptive patients. Should this be the case, we can vouch that there will be no lack of visitors willing to support the establishment and anxious to aid it by their means in exchange for the benefits they have received there. The natural grandeur and magnificence of the mountain scenery would also contribute in no small degree to the attractions of the place and the benefit of the invalids. The city of Cordova is situated in a deep valley on the banks of a river amidst the most varied and beautiful scenery. Ascending from the city to the mountains, the traveller finds every variety of climate, with a difference of temperature at every ascent. In these varieties of temperature he will be certain to find one that is suitable to his complaint and agreeable to himself. The tops and sides of the mountains are covered with trees and shrubs, and the soil of the valleys is rich and very fertile, producing Indian corn, wheat, barley, sundry fruits and vegetables, and whatever the husbandman may desire to cultivate. Cattle, horses, mules, with sheep, roam in great herds on most excellent pasture. Huarracos and other wild animals inhabit the mountains. The wool of the sheep is of a superior quality, and highly prized in the European markets. There are a great variety of trees in the plains, many of which are very lofty, and their branches form an agreeable shade, as well as add to the beauty of the scenery. The timber of these trees is of superior quality, well suited for the construction of houses and in the manufacture of furniture, etc. There are mines of gold, silver, copper, and iron; the latter is abundant, and in good quality. There are also marble quarries, and the marble is very fine and of different colours; limestone of an extremely white nature is abundant—in short, there are few spots in the world where Nature has lavished such a variety of animals, vegetables, and mineral productions as in the province of Cordova. It must follow that, with all these natural advantages, a country producing every commodity for the subsistence of man, and capable of affording all that tends to the convenience and luxury of life, will become, at no distant period, the abode of a numerous, industrious, and wealthy population. For a long period the Jesuits held their head-quarters in this province, and they were remarkable for their tact and knowledge in selecting the most healthy and fertile spots for their residences. They erected in the capital the finest churches in the Argentine Confederation, and they acquired large possessions throughout the province, and they also built splendid country mansions, which are models of art, taste, and convenience. The fine edifices of Santa Catalina Jesus Maria and Caraga are much visited and greatly admired by strangers. Several railways have already been constructed in the Argentine republic, and others are in the course of construction. The central Argentine railway extends 248 miles in length, from Rosario to Cordova. If not already completed, it is hastening towards completion. Cordova is now the great emporium of the inland provinces: their productions of hides, wool, cotton, indigo, sugar, wine, wheat, tobacco, skins of animals, gold, silver, copper, iron, and other valuable productions are transported thither and conveyed by rail to the port of Rosario, and shipped for Buenos Ayres or Europe. In addition to men of business, many will avail themselves of it as for occasional residence and pleasure excursions to visit the city and its beautiful mountain scenery The mineralogist here will find minerals, the botanist plants, to repay his attention. Before the lapse of many years strangers will come from Buenos Ayres and other provinces to build cottages in these beautiful and healthy regions, which need only taste in their erection, and judgment in selecting their sites, to render them all that can be imagined as beautiful and romantic.

The four seasons of the year are distinctly marked in the Argentine Confederation, which is not the case in the Bolivian territory, where there is little difference between spring and summer, between autumn and winter. The weather is not disagreeably cold in the winter season, though occasionally cloudy and wet; it is generally very dry, with a cool clear atmosphere, and free from frost and fogs. The thermometer never falls below zero, except in the most northern and southern provinces of the country; and, says Dr. Scrivener, "I have never seen snow nor frost upon the ground in those parts that I have visited and have recommended for consumptive patients."

In our next we shall proceed to speak of the other climatic and physiological conditions and diseases incidental to these regions.

(To be continued.)

REVIEWS.

Die hypodermatische Injection der Arzneimittel. Nach physiologischen Versuchen und klinischen Erfahrungen bearbeitet von Dr. Albert Eulenburg. Zweite, umgearbeitete und bedeutend vermehrte Anflage. Berlin. 1867. London: Williams and Norgate.

The Hypodermic Injection of Remedial Agents. By Dr. Albert Eulenburg. Second edition, revised and considerably enlarged.

In the year 1863 the Hufeland Medico-Chirurgical Society offered a prize for the best essay "On the Mode of Action and the Therapeutic Application of Hypodermic Injections, based on Physiological Experiments and Clinical Observations." Dr. Eulenburg was the successful competitor for this prize, and the essay originally appeared in February, 1865. The second edition, which now lies before us, passed through the press in the autumn of 1866, and the author was consequently unable to avail himself of the results contained in the well-known "Report of the Scientific Committee appointed by the Royal Medical and Chirurgical Society to Investigate the Physiological and Therapeutic Effects of the Hypodermic Method of Injection," which was read in the summer of 1867. The present volume, which we take blame to ourselves for not having noticed sooner, is a complete monograph on the subject up to the date of its publication. It is equally valuable for its original observations and for its judiciously accumulated cases. It contains upwards of 300 pages, and is divided into a *general* and a *special* part. In the general part the author commences with an historical sketch of the subject, and gives Dr. Alexander Wood full credit for being "the meritorious discoverer of hypodermic injections." The different kinds of syringes invented by various makers and the methods of using them are then fully described, after which there are sections devoted to "the cautions to be observed in injections," and to "the secondary and bad consequences that occasionally follow."

Under the latter heading he places pain, hæmorrhage, the regurgitation of the injected fluid, injury to the vessels and nerves, and finally local inflammatory action. There must always be a slight amount of pain, but it may be reduced to a minimum by the use of a very sharp and unyielding instrument, by inserting it as rapidly as possible, by injecting only a small quantity, and by thus avoiding the production of tension of the subcutaneous tissue. Concentrated watery solutions of the alkaloids do not excite more pain than dilute solutions; alcoholic and etherial solutions usually cause considerable pain, as also do strongly acid solutions, and fluids in which there is any turbidity from crystals or sediments. Aqueous solutions of quinine and quiniodine cause more pain than corresponding solutions of morphia and the other narcotic alkaloids. Iodide of potassium, and, in a less degree, corrosive sublimate, were found by our author to cause considerable pain. As a general rule, no doubt, the degree of pain much depends on the greater or lesser richness of nervous filaments at the spot selected for the operation. Nussbaum has forcibly pointed out the danger that may arise from the penetration of a superficial vein by the point of the instrument. As his experience may serve to put our English Surgeons on their guard against a fearful danger, we shall quote at some length from his paper, which was published in 1865. "During the last two months," he observes, "I have undergone a frightful experience (*eine erschreckende Erfahrung*), twice in my own person and three times in the case of my patients. The point of the syringe entered a subcutaneous vein, and the morphia was thus injected directly into the blood, instead of into the subcutaneous tissue. On the first occasion I injected two grains of acetate of morphia,(a) dissolved in fifteen minims of water, into one of my subcutaneous abdominal veins, and felt as if I should die in a few minutes. In a couple of seconds there was a pricking and burning sensation over my whole body, a strongly acid taste

(a) This would have proved a highly dangerous dose to most persons if simply injected into the subcutaneous tissue.

in the mouth, my whole face was nearly as red as the normal colour of the lips, and in about four seconds after the injection there was a ringing sound in the ears, while scintillations flashed before the eyes, and there was intense pain in the integuments of the head. But the most terrible of all the phenomena was the extremely powerful and rapid action of the heart. Out of more than 25,000 patients, I have never seen or felt such a pulse. Its beats ranged from 160 to 180 in the minute, while the carotids had no time to discharge their contents, and felt like thick tremulous iron cords on either side of the neck. The action of the heart and arterial pulsations was so strong that I felt as if the walls of the chest or the diaphragm must give way, and that my eyeballs must burst. This fearful state, in which the respiration was considerably impeded, lasted on the first occasion about eight minutes. The suffusion of the face was followed by a deadly pallor, which lasted for an hour, while the acute pain in the head subsided in fifteen minutes. The mind was in no degree affected, and with an effort I could stand and speak. Cold applied in the form of washing, affusion, etc., was very agreeable and beneficial. In the course of two hours the whole of the symptoms disappeared. In my other personal misadventure, the symptoms were far less severe in consequence of the injected dose being much smaller. Taught by experience, I have since then always injected very slowly, and as the phenomena ensue with such lightning-like rapidity, I thus secured time, if necessary, to reverse the pumping action of the syringe and to recover a part of the injected fluid mixed with blood. I have on several occasions seen the happy results of this manipulation. The three of my patients in whom a vein was entered were in even a more critical state than I personally was. There was partial loss of consciousness, and there were convulsions, but no persistent consequences ensued."

Dr. Eulenburg, with an experience of many thousand cases of injection, has never met with this accident, but does not on that account call in question the accuracy of Nussbaum's statements. Inflammation of the punctured spot has been noticed by our author on only three occasions, in all of which it was clearly due to the irritant nature of the injected fluid.

In the special part of his book Dr. Eulenburg relates the results of the injection of the following long list of drugs:—Opium, morphia, narceine, codeine, thebaine, and narcotine; of atropine, daturine, caffeine, nicotine, aconitine, colchicine, coneïine, strychnine, woorara, digitaline, veratrine, ergotine, physostigmine, oleandrine, hydrocyanic acid, chloroform, tincture of Indian hemp, quinine, quiniodine, emetine, tartar emetic, camphor, liquor ammonii (*sic*) anisatus, calomel, corrosive sublimate, iodide of mercury, arsenic, and iodide of potassium. Of the three hundred and nine pages occupied in the consideration of these substances, opium and morphia take up nearly one-third, while twenty pages are devoted to atropine and to strychnine respectively, and the other substances come off with only a few pages. We have so recently discussed the properties of the most important neurotic alkaloids in our review of Dr. Harley's volume that we, although with reluctance, feel bound to pass over Dr. Eulenburg's excellent chapters on these subjects, and to proceed to notice the properties of less known drugs. Caffeine, when injected in doses of from one-fifth to two-thirds of a grain, relieves occipital neuralgia and hysterical headaches generally; nicotine, in the dose of one-sixtieth of a grain, was wonderfully successful in a case of tetanus recorded by Eulenmeyer. Of aconitine and colchicine, the author speaks unfavourably. Strychnine (the sulphate), in doses of from $\frac{2}{3}$ths to $\frac{4}{3}$ths of a grain, has been found to be highly valuable in cases of facial paralysis, paralysis of the vocal cords, paralysis of the bladder, prolapsus, spinal paraplegia, spasmodic muscular contractions, amaurosis, and sciatica.

Dr. Eulenburg devotes considerable space to the action of woorara or wourali in traumatic tetanus. Vella used it with great success as a water-dressing to wounds in cases of tetanus that occurred after the battle of Magenta, but unfortunately no details are given. It was first used as a hypodermic injection by Vulpian in 1859. This case terminated fatally, as also did cases similarly treated by Follin, Gintrac, Cornaz, Richard, Liouville, Langenbeck, and Schuh, while Gherini, Demme, Lochuer, and Spencer Wells each record a successful case. While expressing no great faith in the alleged antagonism of strychnine and woorara, the author records a very interesting case that occurred at Königsberg under the care of Burow, jun., in which a young man who had taken one grain and a half of strychnine was apparently saved by the hypodermic application of woorara after morphia had failed to produce any effect.

In intermittent fever arising from malaria, the hypodermic injection of quinine is a pre-eminently successful mode of treatment. Dr. Schachana, of Smyrna, states that a single application suffices to effect a cure, good diet and chalybeates being also prescribed. Out of 150 cases, there was only one relapse. Gualla, of Breschia, similarly treated forty-nine cases without a single failure. Desvignes treated several hundred cases, occurring in navvies engaged on railway work in the Tuscan salt marshes, and met with uniform success. The fluid he injected consisted of one grain and a half of quinine, one minim of dilute nitric acid, and fifteen minims of water. Dr. Eulenburg injected quinine in eleven cases of intermittent fever, and confirms the view propounded by previous observers that this medicine, when injected in doses of one and a half or two grains before or during the cold stage, has the power of cutting short the attack. Five of his eleven patients complained of a sharp burning pain while the fluid was being injected and for some minutes subsequently.

In his remarks upon "intermittent and remittent fever independent of malaria," our author remarks that he has convinced himself by many accurate observations that, "by the subcutaneous injection of small quantities of quinine, we are able in a great number of febrile states of a remittent or intermittent type to produce a temporary, and frequently a considerable, diminution of the febrile temperature of the body." This fact, which he clearly proves by numerous cases, obviously has an important bearing upon the treatment of various forms of disease. In cases of typical neuralgia (sciatica and tic) this remedy has been highly serviceable.

We must now conclude our notice of this valuable essay. When it reaches a third edition—which no doubt will shortly be the case—we trust that some one well qualified for the task will give us an English translation. Few books that we have lately read better deserve such an honour.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

FRANCE.

LETTERS FROM THE SOUTH OF FRANCE.—No. VII.

First Impressions of Pau (Basses-Pyrénées).

So many wonderful accounts about Pau had been given to me by competent judges, that I resolved, on my road to Hyères, to make it an object of observation. At last I found the place which I had for years been longing for, and which most invalids ought to long for; for it is a place little disturbed by wind. Such a quietness of the air we here experienced for a week together as I never saw anywhere before. The smoke of the chimneys rises almost perpendicularly, and the leaves of the trees stand as if they were made of iron or porcelain. All nature is as calm and peaceful as if it were a land of enchantment. It stands to reason that this state of things does not last for ever; but the opinion about the quietness of the atmosphere in Pau is so general, and even quoted against it by the enemies of the place, that there must be much truth in this reputation. At all events, the *mistral* is unknown here, and probably so the still more fatal east winds of Nizza, etc. As to the advantages which absence of wind has for invalids, they are unmistakable. If it is warm, you can dress lightly without fear of suppressed perspiration; and if it is cold, you suffer much less from it than with a windy atmosphere. After a sojourn of several winters on the Mediterranean coast, Pau is a great relief to me in many respects.

It is clear that the mean temperature is a good deal lower in Pau than in Nizza, etc. But, as I have often said, cold is not the thing invalids ought most to fear. The most dangerous influences are doubtless sudden changes of temperature and cold damp winds. And these things, it is clear, are not here more abundant than at the sea-coast of the Riviera.(a) Besides, I found here a multitude of advantages which make this place very attractive to me. Everything is well organised, and you feel as if in a civilised world. There is a commission of gentlemen—not agents, as in other places—giving kindly information to strangers without emptying their pockets. If the chimneys are not good, you complain to those gentlemen, and

(a) The spring in Cannes and Nizza is fatal by the almost incessant east and north-west winds.

your *propriétaire* is obliged to put the chimneys in order.(b) Coachmen are coachmen everywhere; but the carriages cost 1·50 fr. an hour. Milk is excellent. Goats' milk is abundant. Meat, bread, etc., are very good, and not too dear. The ground is even, and invalids are able to take walks in the town and in the country without climbing. The town is curious, clean, picturesque, and full of resources. The views of the Pyrenees require no special recommendation. There is a chalybeate spring at Pau, and for the summer there are beautiful and useful places in the neighbourhood.

There are very good doctors here. As to further particulars about the climate, I am not able to give them yet. I know, however, of very remarkable cases of recovery which were here obtained. The climate of Pau has the reputation of being relaxing. It certainly is not over-exciting. As to its relaxing nature I can say nothing; but of this I am sure—that I feel not at all relaxed since I came here, although it is very warm at this moment. I feel only that I can walk, and sleep, and eat much better.

I strongly advise those who are going to the South to pass through Pau, and take one glance at least at this curious place.

IRELAND.

Dublin, October 27.

The winter session was opened in the school of the Royal College of Surgeons, on Monday the 25th inst., by Professor Macnamara, President of the College. Having briefly alluded to the distinguished men who had on former occasions discharged the same duty, the learned lecturer proceeded to point out in a few words the ameliorations which have taken place in various branches of the Medical public service, how steady in the appointments under the Poor-laws and Medical Charaties Act has been the progressive upward tendency of the salaries, how enhanced value has been conferred upon the tenure of such offices, thanks to the untiring exertions of the Irish Medical Association and its indefatigable secretary, Dr. Quinan, ably seconded by the Council of the Royal College of Surgeons in Ireland, and nobly and effectually supported by his advocacy in the House of Commons, of the well-tried and most disinterested Honorary Fellow of the College, Dr. Brady, M.P. for Leitrim, whereby, under certain conditions, superannuation has been secured for Medical officers worn out, or otherwise incapacitated from the efficient discharge of their public duties. He contrasted the present positions of Assistant-Surgeons in the navy and army with what they were some years ago, showing that service in these departments is now more desirable than it ever was at any previous period. It is not long since the pay of the Assistant-Surgeon in the army was but little more than half what it is now—when, in fact, his pay and that of the newly fledged ensign were all but identical in amount. The pay of an Assistant-Surgeon on joining his regiment is now equivalent to that of an ensign, *plus* an allowance of £100 a year, and from the moment of his entering the service to that of leaving it not only is his rate of pay and pension progressive, but so is also his rank, with all the honours, privileges, and advantages belonging to it. The President next, for the guidance of his younger hearers, sketched the career of a model Medical student, and in doing so entered upon a defence of the principle of enforcing a moderate amount of attendance upon systematic courses of lectures. Towards the close of his address he observed that "the greatest of all impediments to an improved standard of Medical education is to be found in the multiplicity of licensing bodies. Self-preservation is universally accepted as the first law of nature, and, in due obedience to this law, many of these bodies shrink from that self-destruction which would result from a too rigid enforcement of a high standard of Professional education and examination. This opinion has been endorsed on all sides, and by every one capable of forming an opinion, and yet one of the most remarkable facts connected with this subject is the remedy that has been proposed, or is about to be proposed, by a distinguished member of our legislature, himself a Medical man of undisputed talent and originality, occupying a high place in the estimation of thosewho regulate public affairs—the formation of one other examining board, on the homœopathic principle, I presume, that 'similia similibus curantur.' It is true, as I am given to understand, that this board is only to take cognisance of those who have otherwise legally qualified themselves, and that their examination is to be purely of a practical character. Grant it; but it is one other unit added to those which now all but render progress impossible. As I take it, a governmental board of examiners will be appointed for each of the three divisions of the kingdom, who will examine all Medical men seeking to be placed on the Medical Registrar—this examination is to be of a purely practical character, and by no means to take cognisance of the elementary portions of the student's education. But '*quis custodiet ipsos custodes?*' How are we to be assured that each of the three boards will insist upon an equally high standard of professional proficiency? Will the new Bill which we are promised be more successful in putting affairs on a more satisfactory footing, both for the public and the Profession? As thus—by the General Medical Council putting into force, with energy and decision, the powers entrusted to them by the legislature." Having stated his own suggestions under four several heads, Professor Macnamara said:—"The advantages which would flow from some such regulations as these are too obvious, even did time admit of it, to require comment. Be they adopted or be they not, the present arrangements are doomed. Some change must take place, whereby efficiency and equality in the examination of the several corporations will be secured. Of one thing, however, I can assure you, gentlemen, that no change will be tamely submitted to by the Council of this College which will involve the issuing of coin from its mint that has not the ring of the true metal in it. For too many years in the past has this College upheld the honour and dignity of Irish Surgery for us now to permit its reputation to be tarnished in the future."

The public course of lectures by the Professor of Physiology was afterwards commenced, the subject being "The Natural History of Man." The peculiarities of the human species were fully described, and it was urged that they were sufficient to disprove the doctrine of progressive development as advanced by Darwin, for the break between man and the gorilla, the most man-like of apes, was distinct and wide. The varieties of man were then discussed, the Mongolian, American, and Ethiopian tribes being easily distinguished; but it was acknowledged that the Caucasian and Malay divisions included families of most diverse kinds. Dr. Mapother stated that a poor consumptive lad belonging to the Malay variety had been admitted last week into that most valuable institution, the Hospital for Incurables. The lectures are to be continued daily at two o'clock. The winter session will be inaugurated at the Meath Hospital and County Dublin Infirmary on Monday, November 1, by Dr. Stokes, D.C.L., F.R.S.

GENERAL CORRESPONDENCE.

THE CONVERSION OF THE GREEK υ.

Letter from Dr. John Harley.

[To the Editor of the Medical Times and Gazette.]

Sir,—In the review of my work on the "Old Vegetable Neurotics" in your last impression, the writer very pertinently asks why I have sometimes spelt "hyoscyamus with an *i* in the third syllable." I am glad that he has done so, not that I am able to clear myself of the error, but because it gives me an opportunity of calling attention to what amounts to a very wide-spread orthographical degeneracy. To illustrate what I mean in reference merely to Medical terms, I will take the last edition of the British Pharmacopœia, a book which abounds in Greek words, and which we assume to be authoritative in respect of the correctness of their form. But, strange to say, we here find both error and inconsistency in the conversion of the *υ*. Thus, on the one hand, we have oxygen and oxide, but, on the other, hydrogen and hydride, or hydration. Now, oxide is not an abbreviation of oxy-ide, for German and French chymists—or, as all the world has it now, chemists—invariably write oxyde, &c. But to revert to the Pharmacopœia, we find in opposite series Plumbi oxidum and Litharg*y*rum. Here is inconsistency. In both the body of the work and in the index the word Glycerinum is immediately followed by Glyc*y*rrhiza. Here is error and inconsistency both; for if *e* were the proper substitute for *υ* in the former word, *y* could not be the equivalent of *υ* in the other, the root in both words being the same—γλυκύς.

I have pointed out this error in Hooper's "Physicians' Vade-Mecum," ed. 8, p. 677, and have in the "Old Vegetable Neurotics" uniformly used the correct spelling, both of this

(b) In Cannes there were scarcely any good chimneys, and if you complained, the *propriétaire* said, "Mon Dieu, que voulez-vous? Faites l'arranger vous-même," or something of that kind. The smoke was called there "odeur de bois," and one of the first Doctors declared to me that it was good for the chest!

word and of the derivatives of ὀξύς, and I hope my adhesion to classical rules in respect of these degraded words will be accepted as a sufficient set-off against the unwarrantable freedom which I have used in spelling hyoscyamus with an *i* once in about ten times.

I am, &c. JOHN HARLEY.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

TUESDAY, OCTOBER 19, 1869.

RICHARD QUAIN, M.D., President, in the Chair.

AFTER some observations from the PRESIDENT,

Dr. MORELL MACKENZIE proceeded to show the Larynx and Pharynx of a gentleman who had come to him some time before complaining of irritability of the larynx, and the apex of whose lung was affected. Some time after, he saw him under the influence of an enormous blister, involving the whole of one side, which he himself had applied. He was slightly excited, and was persuaded to enter the London Hospital, where he was closely watched, but nevertheless contrived to cram his throat with the cotton wool covering his side. In the morning he was quite dead.

Dr. PEACOCK exhibited two specimens of Malformation of the Heart. 1. The first specimen was forwarded to him by Dr. Griffith, of Swindon. It was removed from a boy, aged 8, who had been cyanotic all his life, and died during the summer. The heart was found very large for the age of the subject, weighing 10¾ oz. avoirdupois. It was unusually broad, resembling in shape the heart of the turtle. The orifice of the pulmonary artery was very greatly contracted from the adhesion of the valves, and the septum of the ventricles was deficient over a large space, and the origin of the aorta displaced, so that the aorta freely communicated with the right ventricle as well as with the left. The valve of the foramen ovale admitted of being spread over the opening, but it was not adherent to the edges, so that a passage had existed between the two auricles during life. The condition of the ductus arteriosus could not be ascertained from the aorta and pulmonary artery having been cut off short. 2. The second case was sent to Dr. Peacock by Dr. Lanchester, of Croydon, and had occurred in the practice of Dr. Cressell. The child was also cyanotic, and died when 2½ years of age. The case was similar to the former in every repect, except that the foramen ovale was entirely closed, this condition being in such cases of rarer occurrence than the open state of the foramen. The cases afforded examples of the most common form of congenital cardiac defect; but the first was remarkable from the comparatively advanced age which the patient attained.

Mr. ROBERTS, through Mr. De Morgan, exhibited a specimen of Villous Disease of the Kidney. The patient was an old lady, who for two years had suffered from albuminuria with occasional hæmaturia, the latter never being very severe. The last attack broke up her health; but she died after an operation for hernia. There was extensive peritonitis. The right kidney was gorged and friable; the left contained something like pus, but it was not so. A soft whitish mass existed in the pelvis of the kidney, taking its rise by a thin pedicle from the pelvis, and having many villi on its surface. Nothing was seen in the urine during life.

Mr. DE MORGAN said the bladder was not examined, but there were no vesical symptoms during life. The question as to the cancerous nature of the mass was difficult. It floated in the fluid in the kidney. Dr. Murchison had a similar case this year; hæmaturia was frequent, but there was no stone. There was villous disease of the bladder, clots in the ureters, and commencing disease of the kidney.

Mr. HOLMES showed a specimen of Diseased Os Calcis taken from a young woman who had been ill for several years. She had much pain, and there were many sinuses in the neighbourhood of the heel. He tried to remove the diseased portions by gouging, but did no good. Afterwards he removed the whole bone, and the patient recovered perfectly. He had often seen disease thus limited to one bone, but he did not think the fact generally admitted. The articular surfaces were healthy. She was not tubercular in any way.

Mr. NUNN asked what became of the tendo Achillis after such operations.

Mr. HOLMES replied that it probably became attached to the fibrous tissue of the cicatrix; at all events the girl could point her toe.

Mr. W. ADAMS thought the tendency of such cases was to necrosis, not caries. If the sequestrum was removed, the patient got better without removal of the bone.

Mr. HOLMES thought the small sequestrum in the specimen artificial.

Mr. DE MORGAN did not think gouging bad, but Kirkpatrick's method did wonderfully well, much better than gouging.

Mr. ADAMS showed an Unreduced Dislocation of the Hip, removed from the body of a man who had been severely injured by a railway engine, and who subsequently died of traumatic fever. The head of the bone rested on the spine of the ischium, the obturator muscle was ruptured, and there was a collection of pus round the joint.

Mr. GAY exhibited the Bones of the Forearm and Hand of a man whose hand had been shattered by a gunshot wound. The arm was after a time amputated above the elbow. All the carpal and some of the metacarpal and phalangeal bones had been disintegrated by osteomyelitis. The man recovered.

Dr. TILBURY FOX exhibited a specimen of the Fungous Foot of India sent him by Dr. Shortt, of Madras. It was unmutilated. The surface was covered with button-like projections with central apertures leading to cavities in the bone.

Mr. HULKE said a specimen had been shown by Dr. Carter, of Bombay, and reported on by Dr. Bristowe and himself.

The specimen was referred to Dr. Moxon and Mr. Hogg.

Mr. HOGG showed an Encysted Orbital Tumour, much larger than usual, which he had been obliged to remove piecemeal. It had grown two years out in India, and caused the eyeball to protrude excessively. The patient recovered with perfect sight. Also a horny growth of the eyelid of some size. Part had been removed by the man's shopmate. The base was dissected off.

Dr. POWELL exhibited a specimen of Lympho-sarcoma of the Mediastinum removed from a man aged 28. It extended from the root of the neck down over the pericardium, and invaded the lung. The patient had pain, cough, and dyspnœa. The veins of his arms became blocked, and he died. The structure resembled that of a lymphatic gland; in the lung the same. The vessels were surrounded, but not invaded. Referred.

Mr. HEATH said that connected with these growths was the fact that a close plexus of minute vessels existed in this situation. These would affect the growth of the mass by transmission.

Mr. POLLOCK showed a Myeloid Growth of the Head of the Tibia, removed from a girl. There had been slight enlargement of the tibia with lameness for twelve months, and for six months she had walked on crutches. There was much pain at night. He imagined an abscess was threatening, and, under chloroform, cut down to trephine the head of the bone, when the knife slipped into a cavity filled with soft tissue. This was so vascular as to require a plug to stop the bleeding. After obtaining the girl's consent, the limb was removed at the knee-joint. The mass had so nearly penetrated the joint that the crust of bone was torn away with the crucial ligaments.

Mr. GAY showed a specimen of Dry Gangrene of the Hands, occurring in a delicate young lady after gastric fever. When she began to recover the tip of her nose and the joints of her toes and fingers became gangrenous. The nose and toes recovered, but on the hands a line of demarcation formed, and both had to be removed.

Dr. F. ROBINSON exhibited a specimen of what he believed to be Syphilitic Cirrhosis of the Liver, a somewhat infrequent disease. The subject of it, a young soldier of the Scots Fusilier Guards, of delicate aspect, and who had led an irregular life during his short service of two years, was under treatment for syphilis for a period of twenty-nine weeks in the winter and spring of 1867-68. It was somewhat doubtful whether the disease was then the true Hunterian chancre, but the base of the sore became indurated, and mild mercurial treatment—inunction—was employed. No secondary affection resulted, and he was again admitted, in the beginning of August in the present year, with a distinctly indurated sore on the prepuce. He was in a very cachectic state, and mercury was consequently not exhibited. The sore healed up in about ten days, and then about the same time dropsical effusion set in. This affection resisted all the usual means, the kidneys scarcely acting at all, and the patient died two months subsequent to admission in Hospital. With the view of affording temporary relief by tapping, the chest was examined to ascertain the condition of the thoracic viscera a week prior to decease. Extensive effusion was then diagnosed in the right side, and any operative interference was declined. He had occasionally complained of pain, referred rather to the hepatic region than the thorax.

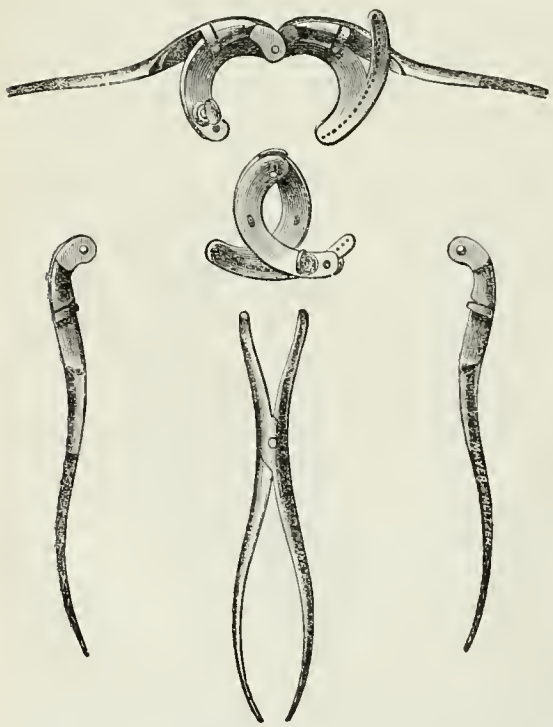
About 80 ounces of clear serum was found in the right cavity of the chest; the lung was compressed to a small bulk—that of the closed hand—against the spine. Extensive deposit of lymph, both of old and recent formation, rested on the diaphragmatic pleura of that side; there was a large quantity of like fluid in the abdomen, the intestines agglutinated together and to the liver by firm coating of lymph, somewhat recent. The liver, below the normal size, weighed about 2¼ lbs., and presented very closely the characteristics of the disease described as syphilitic cirrhosis by Dr. Barton, of Dublin, and other recent writers. It was very hard in structure, yellow in appearance, the whole areolar tissue seeming infiltrated with the specific deposit, while the under-surface of the organ was lobulated. The distinction between it and the hobnail liver of drunkards—the man was not addicted to intemperance—was sufficiently evident. There was an absence of the "nail" marks pathognomonic of that disease, as well as of other indications, the smaller bulk, density of structure, and corrugated shrunk aspect. The kidneys were both very large and congested, otherwise healthy. The history of this case was essentially syphilitic, and during two years and a half of the man's military career he was not in Hospital with other disease of any importance. He did not experience, as far as could be ascertained, any distinct secondary affection, but it is quite possible that to some extent such might have supervened while the man remained at his duty. Believing the last affection to be of a true specific nature—possibly the first also—it may, perhaps, be reasonably conjectured that in an unhealthy subject there was, as it were, a retrocession of the *materies morbi* to the internal organs rather than to the outer textures of the body. The case Dr. Robinson considered to be a somewhat unusual one, especially with reference to the association of ascites with syphilitic liver.

Referred to Dr. Murchison and Mr. De Morgan.

NEW INVENTIONS.

MR. SPENCER WELLS'S CIRCULAR CLAMP FOR OVARIOTOMY.

This instrument, made by Mayer and Meltzer, was shown by Mr. Wells at the last meeting of the Clinical Society as the best form of clamp for ovariotomy. He explained how he had



gradually arrived at this form of instrument after using Hutchinson's clamp, his own first parallel clamp, and different forms of wire and écraseur clamps, and stated that this new circular clamp is very easily applied and removed, and secures the pedicle quite safely and by a circular constriction, which enables the operator to close the opening in the abdominal wall tightly around the pedicle.

HAINES'S PATENT BLOCK-TIN PIPE ENCASED WITH LEAD,

FOR CONDUCTING GAS, WATER, AND LIQUIDS IN GENERAL USE.

(*Manufactured solely by Walker, Campbell, and Co., 33, Albany, Liverpool.*)

This pipe differs in important respects from every other which has been hitherto manufactured for the same purpose, even though of the same materials. We need not speak of the common lead pipe and of the objections to its use for conveying drinking water. Pipes of pure tin are used in the manufacture of soda-water, for the worms of distilleries, and occasionally for water-pipes in private houses; but tin is expensive, not pliable, it tends to break without bending, and is as difficult to work as an iron pipe. Its cost is £126 per ton, whereas lead, which is flexible, malleable, and plastic, costs about £19 per ton. Many attempts have been made to protect the interior of leaden pipes by tinning them, or coating them with a thin wash from a chemical solution. The results, however, have been expensive and unsatisfactory, for the tin so deposited is easily worn off by the action of running water. Haines's plan is to weld an interior tube of tin to an outer casing of lead in such a way that the metals are indissolubly united at the surface of contact, and comport themselves as one. The inventor claims for his compound pipe great strength and tenacity, great flexibility, and perfect freedom from the chance of detachment of the tin and action of liquids upon the lead. The new pipes can be worked more easily, because they are lighter, and the tenacity of the tin enables a considerable weight and thickness of lead to be dispensed with. Thus, a pipe of lead of ¾-inch bore weighs 4½ lbs. per foot, whilst one of Haines's of the same bore weighs only 2¼ lbs. The saving in the weight of lead thus renders them no more costly per foot than the heavier pipe of lead throughout. When we consider the miseries which befall families who have been subject to chronic lead poisoning from the ordinary pipes, we must acknowledge it a great boon that we can have a pipe which is perfectly safe and yet costs not one farthing the more.

THE "ALPHA" RAILWAY ARM AND BOOK REST.

(*Made by Howard, Berners-street, London, W.*)

This little mahogany machine, which is little more than a foot long, and about a pound in weight, unfolds in such a way as to make a convenient rest for the arm in railway travelling. By supporting the arm, it takes the weight off the spine, and diminishes both the fatigue and jolting incidental to the erect posture. It is equally available for first-class railway carriages where the arms are too low, and for the second-class seats which have no arms at all. It is equally useful in an ordinary carriage drawn by horses, as well as for invalids who want to read in their easy chair, and we believe that it ought to form a part of the travelling comforts of all whose avocations compel them to travel much.

GOLDSWORTHY'S WHEATEN BISCUITS.

(*In Tins at* 1*s.* 2, *Bathurst-street, W.*)

We have long recommended Mr. Goldsworthy's to our patients as a place where they could get good brown bread combining the properties of being palatable and digestible. Mr. Goldsworthy has now begun to make the whole-meal wheaten biscuits, of which we noticed a specimen some time since from the factory of Messrs. Huntley and Palmer, of Reading. It is well known that these biscuits were invented by a philosophical gentleman living in Westbourne-terrace, and are the result of a long series of trials to find some article of food palatable and digestible in itself, and capable of stimulating the colon without the necessity of adding any aloes or drug to the things taken into the stomach. The materials are pure wheat coarsely ground and good fresh butter. The result is a delicious biscuit, eating like short piecrust, falling to pieces easily in the mouth, and not requiring any labour of mastication. About one biscuit a day, taken with other food at some meal, suffices. These biscuits contain rather too much butter to be eaten by themselves without a feeling of biliousness. Whilst we are on the subject we may notice a curious blunder made by the vendors of these and similar biscuits in calling

them "digestive," and speaking of "their beneficial effects upon severe sufferers from indigestion." This is mischievous and nonsensical. For indigestion nothing can be conceived worse than a biscuit containing abundance of bran. It is constipation, not indigestion—torpor of the large intestines, not irritation of the stomach—which these biscuits are good for. We may add that they supply the phosphate of lime necessary for growth of teeth and bones in an agreeable and abundant form.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, October 21, 1869:—

Collins, Edward Lorton, Canterbury.
Hiron, John Hickman, Studley, Warwickshire.
Rosser, Walter, Risca, Newport, Monmouth.
Smith, George, Newcastle-on-Tyne.

The following gentlemen also, on the same day, passed their First Professional Examination:—

Lang, J. A. T., London Hospital.
Osborn, Samuel, St. Thomas's Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

LOWNDES, FREDERICK WALTER, M.R.C.S. and L.M. Eng.—Honorary Assistant-Surgeon to the Ladies' Charity and Lying-in Hospital, Liverpool.

WARBURTON, J. W., M.R.C.S.—Honorary Assistant-Surgeon to the Liverpool Ladies' Charity and Lying-in Hospital.

NAVAL APPOINTMENTS.

ADMIRALTY.—The following appointments have been made:—James N. Dick, Staff-Surgeon, to Haslar Hospital; Henry Piers, Staff-Surgeon, to Chatham Dockyard; Charles R. Godfrey, Surgeon, to the *Pembroke*, for Melville Hospital; and Dr. Adam B. Meeser, Surgeon, to the *Nankin*.

BIRTHS.

DANIEL.—On October 21, at Epsom, the wife of W. Clement Daniel, M.D., of a son.

DUNCAN.—On October 8, at Brighton, the wife of P. C. Duncan, M.D., late of Great Marlborough-street, London, W. (the English Physician at Hyères, South of France), of a daughter.

FOTHERBY.—On October 24, at 40, Trinity-square, Tower, E.C., the wife of H. J. Fotherby, M.D., of twins, boys.

HAMILTON.—On October 25, at Oakthorpe, Windermere, the wife of Archibald Hamilton, M.D., of a daughter.

JENNER.—On October 25, at 63, Brook-street, W., the wife of Sir William Jenner, Bart., M.D., of a son.

SWETE.—On October 20, at Dunmarklyn, Weston-super-Mare, the wife of Horace Swete, M.D., of a daughter.

TAYLOR.—On October 21, at 77, Watergate-street, Chester, the wife of W. Taylor, Esq., Moorfield, Ayrshire, Staff-Assistant-Surgeon, of a son.

WESTON.—On October 23, at Stafford, the wife of E. F. Weston, Surgeon, of a daughter.

MARRIAGES.

AYRES—MCKENZIE.—On September 2, at St. John's Church, Calcutta, P. B. C. Ayres, M.R.C.S., to Emily Maud, only daughter of Captain E. McKenzie, R.N.

FOWLER—THOMSON.—On October 6, at All Saints Church, Kingston, Canada, William Augustus Fowler, Esq., eldest son of Daniel Fowler, Esq., of Amherst Island, and late of Down Hall, Kent, to Clara Elizabeth, only daughter of Charles Thomson, M.R.C.S.L., and granddaughter of the late Rev. John Lempriere, D.D., of Shaldon, Devon.

HITCHCOCK—TUCK.—On October 21, at St. George's, Hanover-square, Henry Knight Hitchcock, M.R.C.S.E., L.S.A., to Sarah, only child of P. Tuck, Esq., Bournemouth, Hants.

THORNE—EVANS.—On October 20, at the Parish Church, Leamington, Frederic La C. Thorne, of Leamington, Surgeon, to Lillie Anna, youngest daughter of the late John Evans, Esq., formerly of the Summer House, Stoke Newington, and of St. Mary's Lodge, Leamington.

DEATHS.

BEATSON, ANNE, the beloved and deeply regretted wife of W. B. Beatson, M.D., Civil Surgeon H.M. Bengal Medical Service, of remittent fever, at Nagpore, Central India, on September 20.

BOTTOMLEY, THOMAS ABBEY, M.R.C.S., L.S.A., eldest son of the late Joseph Bottomley, of Huddersfield, at his residence, No. 3, New North-road, Huddersfield, on October 20, aged 41.

BOUSFIELD, ELIZABETH ANNE, the elder daughter of the late William Brackenbury Bousfield, M.D., of Horncastle, Lincolnshire, at Brighton, of consumption, on October 20, in her 51st year.

HALE, ALBERT EGERTON, Assistant-Surgeon 103rd Royal Bombay Fusiliers, at the Fortress, Gwalior, N.W.P. India, of cholera, on August 17, aged 27.

IVES, ELIZA, widow of the late Charles James Ives, of Chertsey, Surgeon, at Chertsey, Surrey, on October 20.

WATKINS, ELIZABETH MARY, the beloved wife of Joshua Watkins, M.R.C.S., of Chandos-street, Strand, at 49, Mornington-road, N.W., on October 24, aged 75.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

CHOLSEY NEW PAUPER LUNATIC ASYLUM.—Medical Superintendent. Applications and testimonials to J. T. Morland, Esq., Clerk to the Committee of Visitors, at the Asylum, Cholsey, near Abingdon, Berks, on or before December 16.

COVENTRY AND WARWICKSHIRE HOSPITAL.—House-Surgeon; must have both Medical and Surgical qualifications. Applications and testimonials to the Secretary, St. Mary-street, Coventry, on or before November 5.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, BROMPTON, S.W.—Resident Clinical Assistant; must have a Medical qualification. Applications and testimonials to the Hon. Sec., on or before the 30th. Candidates will be required to attend on the following Monday at 4 o'clock p.m.

LINCOLN COUNTY HOSPITAL.—Physician; must possess a Medical qualification. Applications and testimonials to Mr. J. W. Danby, Lincoln, on or before November 20. Election on the 22nd.

MIDDLESEX HOSPITAL.—Resident Obstetric Assistant; must be legally qualified. Applications and testimonials to the Secretary, at the Hospital, on or before November 5.

NORTH WITCHFORD UNION, CAMBRIDGESHIRE.—Medical Officer for the Third District of this Union, comprising the south division of the parish of March. Candidates must have the qualifications prescribed by the orders of the Poor-law Board. Applications and testimonials to T. Tusting, Esq., Clerk, March, on or before November 2.

ROYAL ALBERT HOSPITAL, DEVONPORT.—Resident Medical Officer; must be registered under the Medical Act. Applications and testimonials to the Honorary Secretary, Royal Albert Hospital, Devonport, on or before November 3. Gentlemen whose attendance is required will receive notice to that effect.

ROYAL KENT DISPENSARY.—Resident Medical Officer; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Secretary, J. Carrtar, Esq., Catherine House, Greenwich, on or before November 8. Election on the 19th at 8 o'clock p.m.

ST. MARY'S HOSPITAL.—Assistant-Dispenser. Applications and testimonials to be sent in on or before the 30th inst. For further particulars, apply at the Hospital.

SPALDING UNION.—Resident Medical Officer for the Gosberton District of this Union. Candidates must be registered and have the qualifications prescribed by the orders of the Poor-law Board. Applications and testimonials to A. Maples, Esq., Clerk, Spalding, on or before November 8. The election will take place on the same day.

STOURBRIDGE DISPENSARY.—House-Surgeon and Secretary; must have both Medical and Surgical qualifications. Applications and testimonials to the Secretary on or before November 11. Election on the 23rd.

SUSSEX COUNTY HOSPITAL.—House-Surgeon. Applications and testimonials to A. Veysey, Esq., Sec., Brighton, on or before November 24.

SUSSEX COUNTY HOSPITAL.—Dispenser. Applications and testimonials to the Drug Committee on or before November 15.

SWANSEA NEW HOSPITAL.—House-Surgeon; must be legally qualified. Applications and testimonials to the Secretary, 23, Gower-street, Swansea, on or before November 24. Election December 1.

TOWER HAMLETS DISPENSARY.—Resident Medical Officer; must be L.S.A. or have some other Medical qualification. Candidates to attend personally with testimonials on November 1, at 7 o'clock p.m. Further information may be obtained of T. Stone, Esq., Hon. Sec., 5, Finsbury-circus, E.C.

WESTMINSTER GENERAL DISPENSARY.—Surgeon; must be M.R.C.S., not practising midwifery or pharmacy, and be registered. Applications and testimonials to the Secretary on or before November 22.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Banbury Union.—Mr. Robert Croome has resigned the Middleton Cheney District; area 6110; population 2451; salary £53 per annum.

Sedgefield Union.—Mr. W. L. Piercey has resigned the Trimdon District; area 6772; population 3236; salary £15 per annum.

APPOINTMENTS.

Carlisle Union.—Roderick Maclaren, M.D. Edin., M.R.C.S. Edin., to the Stanwix District.

Newhaven Union.—Thomas M. Cann, M.R.C.S.E., L.S.A., to the Fourth District.

CHOLERA prevails to a great extent in many parts of India.

THE appointment of a Bengali and Urdu lecturer on Chemistry and Medical Jurisprudence to the native apothecary and military classes of the Calcutta Medical College has been sanctioned by the Government of India.

WE understand that an enormous tumour of the thigh, for which amputation of the hip-joint was performed by Mr. Maunder this week, will be exhibited at the Pathological Society on Tuesday.

THE Royal Marine Infirmary, Woolwich, which has remained empty since the "disestablishment" of the Woolwich division of the Royal Marines, is being prepared for occupation.

Dr. Beale commenced his third course of lectures, given by desire of the Radcliffe Trustees at Oxford on Thursday evening last. The subject of this course is as follows:—"On the Changes occurring in the Tissues and Fluids of the Organism in Disease as ascertained by Microscopic Investigation." The lectures, nine in number, are to be illustrated by diagrams and microscopical specimens.

Our readers will learn with pleasure that, at the first meeting of the Committee for the erection of the National Hospital for Incurables at Oxford, held on Monday at Dr. Andrew Clark's, Miss Sandford's scheme was taken up with great cordiality, and a working sub-committee appointed. Now that the Medical world have given their *imprimatur* to this great undertaking, nothing is wanted but additional funds to carry the undertaking to a successful issue.

University of Cambridge.—The Professor of Anatomy gives notice that the microscopical demonstrations will be given, as in former years, in the old Anatomical Museum on alternate Mondays at 6 p.m., commencing on Monday next; also that, with the aid of Mr. Garrod, of St. John's College, practical instruction in minute anatomy will be given in the Anatomical Schools every Saturday, at 12 o'clock, commencing on Saturday next. These courses are open without fee to students of anatomy and zoology.

Destruction of Unhealthy Houses.—The Marylebone Vestry, at their adjourned meeting last week, decided finally on the demolition of the houses in York-court, as unfit for human habitation.

Dr. Livingstone.—A letter dated August 31, 1869, has been received by the Bombay Government from Dr. Kirk, political agent at Zanzibar, relating to the supposed arrival of Dr. Livingstone at Ujiji.

Brighton Hospital for Sick Children.—A bazaar, lasting three days, has been held at Brighton in aid of the funds of the Children's Hospital. The munificent sum of £1511 was netted.

The Vaccination Act in East London.—Mr. Chapman, the acting clerk of the East London Union, has received a gratuity of £30 for extra services—viz., that he had written 600 letters to persons who had failed to comply with the provisions of the Vaccination Act.

Death of Mr. Bottomley, of Huddersfield.—The following announcement appears in this week's *Guardian*:—"On Wednesday Mr. Bottomley, of Huddersfield, was preparing to go on his visits, and seemingly in good health, when he suddenly fell down and expired. He was only 39 years of age and a widower."

The Puff Direct.—In a West of England journal of large circulation appears the following editorial paragraph:—"Mr. ———, chiropodist, advertises in another column a portion of his list of testimonials, which certainly are of a very high character, and speak well for his skill as a practitioner."

St. Vincent's Hospital, Dublin.—The Medical session was opened yesterday by the inaugural address, which was delivered by Dr. Quinlan in the presence of the Medical staff, the class, and a large number of visitors. Dr. Quinlan's address consisted of an eloquent account of the life of their late Medical adviser Dr. O'Ferrall, and of the rise and progress of St. Vincent's Hospital.

Medical Benevolent Fund.—There was a large attendance at the committee meeting on Tuesday last, and a great many applications for relief, most of them being of the usual distressing character. The sum of £132 was disbursed in grants among seventeen cases, while others were held over for further inquiry. The death of one annuitant was reported, and an application made on behalf of the widow for the half-yearly payment of £10, which was nearly due at the time of her husband's decease; this was directed to be paid to her.

Hull Infirmary.—A meeting of the governors and subscribers to this Institution was held on Friday for the purpose of electing a House-Surgeon. The Mayor (J. Bryson, Esq.) presided. The chairman of the Infirmary Board, before the election was proceeded with, alluded to the great loss which the Institution had sustained in the death of Mr. Richardson, the last House-Surgeon. He was a great favourite with every one, and his loss was felt very much. No person could have been more attached to the Institution. All his energies, mental and physical, were devoted to the interests of the Infirmary, and he (the chairman) looked upon his death as a very serious loss, and most difficult to replace. He would not occupy the time of the meeting longer, but it was due to Mr. Richardson's memory that he should make these remarks. The Mayor then read over the names of the applicants, nineteen in number. But owing to some informality in the proxies sent in, the election was postponed for three weeks.

Liverpool Royal Infirmary School of Medicine.—The following prizes, etc., were distributed on October 1, by S. R. Graves, Esq., M.P.:—Scholarship and Gold Medal: Mr. W. S. Paget. Exhibitioners: Mr. R. Leigh, Mr. W. S. Paget, Mr. H. Y. Pitts, Mr. J. Matthews. Medicine: Mr. J. Matthews and Mr. R. A. H. Wood (equal, Silver Medals); Mr. R. Leigh, Hon. Certificate. Surgery: Mr. J. Matthews, Silver Medal; Mr. W. S. Paget, Hon. Certificate. Physiology: (Seniors) Mr. H. C. Pope, Silver Medal, Mr. H. Y. Pitts, 1st Hon. Certificate; Mr. A. R. Hopper, 2nd ditto. Anatomy: (Seniors) Mr. H. Y. Pitts, Silver Medal; Mr. H. C. Pope, 1st Hon. Certificate; Mr. E. A. Fox, 2nd ditto. Anatomy and Physiology: (Juniors); Mr. J. Lewtas, Silver Medal; Mr. W. Garton and Mr. J. B. Lyth (equal, 1st Hon. Certificate); Mr. P. W. Hughes, 2nd ditto; Mr. C. D. Leech, 3rd ditto. Chemistry: Mr. E. C. Jee, Silver Medal; Mr. H. J. Molyneux, Hon. Certificate. Midwifery, etc: Mr. W. S. Paget, Silver Medal; Mr. R. Leigh, Hon Certificate. Materia Medica: Mr. H. C. Pope, Silver Medal. Medical Jurisprudence, etc.: Mr. W. S. Paget, Prize; Mr. R. Leigh, Second Prize. Botany: Mr. J. Lewtas, Prize; Mr. E. Phillips, Hon. Certificate. Practical Chemistry: Mr. J. B. Lyth, Prize; Mr. E. Phillips, Hon Certificate. Prosector's Prize: Mr. H. Y. Pitts.

The Anatomical Museum, Cambridge.—During the summer a very important addition has been made to the Museum of Human Anatomy by Dr. Robert Lee, F.R.S., of Savile-row, London, who has placed in it the whole of his valuable anatomical and pathological collection. The collection, which represents much of the labour of a long and industrious life, contains numerous specimens illustrative of the diseases of the veins, the uterus, ovaries, and other parts which have been the subject of communications to the Royal and other societies, and which have, therefore, peculiar interest in addition to their intrinsic value; and it contains a series of remarkably elaborate dissections of the nerves and ganglia of the heart and uterus. By these dissections, carried on with great patience and skill through many years, Dr. Lee was the first to display the rich nerve-supply to the organs mentioned, and so pave the way to a correct knowledge of their mode of action. The specimens have been the subject of much discussion and some controversy among anatomists; they have been represented in various works by Dr. Lee, and in papers in the *Transactions* of the Royal Society, and are, therefore, of considerable historic as well as of anatomical and physiological interest. They are placed in our museum with the confidence that they will be valued and treasured here, will be accessible to the investigation of those who may desire to examine them, as well as be of service in the teaching of our students. This mark of good feeling to the University must be in part attributed to the fact that Dr. Lee had lately a son at Caius College who graduated in Medicine, who follows in his father's steps, and has been occupied in investigating the distribution of the nerves to the eye, and who has just presented to the museum an evidence of his skill in an exquisite dissection of the nerves of the iris.—*Cambridge University Gazette*, Oct. 27.

The Heart Transfixed by a Needle.—Professor Biffi, at a meeting of the Milan Institute, presented the heart of a lunatic who had died in consequence of gangrene of the tongue which had supervened upon a bite which he had inflicted upon it during a maniacal paroxysm. At the autopsy a needle six centimetres in length was found in the left ventricle, its point, after perforating the valve, penetrating to the extent of one centimetre and a half into the left auricle. On inquiry being made, it was ascertained that the lunatic, twenty-two months prior to his death, had announced to his relatives that he had forced a needle into his heart; but little attention was paid to his statement, especially as no symptoms of any disorder in the chest manifested itself, the pulse during all this time, too, being quite regular in its beats. Full details of the case are to be shortly published.—*Gaz. Med. Italiana-Lombardia*, October 16.

At the petty sessions at Longtown, Cumberland, on Thursday, Mr. Francis B. Graham, Surgeon, was fined 5s. and costs for unlawfully selling a quantity of prussic acid without labelling the bottle with the word "poison." It appears that a veterinary Surgeon at Longtown, named Sarginson, thirty-four years of age, had gone to the defendant and asked him for half an ounce of prussic acid. The defendant, knowing the applicant, believed that he wanted the poisonous drug for the purposes of his profession—as, indeed, he stated he

did—and gave him half an ounce in a small phial. From what afterwards came to his ears, however, Mr. Graham began to suspect that the poison was intended for a wrong use, and he therefore proceeded to tell Sarginson's friends and to apprise the police. Soon afterwards he was informed that Sarginson was lying poisoned at the police station. He had taken a fatal dose of the prussic acid.

Hypodermic Injection of Morphia in the Vomiting of Pregnancy.—Of all means that I have tried this has proved the most successful. A grain of the acetate is dissolved in half a drachm of water, of which ten minims are injected at the epigastric region, and repeated after one, two, or three hours' interval until relief occurs. Sometimes one injection suffices, but generally two or three, or it may be even double doses (*i.e.*, $\frac{1}{2}$ grain) are required.—*Dr. Baillie, Indian Medical Gazette, September* 1.

"Secundum Artem."—The old direction formerly contained in prescriptions that they should be compounded *secundum artem* is still sometimes necessary, notwithstanding the advanced knowledge of our times. A *pharmacien* having received the following formula to dispense—chlorate of potash 8 grammes, hyposulphite of soda 4, syrup 62, water 125—to expedite matters, put both the salts in the mortar and commenced a vigorous trituration. An explosion immediately took place, the pestle being propelled to a distance, and the operator getting some bad bruises. To prepare such a formula without danger, the salts should have been separately dissolved.—*Union Pharmaceutique.*

Butcher's Meat in Paris.—The consumption of this rose from 127,837,099 kilogrammes in 1867, the year of the Exhibition, to 131,438,225 kilogrammes in 1868. The retail price of beef of the first and second categories was in 1867 1 fr. 63c. and 1 fr. 40c. per kilogramme (2 lb. 3 oz.); of veal, 1 fr. 83c. and 1 fr. 57c.; and of mutton, 1 fr. 75c. and 1 fr. 47c. In 1868 the prices rose three or four centimes for each kind of meat, and those of the last month for which returns are published (Feb., 1869) exhibit a similar rise; viz., beef selling at 1 fr. 69c. and 1 fr. 44c., veal at 1 fr. 89c. and 1 fr. 62c., and mutton at 1 fr. 80c. and 1 fr. 51c.—*Jour. de la Soc. de Stat.*, Ang.

Another year's experience confirms what we have already written on the opium question. Every year the conviction is strengthened regarding the difficulty of giving up this habit. Men of means will continue to smoke, and those without means may be occasionally driven to the expedient of attempting to throw it off, but relapses are frequent and at no distant intervals. The imperial monthly pittance of money and rice to the bannermen rescues them from absolute misery, and they at least are thus carried on from month to month. All human expedients seem vain—the grace of God alone can restrain men from following in this vice. We have made it a rule that pipes must be lodged as a guarantee of good faith. I possess a few, but the greater number who apply for relief are either so poor or so situated that they are driven to the shop and cannot boast of a pipe of their own. To possess the necessary articles, pipe, lamp, iron rod upon which the opium is prepared over the flame, small box to contain the raw material, generally with the character happiness upon it, must cost about a dollar. If deprived of their pipe, or if they find it impossible to smoke at home or at their workshop, they have recourse to the opium office. A price is charged for the medicine by some philanthropists in order that a way of escape may be made, but this and other expedients only tend in too many cases to tide them over present difficulties. During the last three years 510 opium smokers have applied for relief, but comparatively few in my opinion have been reclaimed. It is a powerful habit, a second nature, stronger and more insinuating than strong drink. I have had numerous professions of cure, but I have learned to receive such with great caution, and the more so the longer the period in which the drug has been used. To give up the fascinations and associations of the pipe, and to overcome and hold out against the agonies, pains, discomforts, even with the aid of foreign medicine, which are induced by attempts at reformation, requires great strength of will. After abstinence for months perhaps, the victims relapse into their old habits. During the last three years I have had four different applications from the same person for medicine to effect a cure. It is oftentimes very difficult to bring home the charge of opium smoking; all are more or less directly or indirectly connected with it or with other faults or sins which they dread having exposed. Informants themselves dread exposure and conviction of this or other faults, and a Chinaman's golden rule seems to be to know nothing of anything, to mind his own business and let other people's alone. The almost total want of justice in their yamens for the control of native affairs and the amount of bribery practised and severity of the punishments inflicted have taught this people a salutary dislike of law.—*The Fifth Annual Report of the Peking Hospital, by Dr. John Dudgeon.*

AMENDMENT OF THE MEDICAL ACTS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I enclose a copy of a letter which I addressed to her Majesty's Secretary of State for the Home Department, and his reply.

My object in asking for an interview at my date was to enable me to communicate with a number of those who signed the memorial, and by whom I hope to be accompanied when I present it. I now beg that any one desirous of forming part of the deputation will be good enough to communicate with me. On receipt of the Secretary's appointment, I shall forward invitations for a meeting of the Medical Club an hour before the time which may be fixed for attendance at the Home Office.

Bearing, as the memorial does, the signatures of 9471 members of the Medical Profession from all parts of the United Kingdom, it is a document without parallel in our Professional history, and one which cannot fail to have great weight in promoting the desired amendment of the Medical Acts.

Personally, I attach the utmost importance to the following clauses of the memorial:—

"The undersigned are of opinion that the system of Medical education should be revised, so as to insure the possession of a thoroughly scientific and practical acquaintance with Medicine and Surgery on the part of persons applying for the legal qualification.

"To this end it is held to be necessary to substitute for the present system of examination, and for the many forms of licence to practise now granted, one high and uniform standard of examination, and one legal qualification."

The one-faculty system granted, all other desirable reforms must follow.

The reconstitution of the Medical Council is essential; but I trust there will be no split on the method of representation of the Profession, by the *direct* or the *indirect* plan, as the rival schemes have been respectively designated. It is pretty evident that the Government intend introducing a Bill to amend the Medical Acts next session; and now that so large a majority are agreed on the general principles of the desired reform, I think the safest course is to wait the appearance of the Government measure and dispassionately consider its provisions.

The task of eliciting the opinion of the whole Profession has entailed an outlay in printing and postage of about £400; towards this sum we have received £161 0s. 7d., from 1782 contributors. I beg that further donations by cheque, post-office order, or stamps, be forwarded to the Treasurer, Mr. Arthur Oates, 9, Old-square, Birmingham.

I shall, in any case, deem it a very honourable duty to appear at the Home Office with a deputation to present the memorial intrusted to me; but I confess I should feel stronger in the responsible position if I had better evidence than I now possess on which to assure the Secretary of State that the majority of the Profession are prepared to do something more than merely sign a memorial for the amendment of the Medical Acts.

Confident that those who have co-operated with me in this matter will not be allowed to be pecuniary losers by their labours in the general interest, I am, &c. Bell Fletcher, Chairman,
Senior Physician to the General Hospital.

7, Waterloo-street, Birmingham, October 25.

7, Waterloo-street, Birmingham, October 14, 1869.

To the Right Honourable H. A. Bruce, her Majesty's Secretary of State for the Home Department.

Sir,—I have the honour to inform you that I have been intrusted with a petition for presentation to you, signed by nine thousand four hundred and seventy-one (9471) registered Medical Practitioners, throughout the United Kingdom, praying that her Majesty's Government may introduce a Bill into Parliament for the amendment of the Medical Acts.

I shall feel greatly obliged by your naming a day in the ensuing month of November when I may have the honour of waiting upon you with a deputation to present the memorial.

I am, Sir, your most obedient servant,
Bell Fletcher, Chairman,
Senior Physician to the Birmingham General Hospital.

Whitehall, October 19, 1869.

Sir,—I am directed by Mr. Secretary Bruce to acknowledge the receipt of your letter of the 14th inst. requesting an interview for a deputation to present a memorial from certain registered Medical Practitioners, praying for the introduction into Parliament of a Bill to amend the Medical Acts; and I am to inform you that Mr. Bruce is unable, at present, to fix a day to receive the deputation, but will do so in November, when due notice will be given to you. I am, Sir, your obedient servant,
Knatchbull Hugessen.

Bell Fletcher, Esq., M.D., 7, Waterloo-street, Birmingham.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

T. F. C. should apply to the secretary of the association.

Dr. Palfrey is not pleased that we did not insert in full his answer to the charge made against him of violation of Medical etiquette. But we did not insert the accusation in full, but only the points thereof to which, in our opinion, Dr. Palfrey gave no satisfactory answer.

B.A., Manchester.—You will find the information in our advertising columns. The next arts examination at the College of Surgeons will take place on Wednesday, Thursday, and Friday, December 15, 16, and 17. You must send in your name on or before the 24th proximo.

A Victim (*Leeds*) should avoid advertisers and consult some respectable Surgeon in his own town. Cases of the kind are by no means uncommon, and are amenable to treatment.

Lector.—The barber-surgeons practise their calling under ordinances confirmed by the Mayor and Aldermen of the City of London. In one of the ordinances their privileges are made secure. Thus they were to practise "without the scrutiny of any persons or person of any other craft or trade, under any name whatsoever, other than the craft of the said barbers, either as to shaving, making incisions, blood-letting, or any other matters pertaining to the art of barbery or of Surgery in the craft of the said barbers, now practised or to be practised hereafter."

A Case of Intussusception of the Cæcum (Conoenital?) within the Colon.

By Henry Horsley.

L. L., a fine healthy infant, aged four months, was brought to me one evening in a state of collapse. The child had the appearance of having suffered from severe diarrhœa, which, I was informed, was not the case, but the following history was given to me. The baby, usually a very contented child, whilst being undressed, suddenly commenced crying, and evidenced great pain in its abdomen by drawing its legs up. Very soon after this, blood, pure and bright, commenced to come away from the rectum, not mixed with fæcal matter, nor having any of those appearances so common in children suffering from dysenteric diarrhœa. I may here mention that there never had been any disorder of the bowels; on the contrary, the child had regular and normal evacuations daily. From the appearance of the little patient I did not think that it would survive the night. I was wrong, for it lived for two and a half days. I visited the child on the next day, and found it still looking very ill. Vomiting had now set in; it could not retain any of the breast milk. A little blood still oozed from the bowels. There appeared to be no abdominal tenderness, nor were the bowels distended. The symptoms continued much the same until it died.

A post-mortem examination was readily allowed, as the mother thought that the child must have met with some injury. The inspection revealed the following extraordinary abnormalities:—Half the transverse colon with the descending portion, as also the rectum, looked as if filled with hard fæcal matter, and, when handled, felt like it also. At the transverse colon there was an intussusception. The portions of bowel were carefully cut out of the body and examined, when it was found that what appeared to be hardened fæces was really the cæcum inverted and very much compressed, the ileo-colic valve end, with the appendix vermiformis, reaching actually to within an inch of the anus. The cæcum was opened, and a piece of ileum found running down its whole length, so that, if the bowel had been cut through at the sigmoid flexure of the colon, three different portions of intestine would have been divided. The rectum, colon, and ileum were healthy, but not so the cæcum, that being intensely congested and becoming gangrenous. I may mention that all other parts of the bowels were healthy, and not at all distended as if there had been any previous obstruction. The cæcum was wanting in its proper site.

I believe that this was not a case of ordinary intussusception coming on suddenly, but that the child was born with its cæcum contained in the colon and rectum, for the latter was so much larger than usual, and the former (the cæcum) had such an extraordinary compressed appearance, that it could not have possibly been put on in a day or two. I do not pretend to explain the reason why the symptoms came on so suddenly, unless they were due to some strangulation of the gut at that part where I first noticed the intussusception—namely, at the arch of the colon. On the other hand, the case might possibly have been one of acute cæcitis, but that the attack of inflammation was greatly influenced by the abnormal situation of the cæcum.

Croydon, Surrey.

Inquirer is not quite correct. Dr. Lettsom was the second President of the Medical Society of London. The first holder of the office was Dr. John Millar, who occupied the chair from 1773 to 1775.

M.D.—The late Professor Forbes published an excellent account of the *Acalephæ* or sea-nettles. The function is possessed probably by only a few species. The *Cyanea capillata*, which is a terror to bathers, possesses it in a remarkable degree. You will no doubt find specimens in the College Museum recently mounted by Mr. W. S. Kent.

Treatment of Gonorrhœa.

To the Editor of the Medical Times and Gazette.

Sir,—A fair youth, aged 16 years, a month ago presented himself for treatment. I directed him to swathe the penis with wet linen and frequently to inject cold water. He is now well, having used no other curative means for his gonorrhœa. I am, &c.

66, Camberwell-road. H. M. Simmonds.

A Country Surgeon.—The subscription to the Poor-law Medical Officers' Association is seven shillings and sixpence yearly. This includes payment for the bi-monthly journal of the Association. Without the journal the yearly subscription is five shillings.

Candidate.—The following is the regulation referring to the subject:—"The fee for the degree of Master in Surgery shall be five pounds. No candidate shall be admitted to the examination unless he shall previously have paid this fee to the Registrar. If a candidate withdraw or fail to pass the examination, the fee shall not be returned to him, but he shall be admissible to any *one* subsequent M.S. examination without the payment of any additional fee, provided that he gives notice to the Registrar at least *fourteen days* before the commencement of the examination."

A Metropolitan Teacher.—The returns of the number of dissecting pupils was published in the *Medical Times and Gazette* last week, and is quite correct, notwithstanding the statement to the contrary published in the *Standard*.

R. P.—It is published annually.

Spero must pass the preliminary.

Vaccination in the Ipswich District.—Dr. Elliston's appointment as public vaccinator for the Ipswich district dates from June 24, 1868. From that date to the corresponding day in the present year, he vaccinated, in his public capacity, 1534 persons. In the four preceding years the yearly average was 750 only. It was feared on the introduction of the new regulations that the abolition of the old practice of domiciliary vaccination, and the reduction of the number of public vaccinators from six to one, would have a prejudicial effect. The great improvements, however, in the machinery for enforcing vaccination, and the active steps which have been taken in this union to make such machinery effective, have tended very largely to the promotion of vaccination both public and private.—*Suffolk Chronicle.*

The present Epidemic of Scarlatina.

To the Editor of the Medical Times and Gazette.

Sir,—It appears to me that a peculiar feature in the present epidemic of scarlet fever is the great susceptibility of adults to its influence, a prior attack in childhood not giving the usual immunity. I should be glad to know if this has been noticed generally, or if it be but a coincidence in my practice. I am, &c. Robert Debenham.

Stepney, October 26.

*** We believe our correspondent's experience agrees with that of other Medical Practitioners. We have five children in one house, all of whom have had scarlet fever before.

L.S.A.—There will be a midwifery examination in December. The licence is registerable.

Pharmaceutist.—It is said that Parr's life pills were made and introduced to the public by the late Mr. Ingram, and the profits were so large that he was soon enabled thereby to start the *Illustrated London News*.

Poets' Corner.—The letter of Mr. Trimmer, the Secretary to the College, was sent to the dean or secretary of *all* the Medical schools so long ago as December 20, 1867, and we believe that for some time past the schedules have been signed by only *one* recognised person.

Corrigendum.

To the Editor of the Medical Times and Gazette.

Sir,—The *Medical Times and Gazette* of October 2 records the death, at Ilfracombe, of Mr. Barber, from taking prussic acid. Will you allow me to correct this error? He died from the effects of a mixture of chloroform and laudanum. I send the evidence at the inquest, and also the verdict, for your perusal. It was well known to his friends that he always carried with him a mixture of chloroform and laudanum for some pains in the stomach to which he was subject. He stated what he had taken before he became insensible, and it is a source of great regret to his relatives that, though he lived for more than two hours, no emetic was administered, or the stomach-pump used. The fear of choking him was assigned as a reason. With a supply of chloroform and laudanum in his stomach, little benefit could result from the artificial respiration which was resorted to. A friendship of twenty-five years with the deceased, interrupted occasionally through foreign service, must be my apology for troubling you with this communication. I am, &c. Thomas Greenish.

[The verdict was as follows:—"That the deceased had died through taking a mixture of chloroform and laudanum, but whether by accident or design there was no evidence to prove."—Ed. *M. T. and G.*]

Dr. McM.—The preliminary examination in arts, etc., will take place at the College in December, and, it is stated, will be the last at that institution.

P. Malthus, M.D.—In Lenham Church, north of the chancel, on the tomb of Robert Thomson, Esq., it is stated that he was grandchild to Mary Honeywood, of Charing, who had at her decease 367 children lawfully descended from her—viz., 16 of her own body, 114 grandchildren, 228 in the third generation, and 9 in the fourth.

An Old Practitioner.—We believe that the Royal College of Physicians has still the power, in virtue of the charter, to pay periodical visits to chemists' shops for the purpose of ascertaining the quality of their drugs; it is, however, confined to the City, and not the metropolis generally. The College was formerly in Warwick-lane, Newgate-street.

Associate King's College.—You will find the subject mentioned in Dr. Budd's lectures on "Organic Diseases and Functional Disorders of the Stomach" published in the *Medical Times and Gazette*, vol. xxvii. p. 363, *et seq.*

Pensions for Poor-law Medical Officers.

To the Editor of the Medical Times and Gazette.

Sir,—As you have always supported the Poor-law Medical Officers, perhaps you will rouse them up to look after their own interests, as they have hitherto been so supine. I know what it is, from formerly having been a Poor-law Medical Officer myself, to have to put up with many things that are very unpleasant to our feelings as gentlemen, and to be stigmatised as the "parish Doctor"—a sort of inferior Professional person—when I had received an education to fit me for consulting practice in London, had I been inclined to settle there. I would therefore recommend every young man to think twice before he accepts a Poor-law Medical appointment under the present *régime*. I think, it an alteration takes place, that then it should be offered to the very best men, as our London Hospital appointments are, and then I think it would be appreciated.

One thing is especially necessary, which is, that gentlemen holding Poor-law appointments should be entitled to a pension after twenty years' service, quite irrespective of age, to be increased every three, four, or five years, till they had completed the period of thirty years' service. This sum should be paid out of the Consolidated Fund. It would amount to very

little, and I am quite sure that no Englishman would begrudge it. The Irish Bill is a perfect failure, for it fixes sixty years as the time to be entitled to a pension, which is much too old, and the money is to be paid out of the parish rates, so that it would be always thrown up in the face of the parish Doctor that he was receiving a pension from the poor ratepayers. It behoves every Poor-law Medical Officer to bestir himself, and to write individually a letter to the Poor-law Board, complaining of the wrongs to his class, and the Poor-law Medical Reform Association should at once send a deputation to the President of the Poor-law Board, asking him to bring in a Bill early next session to provide this pension for a most deserving class of men; and they must be determined that the next session shall not pass over without the Bill becoming law. They might form one themselves, with a graduated scale of pension, according to the number of years each Medical officer has served. I am quite sure that you have the interest of the Profession at heart, and will assist them.

London, October 27. I am, &c. MEDICUS.

COMMUNICATIONS have been received from—

Mr. T. BRYANT: Dr. LEWINS; Mr. H. K. HITCHCOCK; Mr. F. HENSMAN; Mr. G. B. PARTRIDGE, of Calcutta; Mr. J. F. COLLINGWOOD; Dr. GERVIS; Mr. T. WOOLLCOMBE; Mr. H. K. COTTEN; Dr. FAIRBANK; Mr. H. M. SIMMONDS; Mr. T. STOKES; Dr. QUINLAN; Mr. SAMPSON GAMGEE; MEDICUS; Mr. R. DEBENHAM; Dr. FOTHERBY; Dr. J. A. ROSS; Dr. DAY; Dr. J. P. ALDRIDGE; Assistant-Surgeon N. ALCOCK; Dr. D. H. STIRLING; Mr. J. GHATTO; Dr. B. W. RICHARDSON; Dr. FELCE; Mr. MAUNDER; Mr. LOWNDES; Dr. ELLISTON; Dr. PALFREY; Mr. POOLE; Mr. J. B. CURGENVEN.

BOOKS RECEIVED—

Novus Theætetus; or, Sense and Science, by Dr. W. H. Stone—Infant Life, by E. N. G.—Wormell's Elementary Course of Theoretical and Applied Mechanics—Tuson's Veterinary Pharmacopœia—Wharton Jones on the Failure of Sight from Railway and other Accidents—Dr. Evory Kennedy on Hospitalism and Zymotic Diseases—California Medical Gazette, October—Shettle on the Pathology of Insanity—Stirling on Protoplasm.

NEWSPAPERS RECEIVED—

The Brighton Herald.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, October 23, 1869, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the year 1869.	Persons to an Acre. (1869.)	Births Registered during the week ending Oct. 23.	Deaths. Corrected Average Weekly Number.	Deaths. Registered during the week ending Oct. 23.	Temperature of Air (Fahr.) Highest during the Week.	Temperature of Air (Fahr.) Lowest during the Week.	Temperature of Air (Fahr.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3170754	40·7	2095	1462	1476	55·5	32·0	42·7	0·90	91
Bristol (City)	169423	36·1	114	76	*73	57·5	26·5	44·2	0·96	97
Birmingham (Boro')	360846	46·1	239	175	161	...	...	...	...	...
Liverpool (Boro')	509052	99·7	368	295	307	54·8	35·8	45·5	0·90	91
Manchester (City)	370892	82·7	261	210	*192	54·9	29·0	41·5	0·54	55
Salford (Borough)	119350	23·1	92	60	41	58·5	28·5	41·5	0·58	59
Sheffield (Borough)	239752	10·5	181	126	111	54·6	32·0	42·5	0·30	30
Bradford (Borough)	138522	21·0	79	71	73	57·5	30·0	42·8	0·33	33
Leeds (Borough)	253110	11·7	183	129	151	55·0	32·0	42·9	0·39	39
Hull (Borough)	126682	35·6	72	59	66	55·0	29·0	40·4	0·46	46
Nwestl-on-Tyne, do.	130503	24·5	75	69	59	...	...	...	...	...
Edinburgh (City)	178002	40·2	116	86	88	55·7	32·0	43·8	0·20	20
Glasgow (City)	458937	90·6	354	268	263	56·3	29·8	43·9	0·16	16
Dublin (City, etc.†)	320762	32·9	159	158	126	55·6	31·7	46·9	0·29	29
Total of 14 large Towns	6546587	35·5	4388	3244	3187	57·5	26·5	43·2	0·50	51
Paris (City)	1889842	...	...	...	825	...	...	...	...	...
					Week ending Oct. 16.	Week ending Oct. 16.				
Vienna (City)	605200	...	...	...	...	...	...	...	...	...

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·846 in. The barometrical reading increased from 29·15 in. at the beginning of the week to 30·33 in. on Friday, Oct. 22.

The general direction of the wind was N.N.W. and W.S.W.

Note.—The population of Cities and Boroughs in 1869 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous.

* The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

† Inclusive of some suburbs.

VITAL STATISTICS OF LONDON.

Week ending Saturday, October 23, 1869.

BIRTHS.

Births of Boys, 1061; Girls, 1034; Total, 2095.
Average of 10 corresponding weeks, 1859-68, 1947·6.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	768	708	1476
Average of the ten years 1858-67	629·6	597·2	1226·8
Average corrected to increased population	...	...	1349
Deaths of people above 90	...	...	...

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-cough.	Fever.	Diarrhœa.	Cholera.
West	463388	...	3	18	1	4	6	3	...
North	618210	1	3	38	1	17	12	13	...
Central	378058	...	1	27	...	7	3	4	...
East	571158	1	12	63	2	20	8	12	...
South	773175	1	8	87	7	19	9	13	...
Total	2803989	3	27	233	11	67	38	45	...

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·846 in.
Mean temperature	42·7
Highest point of thermometer	55·5
Lowest point of thermometer	32·0
Mean dew-point temperature	38·0
General direction of wind	N.N.W. & W.S.W.
Whole amount of rain in the week	0·90

APPOINTMENTS FOR THE WEEK.

October 30. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m. King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 1½ p.m.

November 1. Monday.

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 1½ p.m.; St. Peter's Hospital for Stone, 2½ p.m.

MEDICAL SOCIETY OF LONDON, 8 p.m. Mr. Jabez Hogg, "On a Case of Ectropium following a severe Burn." Mr. Henry Lee, "On severe and long-continued Pain relieved by the Removal of the whole of the Humerus."

ODONTOLOGICAL SOCIETY, 8 p.m. Mr. Mummery, "On the Evidences of Dental Caries among Ancient Races of Mankind and existing Savage Tribes."

2. Tuesday.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.

ANTHROPOLOGICAL SOCIETY, 8 p.m. L. Owen Pike, M.A., Vice-President, "On the Methods of Anthropological Research."

PATHOLOGICAL SOCIETY, 8 p.m. Meeting.

3. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1¼ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.

OBSTETRICAL SOCIETY, 8 p.m. Dr. Barnes, "On Hæmorrhage after Labour." Dr. Hall Davis, "On Puerperal Convulsions." Dr. J. H. Aveling, "A new Principle of Treatment in Prolapsus and Procidentia Uteri." And other Papers by Dr. Madge and Dr. Mendenhall.

4. Thursday.

Operations at St. George's, 1 p.m. Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

HARVEIAN SOCIETY, 8 p.m. Dr. Menzies, "On Small-pox in connexion with Vaccination."

5. Friday.

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

WESTERN MEDICAL AND SURGICAL SOCIETY, 8 p.m. Meeting for the Narration of Cases and Exhibition of Specimens.

EXPECTED OPERATIONS.

London Hospital.—The following Operations will be performed on Saturday (this day) at 2 p.m.:—

By Mr. Maunder—Lithotomy; Fistula; Tumour of Thigh; Wry-neck.
By Mr. Couper—Lithotomy.

MEAT WITH FRUIT.—GUICHON'S MUSCULINE.

The pulp of Raw Meat combined with Fruit, in the form of Sugared Tablets, manufactured at the Monastery of Notre Dame des Dombes, France.

Dr. C. M. Tidy, Joint-Lecturer on Chemistry at the College of the London Hospital, having made an analysis of GUICHON'S MUSCULINE, reports that it contains about 51 per cent. of animal matter, the remainder being for the most part Sugar. Each Lozenge weighs on an average about 28 grains—a little more than half of which, therefore, is MEAT.

The "MUSCULINE" is strongly recommended as a nutritious Diet, and a powerful agent in overcoming debility consequent upon disease.

Introduced into England by THOMAS TOMLINSON, Chemist, 6, Lower Seymour-street, Portman-square, London, W., of whom it may be obtained in Boxes, 2s. each; by post, 2s. 2d.; or 22s. per dozen, carriage free; and through all Chemists.

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Boudault's **PEPSINE** was honoured with two Reports at the Academy of Medicine, Paris, and with having its formula inserted in the New French Pharmacopœia.

The International Jury of the Universal Exposition, Paris, 1867, awarded to Boudault's **PEPSINE** the ONLY MEDAL given for **PEPSINE** and its preparations.

Boudault's **PEPSINE** is the only one that has been furnished to the Hospitals in Paris since 1854.

PEPSINE Wine, in bottles, 4/. Dose—a tablespoonful before each meal.

PEPSINE Lozenges, in bottles, 3/. Dose—3 before each meal. **PEPSINE** Pills, in bottles, 3/. Dose—3 before each meal.

Boudault's **PEPSINE** or Poudre Nutrimentive. Dose—15 grains, sold in 1 oz. and ½ oz. bottles.

All the above Preparations are guaranteed to be genuine which bear the label and seal of the

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HUBBUCK'S PURE OXIDE OF ZINC.

See Pharmaceutical Journal of May 1, 1856.

Sold in Stamped Boxes of 14 lbs. each, by the following Wholesale Druggists:—

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,, Barron, Harveys, & Co.	,, Drew, Barron, & Co.	,, Herrings & Co.	,, Southall, Son, & Dymond.
,, Battley & Watts.	,, Evans, Lescher, & Evans.	,, Hodgkinson, King, & Co.	Mr. James Woolley.
,, Burgoyne, Burbidges, & Co.	,, Evans, Sons, & Co.	,, Hodgkinsons, Stead, & Treacher	Messrs. Wright, W. V., & Co.
,, Cox, Gould, & Co.	,, Samuel Foulger & Son.	,, Langtons, Scott, & Edden.	,, Wyleys & Co.

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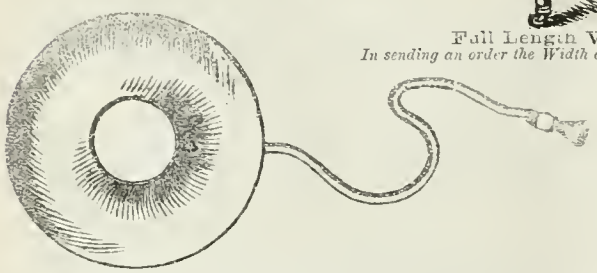
Full Length Water Mattress.
In sending an order the Width of the Bedstead should be stated.



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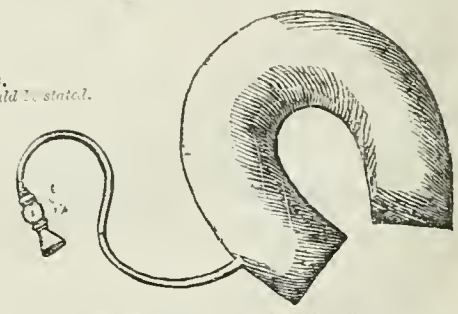

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ELASTIC BAGS, for applying dry cold or dry heat, maintaining their elasticity under all temperatures, from zero to 212° Fahr.

WATERPROOF SHEETS, INDIA-RUBBER URINALS, ENEMAS, &c.

ORIGINAL LECTURES.

LECTURES ON EXPERIMENTAL AND PRACTICAL MEDICINE.

By BENJAMIN W. RICHARDSON, M.D., F.R.S.

ON HYDRATE OF CHLORAL.(a)

(*Concluded from page* 511.)

PHYSIOLOGICAL ACTION.

Effects on Animal Temperature.

I OBSERVED in my experiments in August last, and reported the observation at the Exeter meeting of the British Association for the Advancement of Science, that the administration of the hydrate of chloral reduces the animal temperature. The fact is true, and has been corroborated by every experiment since performed, in all by fifty carefully conducted experiments. In this line of research I have not rested content with taking the temperature at long intervals or occasionally, but have had the thermometer in action during the whole period of narcotism; and, summing up the facts to this moment, I find that in birds and rabbits the temperature may fall five, six, and even seven degrees Fahrenheit, and yet the animal may recover.

We have an extreme case of this kind before us now in the rabbit which is so profoundly narcotised; the temperature of that animal declined at one time full seven degrees. This, however, I would repeat, is an extreme case, the dose of the hydrate having been carried to the verge of danger; but so soon as the thermometer commences to rise the danger is over. In ordinary narcotism from the hydrate the decline of temperature, at the minimum, is three or from that to four degrees. There would, in fact, be no difficulty in learning precisely the exact dose of hydrate required to bring down the animal temperature to a given degree, the temperature of the air and of the animal, together with the weight of the animal, being first ascertained; for the phenomena of the narcotism are just as steady and reliable as are other chemical phenomena when one understands them by taking the mere trouble to read and learn them off.

Side by side with decrease of temperature is decrease of respiration. I am unable to determine whether the fall of temperature is sequential to the reduction of the muscular respiratory power, or whether it be the cause of reduced respiratory power.

Administration by Inhalation.

The hydrate of chloral, as we have seen in an early experiment, volatilises when subjected to heat, but it is not sufficiently volatile to be administered directly by the process of inhalation. I find, nevertheless, that a little may be introduced by means of the lung in a very simple manner. We have seen that the substance is very soluble in ethylic ether. I make, then, a solution by dissolving as much as I can of it, or nearly so, in absolute ether, and with this compound I narcotise. The effects produced by ether alone are very transient, but when the hydrate is combined the sleep is prolonged half an hour in birds, and in other animals a much longer time. Here is a mouse which, after this mode of narcotism, has been asleep nearly two hours. In a globe of one hundred cubic inch capacity here before us I have diffused the ethereal solution of hydrate of chloral. I introduce into the globe another mouse. Within the minute the animal is narcotised. We must not remove it at once, or it will very quickly recover, but if we let it remain a little time it will take up sufficient hydrate to get a sleep that shall last for two or three hours.

Action on Blood.

When hydrate of chloral is added to freshly drawn blood, it acts like other readily soluble salines, preventing the process of coagulation. I place before you a specimen of blood thus held fluid and retained in the fluid state since the meeting of the British Association at Exeter in August last. The blood has undergone a little decomposition, proving that the hydrate is not a persistent antiseptic. From the first this blood was quite fluid and thin, but the corpuscles were not immediately destroyed; they were reduced in size and rendered crenate at the edge, but they did not undergo solution until decomposition commenced.

If an excess of hydrate of chloral be added to freshly drawn blood, there is complete and sudden decomposition; the fluid becomes pasty, and of iron colour, but remains soluble in water; the corpuscles are entirely destroyed. The effects are, I had almost said, identical with those which follow upon the addition of formic acid to blood. These observations have reference to blood which has been drawn; on living blood circulating in the animal system the changes named are never presented after the administration of a dose of the hydrate which is insufficient to kill outright; but when the dose is so large as to prove quickly fatal an approach to some of these changes is distinguishable—that is to say, the blood remains fluid, and the corpuscles are shrunken and crenate.

One other observation is of moment. When the hydrate of chloral is first added to blood, the odour of chloroform from the blood is distinctly perceptible, and I have, in fact, been able, by mixing free quantities of blood and hydrate, to drive over and condense a few minims of chloroform from the vapour of such blood. It is clear, therefore, that blood possesses the property of decomposing the hydrate of chloral. I think, too, it is clear that the decomposition is effected by the alkali of the blood.

Theory of Action.

I am inclined on the whole to accept the theory of Liebreich as the most reasonable explanation of the action of hydrate of chloral, and as most in accordance with all the facts at present before us. The odour of chloroform in the breath of the sleeping animals, the fact that chloroform is eliminated when the hydrate is added to blood, together with the decomposition which ensues in blood when treated with a large quantity of the hydrate (a decomposition analogous to that which follows upon the addition of a formate or of formic acid), all tend to show that blood within and without the body liberates chloroform. To these evidences in favour of the theory of Liebreich we may add analogy of symptom between the action of the hydrate and of chloroform subcutaneously injected; for, on introducing chloroform subcutaneously in birds, I have been able to produce the same kind of narcotism as we have seen to-day—narcotism preceded by no excitement, and succeeded by prolonged sleep, with the extreme muscular prostration, cataleptic in character, which follows on the administration of the hydrate itself.

On the whole, then, I am bound at this moment, I repeat, to accept the theory of Liebreich as reasonable, but I hold myself at the same time open to correction after further research.

APPEARANCES AFTER DEATH FROM THE HYDRATE OF CHLORAL, AND ON CAUSE OF DEATH.

When hydrate of chloral is administered in sufficient dose to destroy life, the sinuses of the brain are found, after the death, distended with dark fluid blood; the membranes are injected, but the brain itself is free of congestion and is of natural colour. The same observation extends to the spinal cord. The muscles are dark in colour and filled with fluid blood, which flows freely from them when they are incised. The heart contains blood on both sides, and the distinctive characters of the venous and arterial bloods are preserved in respect to colour. The lungs are of pale white and contain blood, but are free from congestion. The changes in the blood itself have already been glanced at. The other organs of the body are left natural except the stomach, the inner surface of which is sometimes found, in rabbits, more vascular than is natural.

As to the cause of death I am at one with Liebreich in attributing it ultimately to paralysis of the heart. The heart seems to me to be the last organ which suffers, and the long duration of life which is seen in the presence of apparent death during the stage of extreme muscular prostration is due, I doubt not, to a continued although imperceptible action of the heart.

SUMMARY.

The effects of hydrate of chloral may be summed up as follows:—

(*a*) Deep and prolonged narcotism can be safely produced by the hydrate of chloral.

(*b*) During a portion of the period of narcotism there may be complete anæsthesia with absence of reflex actions, and a condition in which every kind of operation fails to call forth consciousness.

(*c*) During the narcotism there are intervals of apparent exalted sensibility.

(*d*) In the transition from drowsiness to stupor there is no stage of muscular excitement, but in birds there is vomiting, as is common in the same animal in the second stage of narcotism under chloroform.

(a) Delivered on Tuesday, October 5.

(*e*) During the narcotism produced by the substance there is invariably reduction of temperature.

(*f*) The hydrate produces muscular relaxation, which relaxation extends to the muscles of volition and alike to the iris and the muscular arterial system. From the condition of the muscles after death we may infer that this paralysis is in part due to change within the muscular structure itself.

(*g*) The action of the substance on the nervous system is primarily on the sympathetic ganglia, afterwards on the cerebrum, and finally on the heart.

(*h*) Recovery, when it takes place, is followed by no bad results.

(*i*) In fatal cases the functions destroyed are:—1. The cerebral. 2. The voluntary muscular. 3. The respiratory. 4. The heart.

(*j*) The substance in small proportions arrests in some degree the coagulation of the blood, and in large quantities stops the process of coagulation altogether. In large quantities it also destroys the blood corpuscles and produces general destruction of blood, but the dose required to produce extreme narcotism need not be so large as to lead to serious derangement of blood.

(*k*) The phenomena observed correspond with those observed under chloroform, and the balance of evidence is that they are the result of the action of chloroform.

THERAPEUTICAL VALUE OF HYDRATE OF CHLORAL.

The last point we have to consider relates to the therapeutical application of the hydrate. I may premise that the dose to the human subject varies, according to the age of the subject or according to the effects desired by the administrator, from seven grains to two drachms. For young children Liebreich recommends seven grains as the dose. For adults, if short intervals of sleep are required, from twenty-five to thirty grains may be administered, and may be repeated every two or three hours, by which a safe and continuous action may be maintained. In cases where more determinate effects are demanded at once, from one to two drachms may be given at once.

The hydrate may be prescribed in solution with water. It must be well diluted—say in proportion of ten grains to the ounce of water, for it is pungent if not well diluted. The addition of a little tincture of orange, as suggested by Liebreich, is an advantage when the substance has to be swallowed. Altogether, I prefer administration by the mouth rather than by subcutaneous injection. The agent acts quite as well and as quickly when thus administered, and in the same dose. I also myself prefer to prescribe moderate and frequently repeated doses rather than one large dose.

Liebreich, in his communications, recommends the hydrate of chloral for neuralgia and rheumatism, for convulsive cough and tetanus, for acute mania and delirium tremens, for gallstones, for removing the pain of small Surgical operations, and for local application for the relief of local pain. In cases where there is gastric irritation, as from ulceration, he thinks it should not be administered by the mouth, but should be injected subcutaneously. He seems to have obtained the best results from its use in cases of acute mania and delirium tremens.

We may ourselves draw the clearest indications of therapeutical value from the experimental facts connected with the action of the hydrate which have been presented to us in experiment. Let us sum up these facts. The hydrate *produces sleep, removes sensibility, brings down the animal temperature, and causes extreme muscular relaxation.* Taking these facts as our guide, we may reasonably put it to the test for the relief of various diseased states and conditions.

1. Because the hydrate *produces sleep*, it may be employed in cases of sleeplessness and excitement where opium or other narcotics are objectionable. It may thus be used in acute mania, in delirium tremens, and possibly during hysterical excitement.

2. Because the hydrate *relieves pain*, it may be administered as a substitute for opium, or independently, in cases of suffering from acute pain, as in neuralgia, rheumatism, cancer. It may also be used for the same intention in Surgical cases attended with much suffering, and may be carried in such cases, when required, to the extent of rendering a painful part sufficiently insensible to admit of its being altered in position or readjusted. We often have cases of painful disease of joints—strumous disease of the knee-joint, for example—where an agent like the hydrate of chloral may become of the greatest service for the purpose just described. The same application may likewise extend to the treatment of compound fractures where it is important that the injured parts should be moved without the excitement attendant upon suffering.

3. Because the hydrate *reduces the animal temperature*, it may be tested, with every probability of advantage, in cases where there is rapid increment of heat—fever—with restlessness and excitement. I select cases of Surgical fever as cases singularly happy in illustration of this position. In examples where accident or Surgical operation is succeeded by heat of body with constant pain, sleeplessness, and tendency to delirium, I can imagine no treatment better than the administration of moderate and frequently repeated doses (say twenty to thirty grains every two hours) of the hydrate. Under its influence sleep would be induced, pain and excitement relieved, temperature brought down, and undue waste suspended. What is more, the tendency of the agent is to maintain the fluidity of the blood, and thus to prevent the most dangerous of all occurrences in acute disease, separation and deposition of fibrine in the circulatory system.(b)

4. Because the hydrate *produces extreme muscular relaxation*, it may be reasonably employed in various cases, Medical and Surgical, where it is necessary to overcome muscular resistance or spasm. Thus it may be employed in tetanus, in cases where there is passage of gallstone, and, I should think with special advantage, in strangulated hernia. In this latter case it would have a double meaning. It might be employed not only for rendering reduction by the taxis easy, to the avoidance of an operation, but if operation were afterwards unavoidable, it would tend to remove the pain of the operation and to be of service to the operator by sustaining relaxation.

It is unnecessary for me to trouble you with further suggestive details. The physiological action of the hydrate of chloral understood, its applications will occur equally to all; I shall therefore be content simply to record that the external use of chloral for the relief of pain as recommended by Liebreich does not, according to my experience, correspond with its usefulness as an internal remedy. I find that when applied to the skin it creates some irritation, and in a typical case of superficial and local neuralgia, where I have employed it for a week with great care, it has had no effect in relieving the pain of the sufferer.

I had intended in this lecture to have brought before your notice some experimental facts bearing on the value of some chemical substances allied, in physiological action, to the hydrate of chloral, but the hour has long expired, and I must reserve what has to be said on this matter for a future occasion. Meanwhile, it is but just to accord our warmest tribute to the genius and industry of the distinguished Professor in Berlin, Liebreich, who has placed in our hands so admirable and scientific a remedy as that we have discussed to-day.

ORIGINAL COMMUNICATIONS.

CLINICAL SURGERY.—No. V.

ON DISEASES OF THE KNEE JOINT.

By THOMAS BRYANT, F.R.C.S.,
Assistant-Surgeon to Guy's Hospital.

The knee-joint is probably more frequently the seat of disease than any other articulation. In Hospital practice my own statistics tell me that it forms 40 per cent. of the joint cases admitted into Guy's; and in the out-patient department it is at least as common. The greater liability of the knee to injury than any other joint, and the thinness of its natural covering, together probably afford the true explanation of this fact, for there is nothing in the formation of the joint itself otherwise to account for its greater liability to disease than any other articulation. It is found slightly more frequently in male than in female subjects, my notes of cases showing that, out of 610 examples, 318, or 52 per cent., were in male subjects, and 292, or 48 per cent., in female, the difference between the two being

(b) Since this lecture was delivered, my friend Mr. William Adams, struck with the above suggestion, and with the view of acting upon it, consulted me respecting a case of compound fracture and commencing surgical fever in a man under his care in the Great Northern Hospital. I recommended that the hydrate of chloral should be administered in doses of twenty-five grains every two or three hours until the temperature of the patient, which had risen to 102° Fahr., was reduced to the natural standard. The treatment was carried out by Mr. Adams with the most satisfactory results, and will, I trust, be reported upon by himself, in detail.

only 4 per cent. in favour of the male as to frequency; whereas in hip-joint disease we found it was more common in the female by 10 per cent. As to the limb in which the disease is found, it attacks either side in equal proportions.

With respect to the period of life at which disease of the knee-joint is the most prone to appear, it seems, from the table I am about to quote, that it does not occur at so early an age as hip disease—that is, more cases of the latter, indeed nearly twice as many, are seen in children under 10 years of age than we find in the former, 32 per cent. of the whole number of cases of knee-joint disease and 62 per cent. of hip-joint disease appearing in subjects under 10 years of age. This difference between the two classes of cases is very remarkable, and seems to indicate that, if the knee-joint be more liable to disease from injury, the hip is more prone to disease from other causes.

Table showing the Ages at which Disease of the Knee-joint and Hip-joint commenced.

Age.	Number of cases of disease of Knee-joint.	Per cent.		Cases of Hip Disease.
Under 5 years	98	16	32·5	61·9
Between 6 and 10	101	16·5		
„ 11 „ 20	160	26·2		23·8
„ 21 „ 30	111	18·2		7·5
„ 31 „ 40	69	11·2		3·6
„ 41 „ 50	46	7·5	3	
„ 51 „ 60	25	4·1		
Number of cases	610			

It may be mentioned that 505 of the 610 cases were collected during the period of my registrarship at Guy's, the remaining 105 being from notes of cases that have passed under my own care since.

It would thus appear that disease of the knee is more common than any other affection of the joints that we meet with in practice, and that it is met with in patients of a more mature age than hip disease. It may also be said with all truth that inflammation of the synovial membrane is more frequently met with in the knee than in any other articulation, whether in the form of acute, or subacute, or chronic effusion into the joint, or of the pulpy disease of the same membrane; for synovial inflammation in one of its forms not only occurs more commonly in the knee than in any other joint, but it likewise is met with more frequently in middle age or adult life than at an earlier period, childhood being more prone to disease of the bone than manhood.

On the Pathology of Diseases of the Knee.

The diseases of the knee-joint have no special pathology; the same diseased actions that occur in the hip or in any other articulation are found in the knee, the formation of the joint in no single point favouring any special form of disease. Its more exposed position and the thinness of its coverings have been already alluded to as explaining the greater frequency of disease of the articulation, and more particularly of synovial disease, but beyond these points the pathology of disease of the knee is identical with that of the hip, to which attention has been already drawn.

Excluding the development of new growths, inflammation of the bone or of the synovial membrane in one of its forms is the essence of all the changes that we meet with in practice, and so-called strumous or scrofulous disease of the knee is as indefinite, unsatisfactory, or unmeaning a term as it is when applied to the hip-joint. The remarks we have already made in a previous chapter upon this point are as applicable here as they were there, and may be referred to with advantage.

It is consequently unnecessary to go over again the ground we have already traversed when considering the general pathology of joint disease; but looking at joint pathology in its clinical aspect, it may safely be asserted that it is in the knee-joint that the changes which the different parts entering into the formation of the joint undergo in disease are the best observed; it is in the knee that the student finds the best types of the different forms of disease, and can make out the clinical points by which one form of affection is to be distinguished from another.

Any expansion of the articular extremities of the bones can be seen at once in the knee by comparing the sound with the affected limb. Any effusion into the synovial cavity can likewise readily be made out on examining the affected joint side by side with the healthy one; and an enlargement of the bursæ, deep or superficial, is also readily to be diagnosed.

In cases where two or more forms of disease are associated together, the difficulties of diagnosis may be somewhat greater. The clinical history of the case, together with its local features, will generally point to the true character of the affection, and thus help the Surgeon to a correct judgment.

When the articular extremity of the tibia or femur is alone expanded, or when (which is more usual) both bones are enlarged, the joint assumes a special form that is at once to be recognised on comparing it with the sound limb. The soft parts over the bone will be found healthy and movable, and there will be an absence of any effusion into the synovial capsule. Yet the joint will be clearly enlarged from the expansion of its bony elements, even to the extent of one or two inches beyond its fellow. To the eye and hand these changes are very characteristic.

When effusion takes place into the synovial cavity from acute, sub-acute, or chronic inflammation, the changes which are to be seen by the eye and felt by the hand are no less clear than they are in expanded or inflamed bones, although they are very different. The synovial membrane, when distended with fluid, becomes much dilated; it presses forward the patella, which will be felt on palpation to float as upon a water-bed, and may be made to dip on pressure upon the condyles of the femur which lie beneath. The natural dimples or depressions which in health exist on either side of the patella will have disappeared, and in their place the bulging synovial membrane will be both seen and felt. The extensor muscles above the patella will likewise be raised by the distended sac, and the soft parts below the patella, down to its ligament, will likewise project. Distinct fluctuation will not only be felt across the joint from side to side, but will likewise be made out as readily in an oblique direction from above downwards. In fact, the outline of a knee-joint when distended with fluid is not only readily made out by the eye on comparing it with the sound limb, but is as readily to be made out by the hand on a careful examination.

The annexed drawing has been made to render these remarks more intelligible, and well illustrates the peculiar local changes that synovial effusion causes. A healthy joint is placed beside it for comparison.

Fig. 1.

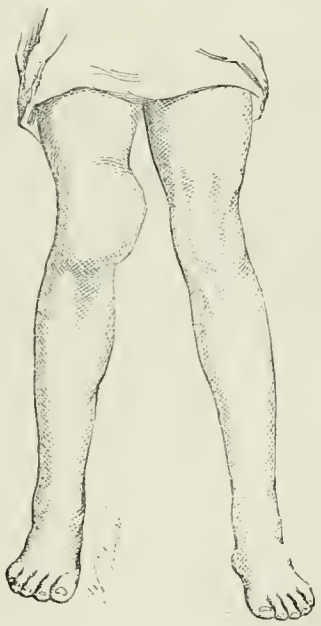

Fig. 1.—Drawing taken to illustrate the local effects of synovitis.

In the pulpy disease of the synovial membrane the local symptoms by which the affection is to be made out are likewise characteristic. We neither find expanded bones, nor dilatation of the synovial sac with fluid, such as we have already described; consequently we do not meet with any of the well-marked symptoms to which attention has been drawn, yet we find others equally characteristic. We find that the different points of bone which are always to be felt in a healthy joint are somewhat obscured, if not indistinguishable. We find that they are clearly covered in with a soft solid, not masked with effusion. We detect on palpation a doughy sensation over the articular

margins of the bones, and more particularly on either side of the patella. No fluctuation is to be made out as a rule, and when it exists the fluid will clearly be in a thickened capsule; if in a distended one, it will be altogether unlike the fluctuation of a joint simply filled with fluid. In fact, the local symptoms of the pulpy disease are as typical as are those of synovitis or inflamed epiphysis. A drawing of such an affection is here given to help the reader in understanding the above remarks.

FIG. 2.

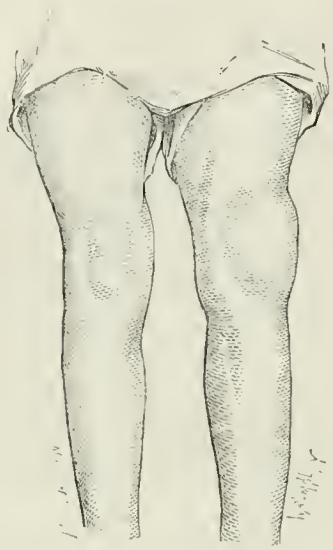

FIG. 2.—Drawing taken to illustrate the external changes of a joint the subject of the pulpy disease of the synovial membrane.

The difficulty of diagnosis in these joint cases is, however, felt when several tissues are involved together, and it is then that the clinical history of the case becomes of so much value to help the Surgeon.

In a former paper these points have been briefly considered, and it is consequently unnecessary to repeat them here. Yet, to make what has been written more intelligible, it must be mentioned that, in cases of expansion of the bone, or of chronic inflammation of the cancellous tissue of the articular extremities of the bones, pain of an aching character—often regarded as a growing pain—will always be found to have preceded, for a greater or less period, the local changes to which attention has been drawn.

That in effusion into the synovial membrane, as in ordinary synovitis, effusion into the articulation accompanies, or rapidly follows, pain, or the local cause of the complaint; and that, in the pulpy synovial disease, the local symptoms are, as a rule, so insidious that, beyond the enlargement and occasional increase of heat or aching of the joint, there are no well-marked or characteristic general symptoms. Nevertheless, it is to be remarked that, in these three classes of cases, which include every form of joint disease independent of new growths, whilst the local symptoms of each widely differ, the group of symptoms which indicate each form are somewhat characteristic.

We will now proceed to illustrate the different forms of disease of the knee—quoting cases of simple synovitis, acute, subacute, and chronic synovitis, the result of a wound or injury to the knee, pulpy disease of the synovial membrane, and inflammation of the articular extremities of the bones.

I propose in this, as in the former article on hip disease, to divide the cases into parts. The *first* including cases of synovitis, pulpy disease of synovial membrane, and articular ostitis, in which recovery took place with a sound joint. The *second* including cases of the same classes of disease, in which recovery followed with a stiff joint, but without suppuration. The *third* part will include cases of suppuration of the articulation, with its results; and the *fourth* will contain cases that have recovered wholly or in part, with anchylosis, the limb being bent at bad angles, together with some remarks on the treatment of such cases; whilst the *fifth* part will be devoted to the treatment of knee-joint disease, more particularly in reference to operative interference.

(*To be continued.*)

CASE OF

ULCERATION OF THE NECK, APPARENTLY MALIGNANT, PROBABLY SYPHILITIC.(a)

By HENRY HANCOCK, F.R.C.S.,
Senior Surgeon to Charing-cross Hospital.

A. S., aged 37, a plate-layer on the South-Western Railway, was admitted under my care into Charing-cross Hospital, on May 4, 1869. He has always hitherto been a strong muscular man, but has lost flesh and strength lately. He has been temperate and healthy, with the exception of an attack of syphilis eighteen years ago, from which time until about three years since he has had nothing whatever the matter with him.

Three years ago last Christmas, he worked on the railway as a plate-layer during bad weather, and thinks he must have taken cold, as he then for the first time noticed a hard lump over the mastoid process of the left temporal bone. It disappeared in a day or two, but, for the next two years, whenever he caught cold, the swelling returned at the same spot, but always subsided as before. About eighteen months ago it reappeared, and gradually increased in size up to the time of his admission, when his face and head presented a most unpromising appearance. His face was so much swollen that his left eye was completely closed, and the mouth pushed over to the opposite side. The whole of the left side of the head and face was enlarged, the ear standing out from the head, and a large excavated ulcer about three-quarters of an inch deep extended from below the zygoma, down in front of the ear and behind the angle of the jaw, spreading in an irregularly oval form over the left side of the neck, from within half an inch of the mesial line in front to within about an inch and a half of the mesial line behind, and from the mastoid process to the clavicle. The mischief did not encroach on the face except below the zygomatic process; but the cheek, especially that portion where the whisker grows, was hard, nodulated, tallow-coloured, and, together with the rest of that side of the head, pitted on pressure.

The edges of the sore were hard, overhanging, sharply though irregularly defined, and of a deep reddish-purple colour, which extended also to the surrounding parts for nearly an inch. Its surface was almost smooth, and covered for the most part with grey fœtid exudation. The movements of the lower jaw were so much impeded that he could not admit more than the point of a small tea-spoon between his teeth. The right side of his head and face were swollen, but not ulcerated. He says that ulceration commenced about three months before his admission. He did not suffer much pain during the day, but it became severe towards night, and subsided about five o'clock in the morning. He had great difficulty in swallowing, and was much troubled with a convulsive cough. The general appearance of the mischief and the ulceration made me fear that the case was one of epithelioma; but, among other symptoms, the nocturnal exacerbation of pain and its uniform subsidence towards morning induced the hope that it was an unusual form of syphilis, or at all events influenced by that poison, and I accordingly ordered liq. hydrarg. bichlor. ♏ xx., decocti sarsæ ʒ j., thrice daily, and the following lotion to be applied:—Chloroformi ♏ j., aq. destill. ʒ j. M. After this treatment had been pursued for ten days, his mouth became painful, and he complained of weakness, whilst the appearance of the sore remained much the same. I therefore discontinued the mercury, and substituted—℞ Pot. iod. gr. v., decocti cinchonæ ʒ j. ter die. He took this for three weeks, but without any improvement; on the contrary, he became much weaker. The discharge was so offensive that the neighbouring patients complained. I accordingly ordered the carbolic acid lotion to be applied to the wounds, and bags of powdered charcoal to be placed in his bed.

June 25.—The sore seems to have an inclination to heal at one part, the edge becoming softer, but at the same time there is a corresponding tendency to spread in the opposite direction. He is unable to close his lips, and there is a constant flow of saliva from the right side of his mouth. He also complains of violent pain in his head and face, always beginning at eleven at night and disappearing suddenly at about three a.m.

July 2.—I determined to try the effect of bromine, and accordingly directed him to take tinct. hyoscyami, tinct. humuli lupuli, āā ♏ xx.; ferri bromidi, pot. bromidi, āā gr. x.; decocti cinchonæ ʒ j. M., ter die.

22nd.—A marked improvement has taken place. The

(a) Read before the Medical Society of London.

swelling of the face and head is greatly diminished, the surface of the wound has become clean, the wound itself is contracting, and its edges are softening. The attacks of pain are less frequent.

Since the above date he has continued steadily to improve.

DISLOCATION OF THE SHOULDER, WITH FRACTURE OF THE ARM.

REDUCTION OF THE DISLOCATION JUST TEN WEEKS AFTER.(a)

By HAYNES WALTON,

Surgeon to St. Mary's Hospital, Surgeon in charge of the Ophthalmic Department of the same.

In January of this year Mr. W. W., a stout man, very muscular and remarkably powerful, 48 years old, was brought to me as a private patient, with well-marked dislocation of the shoulder downwards, or in the sub-glenoid position. The hand and forearm were much swelled. He was in pain, which was increased by any movement of the limb. There was evidence of the surgical neck of the humerus having been broken, probably extra-capsular fracture, and the amount of callus showed that the union was irregular.

History.—Just ten weeks before, when at Gibraltar, W. W. fell into a drain which was being made several feet from the surface. Fracture of the arm was at once detected and treated. When the splints were moved in a month's time, the dislocation was observed, but not recognised as such, and the patient came to England to obtain the advice of a Hospital Surgeon.

There are three points which I shall notice, the duration of the dislocation, the means that I adopted for its reduction, and the result.

It is seldom that a dislocated humerus can be reduced so late as ten weeks after its luxation, and few Surgeons would make the attempt. When the patient is not in pain and the under movements of the arm are good, some have considered it wiser to leave the case alone, or to give more mobility to the new joint by forcible circumduction. But dislocations have been reduced after three months, the time usually assigned as the limit at which success is likely to be got, and even later than this. The pain which my patient endured was in itself sufficient reason why I should make an attempt to get the displaced bone to its proper locality. It was evident that the ordinary method of reducing shoulder dislocation was inapplicable here in consequence of the late fracture, especially as it had not united well.

With the assistance of Mr. Owen, my House-Surgeon, and some of my pupils, this method was adopted. I padded the whole of the limb most carefully from under the head of the humerus to the wrist. I then applied a splint, a yard in length, along the inner side of the limb, another of the same dimensions on the outer side, and thoroughly fastened these throughout the whole extent by straps. The patient was placed on a table, and chloroformed. The dislocation apparatus was then used in the following way:—A broad strap was placed across the shoulder, the ends carried down over the belly and the back, and attached to a cord in a line with the body. By this the scapula and the clavicle were fixed, and the body was kept still. A second and narrow strap was passed under the arm, and made to rest on the head of the humerus, and the extremities attached to a cord communicating with the pulleys behind the head of the patient. Extension was then made in the ordinary manner, while I used the splints as a lever to direct the bone in the desired position, and to apply the required manipulations for breaking down the adhesions.

By this plan there was not the slightest pulling made on the bone, so that the fracture was not interfered with, nor was there any lateral pressure on the fracture, as the lever acted above it, while I had great power at my command. It was three-quarters of an hour before there were any evidences of success, when unexpectedly, with a loud noise, the reduction of the dislocation was effected.

As soon as the apparatus was removed, the arm was bandaged to the body, and kept in that position for a fortnight. The patient was at once relieved from pain. After the swelling of the shoulder subsided, and that of the arm and fore-arm, I allowed the limb to be used a little.

Six weeks after my operation there was no external evidence of the past injury, and the arm could be used nearly as well as its fellow. Inability to raise it as high was the only difference. Nothing more was seen of the patient.

(a) Communicated to the Medical Society of London.

ON THE CONDITION OF THE SEMINAL SECRETION IN DISEASE.

By M. LIÉGEOIS,

Surgeon of the Hôpital du Midi, Paris.

(*Concluded from page* 513.)

"In one case," says M. Duplay, "there existed an obliteration of the globus minor of the epididymis on one side, and yet spermatozoa were absent in both vesicles. This circumstance explains perfectly well the absence of spermatozoa in the vesicle corresponding to the lesion, but not at all in the one of the opposite side."

M. Gosselin relates a case in which the epididymis of one side was indurated so as to form an obstacle to the injection of the duct. No induration on the other side, and yet there were no animalculæ in either of the vesicles.

If we unite these cases to those where the spermatic secretion is abolished or notably diminished (which refers to persons with tuberculous testicle of one side, or even to those where the local induration seems distinct from any diathesis, like the patient observed by myself), we may say, the testicles are sympathetically united, or, to use the language of modern physiology, they are closely united by reflex ties.

The testicles—contrary to all double organs of the economy which mutually support themselves, and which redouble their energy when the function of one of the two is impaired—affect between themselves such a solidarity that the lesion which strikes the one resounds upon the organic activity of the other, and attenuates it.

Do we not find a proof of that sympathy in the epididymitis called *à bascule?* An epididymitis of one side developes itself, another appears in the opposite testicle, immediately lessening the intensity of the first, and which marches towards rapid resolution.

Without doubt the same phenomena take place when a lesion of any kind, of recent or ancient date, attacks one single testicle. The organic activity suffers, in one and the other case, from the existing lesion of the opposite side. It is therefore wrong to say the appearance of the second orchitis is subordinate to the diminution of the first. On the contrary, the diminution of the first is subordinate to the appearance of the second.

A word remains to be said about syphilitic orchitis, also named venereal testicle. The seminal fluid in this disease, too, is deprived of spermatozoa when the affection is double. The patients, moreover, are generally impotent. Vidal de Cassis was the first to observe that these patients regained their virile faculties by means of the iodide treatment. M. Gosselin has noticed that not only do these patients recover their virile faculties from this treatment, but that also the spermatozoa reappear in the seminal fluid.

Godard says, not all persons suffering from double syphilitic orchitis are exposed to these troubles, and he cites several observations to this effect. There is an affection of the testicles which sorely influences the spermatic secretion—arrest of development or accidental atrophy. The semen in such cases has rarely been examined; I only find two observations, one of Curling which was accompanied by azoospermia, the other of M. Laborde, and which treats of a maniac 26 years old who died in consequence of having cut off his penis. At the autopsy there was found a beginning of atrophy of both tesicles. The seminal vesicle of one side was filled with pus, the other with a serous liquid, spermatozoa being absent in both.

I have examined the seminal fluid of six persons who presented an atrophy of one of the testicles, and I have found a great diminution in the spermatozoa as well as the virile faculties in every one. I have also observed four patients with testicles of small size, but not amounting to atrophy. The quantity of spermatozoa was normal in only one of these patients, they were greatly diminished in the other three. The same varieties exist in testicles of large size. The number of spermatozoa is not always in proportion to the volume of the organs.

These results agree fully with those obtained by MM. Duplay and Dieu from persons of old age.

INFLUENCE OF DISEASES CONTIGUOUS TO THE TESTICLES AND THE EPIDIDYMIS.

We shall study successively the influence of false membranes, hydrocele, and spermatic cysts.

M. Gosselin is of the opinion that the false membranes developed from vaginalitis, withdraw from the testicles a certain quantity of the blood which should normally reach

them, producing anæmia of the gland, the result of which is azoospermia.

The same thing takes place, and by the same mechanism, when the two layers of the tunica vaginalis adhere to each other, or when new productions, tubercular especially, are formed in the interior of the testicle.

I differ with Professor Gosselin in regard to this derivative circulation, in cases of peritesticular inflammation at least, and which he thinks produces azoospermia.

The following case furnishes a good example of the point in question:—A man, 30 years of age, entered my wards with a complete gangrene of the teguments of the scrotum; no cause for the disease, no infiltration of urine. The dead portions of skin soon became detached, and when the sloughs had been separated from the testicles, these were hanging to the deferent canal completely uncovered. Healthy granulations formed over testicles and epididymis. I obviated the retraction of the skin surrounding the loss of substance, as much as possible, by the aid of straps and collodion. This man is yet in the Hospital, but he is perfectly cured. The cicatricial depression, occupying the place of the scrotal raphé, and the intimate adherence of the teguments alone betray the former existence of a lesion. There should certainly have been anæmia of the testicles in this case, and which, according to the theory of M. Gosselin, should have caused infertility. But nothing of the kind. The seminal fluid (three grammes), examined three months afterwards, contained spermatozoa in greatest quantity. The patient having had two nocturnal pollutions before the examination, it cannot be urged that the spermatic filaments had been secreted anterior to the lesion.

It is evident, therefore, that the spermatic secretion was not interrupted. I must add that the beginning of the vas deferens of one side was considerably augmented in volume.

M. Dieu says certain lesions of the envelopes of the testicles, such as adhesions or partial thickening of the tunica vaginalis or tunica albuginea, with fibro-cartilaginous deposits, do not appear to exert any definite influence upon the spermatic secretions; for in identical cases I have sometimes found an absence, sometimes the existence, of animalculæ.

As to the influence of hydrocele upon the secretions of the gland, but few observations have been gathered.

M. Duplay, who has had occasion four times to practise the autopsy of old men with double or simple hydrocele, has always found spermatozoa in the corresponding vesicle. There is an interesting observation in Roubaud's work on sterility, and which seems to prove that certain hydroceles may interfere, not with the secretion, but with the excretion of the seminal fluid.

An individual with double hydrocele and no animalculæ in his semen, was operated by the double puncture, after which the spermatozoa reappeared and his wife became pregnant. The hydrocele soon returned, and with it azoospermia. These same phenomena took place after two more punctures, until finally the patient decided to accept what he had previously refused—an iodine injection, which not only cured his hydrocele, but also his intermittent sterility.

I have examined the seminal fluid of four subjects attacked with hydrocele.

1. This case was cited under the head of bilateral epididymitis. It referred to a person with hydrocele of one side, and an epididymitis of the other. Two years later I practised the puncture of the hydrocele and found an induration of both epididymes, but more pronounced on the side of the hydrocele. The semen contained from five to twenty spermatozoa.

2. A patient, 44 years old, with double hydrocele of six years' standing, cause unknown, entered the Midi Hospital. The seminal fluid (two grammes), before the puncture, contained from ten to twenty spermatozoa. Both epididymes were much enlarged.

3. A patient, 51 years old, of feeble constitution, with largely developed double hydrocele, one four, the other of two years' standing, entered for treatment. The seminal fluid contains from 100 to 150 spermatozoa.

4. A patient, 57 years old, of good constitution, has had a blennorrhagic orchitis of the right side eight years ago, another on the left two years ago. A hydrocele followed each time. Both epididymes are found, after the puncture, very large and indurated. The semen (1·50 gramme) is thick, of syrupy consistency, no odour, opaline, contains some few spermatic granulations, but no animalcula.

If we analyse these four cases, we find that three of the four hydroceles were spontaneously developed, and in these spermatozoa existed in spite of the epididymary indurations. I might have added two of these cases to the series of bilateral epididymitis, but I thought best to place them here in order to show more strikingly that the spermatic functions persist in epididymitis consecutive to hydrocele. It is evident that the epididymis in the observations just cited was not obliterated, because the inflammation, or rather the sub-inflammation of the serous membrane simply causes a plastic effusion into the loose cellular tissue surrounding its circumvolutions. It certainly exercises a pressure upon these ducts, but it does not render them impermeable.

These cases, added to the one which I have previously described of an individual, who in spite of the plastic infiltration of the epididymis and the vas deferens, due to the granulations of the tunica vaginalis, still possessed spermatozoa—these cases, I say, evidently strengthen the distinction which I have established between the influence exercised upon the spermatic excretions by an epididymitis beginning in the interior of the duct, especially if of a blennorrhagic nature, and one where the inflammation takes place in the adjoining cellular tissue.

Spermatic cysts of the epididymis or serous cysts of the globus major do not interrupt the spermatic secretion. The spermatic cysts, however, are interesting to the Surgeon because of the spermatozoa which they contain. No one to-day doubts but that these elements come from the epididymary ducts in consequence of a rupture which has either preceded or followed the formation of the cyst. The liquid is generally of a milky appearance, and has been considered by many authors as characteristic of the presence of spermatozoa.

If we filter this liquid, we find in fact that the portion which passes through, and which is deprived of filaments, is remarkably transparent while the spermatozoa remain upon the filter. But these cysts may also, when the spermatozoa are in small quantity, contain a very clear fluid, and there are testicular cysts filled with a milky liquid, which contain no animalcula. The colour in these cases is said to be due to fatty granulations and to nuclei, similar to those found in bilateral obliterations of the epididymes (Robin). It may also happen that this milky appearance is due, in a measure at least, to the presence of leucocytes. I have examined, only a few days ago, the fluid evacuated from one of these cysts. It was of a whitish blue, contained a large quantity of white globules, and an immense number of spermatozoa. The patient scarcely knew that he had anything abnormal about his testicles, though the cyst was nearly the size of a pigeon's egg. He says he fell thirteen years ago, the perineum striking a bar of iron.

The physical character of these cysts is therefore insufficient for a diagnosis; the aid of the microscope is necessary. The liquid is generally alkaline or neutral, and coagulates by nitric acid. The spermatozoa which they contain are dead; some are intact, others have lost their shape, and sometimes we only find the remains of heads and tails.

INFLUENCE OF THE DISEASES OF THE SPERMATIC CORD.

What has been said of epididymary obliterations applies equally to those of the vas deferens, which nearly always coincides with it, but which may also exist separately.

Brugnon and M. Gosselin have cited examples of these isolated obliterations; they coexisted with an enlargement of the epididymis. I have observed one case of double funiculitis and double epididymitis continuing even beyond the external ring. This person did not ejaculate the least quantity of fluid, though the erection and the venereal erethismus existed. It is therefore probable that the lesion in this case extended as far as the seminal vesicles.

The atrophy of the vas deferens generally affects the duct in part or in totality, and transforms it into an impermeable fibrous thread. It is always accompanied by an absence of spermatozoa in the corresponding vesicle. M. Duplay has had occasion to verify this fact upon the cadaver. In other instances he has even observed the ossification of the vas deferens on aged persons and where the duct was not obliterated, but presented a rigid hollow tube, affording space enough for the passage of the spermatozoa.

The seminal fluid has been very often inspected in varicocele. The observations which I have gathered agree in every respect with those of Godard. I have observed that the spermatic secretions were not in the least modified. I have not, it is true, observed any double varicocele of great size, but of eight unilateral cases of middling volume I have found no alteration in the seminal fluid.

As regards the encysted hydrocele of the cord, M. Duplay has noted, in his examinations of persons advanced in age, an absence of spermatozoa in the vesicle corresponding to the side of the disease. M. Dieu cites the case of an old man, 75 years

old, attacked with an encysted hydrocele of the cord and a varicocele of the same side, where there was also an absence of spermatozoa. But as these observations have been made in persons of very old age, I do not consider them probatory.

A very interesting question, but upon which unfortunately our documents are few in number, is the following:—What is the influence of a hernial bandage upon the secretion and excretion of the testicle? Godard thinks the pressure on the cord exerts a deleterious influence upon the testicle, either because the return of venous blood is impeded or because the arterial circulation is intercepted. He cites the case of a vigorous man, 32 years old, in whom the right testicle only had descended into the scrotum, and who had an artificial anus in the inguinal region of the same side. The testicle of this patient seemed to have undergone a fibrous degeneration, probably produced, adds Godart, by the use of the bandage which covered the opening. No syphilitic antecedents in the case. There was a complete absence of spermatic filaments.

M. Piogey also cites an observation of sterility which he thinks was caused from pressure of a hernial bandage. The testicles of this patient had been retained in the abdominal cavity up to his eighteenth year; the left one had remained in the ring. He has had twice gonorrhœa, and has worn for many years a hernial bandage over the right inguinal region. The spermatic cord of this side is indurated. The patient has never had any children—azoospermia.

The above observations tend to show that hernial bandages influence the functions of the testicle and the spermatic cord, liable to produce atrophy of the one and obliteration of the other. I do not believe, however, that such is the result under ordinary circumstances. I have observed a young man 18 years old who, for seven years, had been wearing a double inguinal bandage for hernia. His testicles are of ordinary size, consistency, and elasticity. The seminal fluid—4 grammes—contained from 200 to 300 spermatozoa.

INFLUENCE OF SPERMATORRHŒA UPON THE SECRETIONS OF THE TESTICLES.

I shall terminate by a few words on the character of the seminal fluid in spermatorrhœa.

Lallemand, who has paid especial attention to this subject, says:—"As a general rule, when the evacuations are rare, and the seminal fluid still preserves its distinctive characters, the spermatozoa offer nothing remarkable as to numbers, dimensions, etc. But when the disease has lasted so as to influence the entire economy, the semen becomes more liquid, the animalcula less developed and less animated, although their number is not sensibly diminished. Lastly, when the individual is reduced to the last stage of dorsal consumption, the spermatozoa are no longer present, though the seminal fluid still retains its characteristic odour.

My own observations (six cases) are not at all in accordance with the description given by Lallemand. Azoospermia existed in only one of my patients. The other five, though the involuntary emissions were frequent, and the virile faculties had materially diminished, though the affection had lasted from two to ten years, I have never found any change in the aspect, the consistency, or the odour of the seminal fluid, not even in the number or the configuration of the spermatozoa.

As to the subject with azoospermia, he was far from the marasmus described by Lallemand.

He was a man 34 years old, of good constitution, married four years, no children. He had given himself to masturbation at the age of 13; seminal losses came on two years later, and when twenty-three years old, erections became very difficult. The erections have continued rare since his marriage, the emissions were brought on under the slightest erotic influence, and very often without these. The testicles are normal, the elements of the spermatic cord are intact; no spermatozoa under the microscope. The only solid elements which existed in the seminal discharge were fatty granulations. After having treated this patient for fifteen months with tonics and the advice to abstain from conjugal connections, I found no change whatever in his condition.

This is the only instance in which I have remarked azoospermia, and where the testicles seemed healthy.

Assuredly this observation cannot be ranked with those of M. Hirtz under the head of idiopathic sterility. The diminution of the virile powers in my patient, the increase of the same powers in those of M. Hirtz, establish a radical distinction between the two categories of patients, and which can only be explained by the anatomical structure of the seminiferous tubes.

THE MEDICAL AND METEOROLOGICAL HISTORY OF FYZABAD, OUDE.

By NATHANIEL ALCOCK, L.C.P.I.,
Assistant-Surgeon, 35th Regiment.

Having kept, during a residence of more than eighteen months a daily record of the barometric, thermometric, and hygrometric conditions of the climate of the above station, and having at command the regimental documents showing the exact occurrence of disease during each month, I shall endeavour so to review the information thus obtained as to bring out such facts as can fairly be regarded in the light of cause and consequence. Though fully conscious of the difficulty of conveying by words any idea of an unknown climate, I yet hope, by the definite expressions furnished by meteorology, to bring the nature of the seasons within the conception of all, and thus to place some of those who may subsequently visit this part of India in a position to avoid many influences which experience has shown to be baneful.

For convenience of description I shall adopt the popular division of the climatic year into the hot weather, the rains, and the cold season, and allot to each the dates and duration authorised by observation—viz., to the hot weather from March 15 to June 15, to the rains from June 15 to the end of the first week in October, and to the cold season from October 7 to March 15.

Throughout the three months of hot weather, life is sustained under the following circumstances:—The body is placed in an atmospheric medium heated during the first six weeks to an average daily maximum of 97·9°, and cooled to a nightly minimum of 60·6°, thereby being subjected to a variation of temperature of 37·3° in every twenty-four hours. Each cubic foot of air thus in contact with the surface, and likewise used for respiration, contains 5·2 grains of vapour, which causes it to be a little more than one-third saturated with moisture, its relative humidity being 37·6, complete saturation being represented by 100.

During the succeeding six weeks, up to the advent of the rains, the average daily maximum is intensified by 10° (108·3°), and the nights are hotter by 15½° (76·2°), the mean variation of temperature being lessened by 5° (32·1°). The atmosphere is now one-half saturated with moisture (49·6), and the actual quantity in each cubic foot is increased by 3 grains (8·5).

Such are the conditions, actual and comparative, under which the animal economy performs its functions during that part of the hot weather which succeeds the cold, and during that which precedes the rains, and is influenced by their approach. Of these the latter is the more sickly, and is likewise the most unhealthy period of the entire year. The number of cases of fever which occur from May 1 to June 15 exceeds considerably the average admissions for an equal time during either of the other seasons, being in the proportion of two to one over a like space during the rains, and five times as great as during an average six weeks in the cold weather.

The admissions for derangements of the liver during this period exceed by one-fourth a like average during the rains (the number treated in June being almost double that of any other month), and surpass by one-half the same average of time in the cold weather. Disorders of the stomach and bowels prevail in the ratio of 3 to 2 over a similar average in the rains, and of 10 to 3 beyond those of the cold weather. It is worthy of remark that these latter affections preponderate considerably during the months of May and July, being the one preceding and that following the month in which derangements of the liver are in excess.

I shall now portray the climatic conditions of the rains and cold weather by the same expressions which I have used to convey an idea of the hot season, and shall then endeavour by comparison to draw some feasible inferences of the causes of the more prominent and important diseases.

During the entire period of the rains, from June 15 to October 7, the climate remains almost *in statu quo*, the meteorological readings for the beginning of July differing but little from those for the end of September, yet varying considerably from the season out of which so sudden a transition has been made. The average maximum heat is lowered by 13½° (94·7°)

The nights are hotter by more than one degree (77·1°), and consequently the diurnal range of temperature is lessened by 14½° (17·6°). The humidity is increased by more than one-fourth, the air being now more than three-fourths saturated with moisture (77·1), and the quantity of vapour in each cubic foot augmented by more than two grains (10·7) The total

rainfall equals 68·4 inches. With the intervention of a neutral period, comprising the last three weeks of October, in which no rain falls, and the air is moist, oppressive, and hot, the change to the cold season comes on almost as rapidly as that from the hot weather to the rains, and this, when fairly set in, is one of the most delightful climates in the world. Its average maximum heat reaches only 81·3°, from which the nights are cooled down to an average of 50·4°. The air is a little more than one-half saturated with moisture, and yet contains but 4·9 grains of vapour in each cubic foot. December and January are of course much cooler than the foregoing depicts; but these figures represent the average of the climate from October to March. Since, then, in May and June the two most important diseases so remarkably preponderate, we may reasonably infer that in the atmospheric conditions of these months lies the cause of their respective prevalence, and accordingly we find that, coincident with the greatest development of fever, exists the highest average temperature of the whole year, combined with a relative humidity lower than that in any other month, with the exceptions only of March and April, and that, contemporary with the most frequent occurrence of derangements of the liver, there is an average temperature so high as to differ from the foregoing by not quite half a degree, but accompanied by a relative humidity higher than that of any other month, exclusive of those comprised in the rainy season.

The occurrence of fever during these months respectively being as eight to seven, while twice as many cases of deranged liver came under treatment in the latter as in the former, it is obvious from this, that intense heat is the chief factor in the production of both these affections, and that its power in disordering the liver is augmented by the addition of an excess of moisture.

Now as to the causal relation of heat to fever. The precise mode of the production of fever by heat, and its pathological results, have been definitely laid down by Dr. Richardson in his very beautiful experiments "On the Increment of Animal Heat."

In Dr. Richardson's lecture on this subject, published in the *Medical Times and Gazette* of May 8, are the following deductions:—"In sound states of health there will always be a slight increase of the mean temperature of the body during the heat of summer." And again: "I may state at once that, other things being equal, the power of an animal to live in a raised temperature is proportional to its power to convey away heat by evaporation of water. If we take care to impede the radiation of heat from the body of an animal, we may produce fatal effects even from summer heat."

Of the symptoms arising from increment of animal heat, however produced, Dr. Richardson says:—"The first result upon such increase of heat is increase of involuntary motion—motion of respiration—motion of circulation. It is an equalising process; it employs or uses up the force. When the accumulation of heat is moderate and slow, the increase of motion is frequently succeeded by free elimination of water from the body; indeed, this process once started, it is very difficult to sustain or advance increment of animal temperature; but when the accumulation of heat is rapid and determinate, there is the opposite condition of dryness." In the following sentence he gives the key to the full recognition of the process of induction of fever:—"Under a given accumulation of heat, about 7° or 8°, there is an act of contraction of the whole arterial system, and especially of the extreme or terminal parts of the arterial vessels, and, as a necessary consequence, diminished secretion. On this follows accumulation of water in the blood, and upon this often follows rapid accumulation of fluid in the serous cavities." Since, then, the temperature of the body is somewhat raised in summer, how much greater must this upward tendency be during an Indian hot season; and since, as I have shown (*Medical Press and Circular*, March 17) from observations on a temporarily hemiplegic patient simultaneously attacked with fever, the elevation of temperature on invasion of disease is in direct proportion to the previous nervous depression, it is easily intelligible how, in the system of a person already debilitated by prolonged and continuous exposure to a high temperature, any accident of additional exposure, temporary exhaustion, or transient derangement, may cause retention of the originally slight excess of heat till sufficient is stored up to give rise to partial "contraction of the terminal parts of the arterial vessels and diminished secretion," which, in its turn, would powerfully accelerate the accumulation of animal heat till that point is reached at which fever is developed. Such, then, is the relation of temperature to fever. The affection thus produced has three names—gradual in accession, it is termed fever; rapidly reaching a climax of extraordinary intensity in a person not exposed to the sun, it is called heat apoplexy; suddenly developed in one subjected to direct solar rays, sunstroke.

That fever on the verge of becoming heat apoplexy can be held in check by the abstraction of heat by cold affusion is familiar to Indian Medical experience, and it is equally an acknowledged fact that heat apoplexy can by the same means be brought back to a condition of fever.

I have already shown, in the paper before alluded to, that in a total of eleven cases of heat apoplexy which occurred in the 35th Regiment during a three years' residence in Mooltan, there is but one exception in which fatigue, intemperance, or disease had not depressed the vital powers prior to the attack, and from this it can be inferred how many valuable lives might be preserved to the State by the official publication of a code of rules for the guidance of officers commanding large bodies of men who have either recently arrived in India, or are persistently regardless of the effects of its climate.

Contraction of the arterial system, with its consequent fever, can also arise from the presence in the blood of various animal and other poisons, as malaria, and therein, together with the peculiarity of periodicity, lies the distinction of the fever which occurs in November from that which is met with in June.

And now to consider in what way heat acts as the principal agent in the production of disease of the liver, and how it is aided by moisture as its most powerful co-efficient.

The pathological change in the liver of the Anglo-Indian is exactly analogous to that developed in the Strasburg geese for culinary purposes, and its cause identical—viz., confinement in a heated atmosphere with a too abundant supply of food. The hepatic cells become loaded with oil, and fatty enlargement ensues.

Physiology has recently taught that one of the most important duties of the liver is to furnish a highly organised secretion, charged with carbon and hydrogen, which is reabsorbed from the alimentary canal to be utilised as fuel for combustion in the lungs, thereby helping to maintain the temperature of the body against the immense demands for abstraction of heat by radiation and various other means, which are in constant operation in a cold or even temperate climate. On transition, then, from a temperate to a heated region, the atmosphere of which is nearly three-fourths saturated with moisture, the loss of heat from the body by radiation and evaporation is reduced to a minimum; the consumption of heat fuel in the lungs is considerably lessened owing to the constitutional apathy induced by the season, and, as a consequence, much of the reabsorbed bile remains unused in the blood. During all this, English habits refuse to make any change in diet to meet the altered conditions. The liver is charged through the portal vein with materials sufficient to prepare fuel for the support of bodily heat against an arctic winter, and biline accumulates in the blood till a copious diarrhœa relieves the system. This sometimes becomes a dysentery, but more frequently subsides when its end is answered.

In time, the supply of biline being refused by the lungs, while the elements for its manufacture are still forwarded from the intestines, the liver endeavours to effect a compromise by a defective elaboration of the material, and stores up some of its hydrocarbon constituents as oil in the hepatic cells. These become gradually distended, and ultimately the entire organ is enlarged. Such, then, is the manner in which heat, with the co-operation of moisture, gives rise to enlargement of the liver, and in no other way can the rapid diminution of size which often follows a return to a temperate climate be accounted for, since, were the adventitious deposit of a more organised nature or closely incorporated with the hepatic structures, such a change would be impossible.

From this is apparent what need there is of some alteration in the diet of soldiers during the hot weather and rains in India, and how much the efficiency of a regiment might be increased, its invalid list lessened, and its death-rate lowered by the substitution of light claret for the rum and strong beer of the canteens.

Aldershot.

"Hon. M.D."—A Birmingham newspaper recently announced the death of Thomas Newey, of Birmingham, "Hon. M.D." On reference to the "Medical Register," the "Medical Directory," and various calendars, we could find no mention of the name, but on turning to a local directory we found the deceased described as "Medical Botanist."

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

UNIVERSITY COLLEGE HOSPITAL.

OPERATIONS.

We went to see the operations at this Hospital on Wednesday, October 27, and were glad to find the list unusually attractive, including the ligature of the external iliac artery by Mr. Erichsen, and four cases of lithotrity by Sir Henry Thompson.

The theatre was crowded with students, as it always is when there is anything to be done which is at all out of the common run of operations, and the small area was, as is also usual on these occasions, somewhat inconveniently filled with senior students, apparently dressers and *internes*. There is here no "front row" for the use of these gentlemen, as there is at other Hospitals, so that visitors desirous of viewing the operations may either struggle upstairs and compete with the students for an uncomfortable bit of railing, or, if they are fortunate enough to gain admittance into the area, they must here also trust to good fortune in securing a place on the bench, or, failing that, must swell the crowd of extra dressers and others at the back of the table. We have often wondered that at a Hospital with so large a number of students, and with such attractions to attendance at operations as are afforded by the capital clinical remarks of the Surgeons and the large number of interesting cases brought forward, the operating theatre has never been enlarged, or at least made better capable of accommodating the numerous students and visitors.

In spite of these disadvantages, the method and quiet regularity observed during the operations deserve all praise. On this day, for instance, there was no craning forward of anxious watchers in the area to the confusion of those above, who were too closely packed to be able to shift within view; the House-Surgeon and his dressers, with the Sister (in the garb of an English Sister of Mercy) and nurse, all performed their parts with quiet alacrity; and a special attendant from the instrument-maker looked after the instruments.

The first patient brought into the theatre was a cabman, aged 37, who had first noticed a large femoral aneurism in the right groin four weeks previously, and in whom Mr. Erichsen proceeded to tie the external iliac artery. Chloroform was administered by the Resident Medical Officer with Clover's apparatus, which is now always used at this Hospital. As soon as the man was fairly narcotised, Mr. Erichsen commenced, making the incision rather higher than usual, dividing the external oblique muscle without a director, but using this guard when making the deeper incisions. The peritoneum came distinctly into view, with the gut shining through it. No bleeding requiring interference occurred; the artery was speedily reached, and an ordinary stout whipcord ligature put round it. In the course of his subsequent explanatory remarks, Mr. Erichsen said that the incision had been made higher than usual—so high, indeed, that he could have easily reached the common iliac vessel had that been desired—in order to get as far above the aneurism as possible, since this extended above Poupart's ligament. He pointed out the various steps of the operation, and said that he would have employed the carbolised catgut ligature, as used by Professsor Lister, but that, on trying some of it before coming into the theatre, he had not felt satisfied of its strength, and, as the thread must be placed at the bottom of a tolerably deep wound, he thought it, on the whole, safer to trust to the usual whipcord. He mentioned that there was another aneurism in the Hospital, which might yet come before them in that place; but at present digital compression was being practised, the aneurism being in the popliteal space, and he considered it right to give both compression and flexion a fair trial before subjecting the patient—a man aged only 23—to the risk of the graver alternative.

The next case was one of a large firm nasal polypus, completely blocking the orifice of the right nostril of a woman. Mr. Erichsen slit up the nostril along its junction with the cheek, and cut through the root of the growth with scissors, afterwards closing the wound with wire sutures and collodion. We carried away a portion of the polypus for microscopic examination, as it did not present the more usual gelatinous appearance of these growths. We found the bulk of it to consist of spindle cells, intermingled with which were some large cells of the myeloid kind, so that the structure resembled rather that of an epulis than of an ordinary nasal polypus, and it probably sprang from the periosteum covering the nasal process of the superior maxilla.

Sir Henry Thompson's four cases of lithotrity now put in an appearance in quick succession, and we were amused with the regularity and uniformity attending the introduction of these patients. The old men came down one after another, each bearing his pillow, on which his buttocks were to be supported, and carrying in his hand a pill-box containing the results of the former crushings. As each patient entered the theatre he was greeted by the Surgeon with the question "How often have you been crushed?" followed by "Have you your stone with you?" The contents of the pill-box were then displayed, the nature of the calculus being explained to the students whilst the man climbed on to the table and adjusted his pillow. Then the lithotrite was introduced, the stone instantly caught and crushed two or three times, and the loaded instrument gently withdrawn, being quickly whipped out of the orifice, the only step in the process producing any demonstration on the part of the patient. The extracted fragments were then turned out on to a bit of blotting-paper, and added to the pill-box collection, and the patient carried back to bed. Three of the stones were of uric acid, occurring in men aged 65, 57, and 65 respectively, and the fourth was of urate of soda, in a man aged 69, who had been crushed already three times. The others had been before operated upon once, twice, and thrice respectively. In one instance where an enlarged prostate complicated matters somewhat, the man had suffered from slight febrile disturbance between the crushings.

The last case was one of disease of the os calcis, in which Mr. Erichsen, having cut down upon the bone by a T-shaped incision, gouged out the carious portion, and smoothed down the edges of the cavity with an osteotrite—a practice which, he stated, he invariably adopted when it could be done safely, as by this means an exceedingly useful foot might be secured, the disease being prevented from extending to the joint.

We afterwards joined the throng of students who accompanied Mr. Erichsen round his wards, and were much interested with many of the cases, some of which we shall hope to bring before our readers *in extenso* when they are completed.

ST. MARY'S HOSPITAL.

Going round the Surgical wards of this Hospital with Mr. Haynes Walton's class one day last week, we were specially struck with the excellent results of the system of continued irrigation as adopted by that Surgeon. One good example of the beneficial effects of this plan of treatment we have lately recorded in these columns. At the time of our report the man was making good progress towards recovery. He has since left the Hospital with a perfectly strong, albeit somewhat curved, leg. Our readers may remember that the case was one of severe compound and comminuted fracture of the tibia, in which a large bit of the bone was broken off, leaving only a thin plate of the posterior surface of the bone undetached at the bottom of a large wound. Although this wound took on an actively sloughing character, and the patient's general health became seriously impaired, from the date of the commencement of tepid irrigation not only was all or nearly all pain removed, but the reparative process made such good way that the whole of the new bone was formed with the discharge of only a thin scale like a large thumb nail.

There is at this moment in one of the male Surgical wards another good example of this treatment in the form of a very large ulcer nearly surrounding a man's leg. The surface is now covered with bright healthy granulations, and an inch of sound cicatricial skin surrounds the sore; but at the date of admission the ulcer was very much larger, the surface exceedingly foul, and the edges spreading rapidly. The phagedæna was checked, and the healthy action set in immediately on the irrigation being applied.

We shall hope to present more of these cases to the notice of our readers at a future time.

The plan of putting up fractures of the thigh suggested long since by Mr. Walton, and exclusively used by him in the wards, seems to produce such good results that we may mention here the chief points of the practice, although it has no longer any novelty to recommend it. The main defect in the ordinary long or "Liston's" splint is that, extension being made from the tarsus, this part of the foot is apt to be elongated, and an inconvenient deformity is thereby induced. In order to prevent this,

Mr. Walton directs that, instead of the usual two equal notches in the bottom of the splint, the upper notch (in the position of the applied splint) shall be only one inch long, the lower one being from seven to eight inches. The splint should be long enough to reach well up into the axilla from an inch below the sole of the foot, and carefully padded. The foot and lower third of the leg are then thickly padded with cotton-wool, so as to prevent any possible pressure on heel, external malleolus, or tendo Achillis. The splint is now to be applied to the outer side of the limb, and a turn of bandage passed round the metatarsus and through the shorter notch, so as to fix the foot quite squarely in position. The bandage is then carried up over the ankle, and a turn or two round the leg above the malleoli and through the larger notch fixes the splint firmly to the leg, after which the bandage may be taken in the usual manner up to the knee. The perineal band is next adjusted and counter-extension made, the splint being further fastened by a broad bandage passed round the pelvis between the great trochanter and the crest of the ilium, and the head of the splint kept in a comfortable position by a bandage round the chest, which may be altered by the patient to suit his own comfort. The thigh has thus no bandage covering it, although the whole apparatus is so firmly fixed that the patient may be readily rolled over on to his sound side without disturbing the limb. The perineal band may be removed by the end of a week, the muscles being then quite quiet. During the period of confinement to bed the heel is never allowed to rest for long together in one position, pillows being shifted daily under the leg, so as to prevent any chance of the formation of that most tedious sore to cure, which results from a slough on the heel.

We saw a curious case, also under the care of Mr. Haynes Walton, of a man, aged 35, who, three years and a half before, had sustained a severe fall, in which he had lost one of his front teeth—the right upper lateral incisor. A few weeks later, after much pain and swelling in the upper jaw, an abscess formed, and discharged through a small opening in the cheek, as well as through the alveolus of the lost tooth. The case was supposed to be one of caries of the maxilla, and many naval Surgeons treated the man under this belief, but without alleviating the symptoms. When he came under Mr. Walton's care there was considerable swelling of the side of the face, much pain, and constant profuse discharge from a sinus in the right cheek half an inch outside the nostril. The discharge from the alveolus had stopped, and the bottom healed over. On probing the sinus in the cheek, Mr. Walton was convinced that he detected the smooth hard surface of tooth enamel, and he accordingly enlarged the opening and extracted with forceps a perfect incisor tooth lying loose in the antrum. When we saw the man, eleven days after the operation, the wound was all but healed, and the pain and swelling quite disappeared.

Many are the expedients adopted in China to secure sympathy and money. Among the latest that have come to my knowledge is the following:—I was called to see a patient at his own house who had amputated the little and ring fingers of his left hand with a hatchet. The circumstances were these. Short of cash, and most probably having his opium bill due, he proceeded to a money changer's shop and protested before witnesses, the women of his house—of course sworn to perjury—that on the previous day he had brought 30 taels to be changed, and had not received the exchange. In vain the bankers declared that they knew not the man—protested that he had deposited no such money. He threatened them with a lawsuit. To bring the matter to an issue he said, if they did not refund the cash he would chop off two of his fingers, and this action would bring his case into court, and right or wrong the bankers knew that they would lose more by the pressure of the yamen officials, that most likely they would not be released from litigation until they had paid the uttermost cash, than by paying the comparatively reasonable demands of the patient. They chose the less evil, paid the man the money, and a consideration over and above for his heroic action and the loss of his fingers. His laziness and indifference were such that he pleaded inability to attend at the dispensary. Surrounded by a houseful of women, perhaps his own private property, he lived in comfort, ease, and dirt, so long as the money lasted. His ingenuity would then be taxed in devising other measures for the replenishing of his coffers. He was one of the bannermen pensioners receiving a small monthly allowance from the Imperial exchequer—Mantchus by extraction, who are generally very improvident and contrast unfavourably with their more frugal, industrious, and persevering neighbours the Chinese.—*Fifth Annual Report of the Peking Hospital, by Dr. John Dudgeon.*

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Medical Times and Gazette.

SATURDAY, NOVEMBER 6, 1869.

HAMBRO' SHERRY AT THE SHILLING DUTY.

Experience shows that the facility of procuring liquids of high intoxicating power is one of the most effective means of demoralising a population prone to drunkenness. And there is this bad feature about the use of distilled spirits—that whereas it is only the low and uneducated masses who will drink themselves drunk upon beer or cider, the unlimited supply of spirits is a temptation to which the refined and educated may fall victims. Hence it is that in Scotland and America, where whisky is the staple drink, the so-called "dipsomania" is met with amongst ministers of religion and the like to a degree utterly unknown in England and France. Friends of temperance will therefore give every facility for the use of *light* wine and of pure table beer, and will discountenance the use of spirits in any shape unless ordered as medicine.

But our well-informed readers know very well that there is something worse than either pure wine or spirits simply. Ask Dr. Garrod or Professor Charcot, and they will say that though beer or cider may brutalise the ignorant, and though spirits may inflame the liver and madden the brain of those who drink to excess, yet it is the combination of ill-fermented liquors with sugar and alcohol which is the great promoter of gout even in those who are moderate and temperate.

Amongst the various disguises under which the demon ardent spirits finds entry into the houses of women, is that of the cheap rascalities called Hambro' sherries, whether sold as such or in the guise of Spanish sherry. These miserable concoctions, which are now to be had at almost every grocer's, have, it is true, a little wine in them — wine too bad for sale, and unable to keep—but it is notorious, and it is confessed by the concoctors and vendors, that Hambro' sherries are artificial mixtures of unsound wine, spirits, sugar, and of various ethers and essences to communicate what the poor simpletons who drink them call flavour and bouquet. For instance, in one of those scientific "treatises" which are becoming a fashion in trade, the Messrs. Gilbey give this frank description of Hambro' sherry:—

"Germany is essentially a *natural* wine-producing country, but recently large quantities of wine have been shipped to England from Hambro', and occasionally sold under various names, frequently as cheap Spanish sherry, this having been particularly the case at the time when the vintages in Spain and elsewhere were not as favourable as they have been of late years. By some houses, however, this Hambro' wine was introduced under its proper name, and being a useful white wine of low price and good strength, it has maintained a position in this country. In its original state Hambro' sherry may be best described as a light German wine of poor quality, not

possessing in that condition sufficient preserving powers to render it suitable for shipment, or indeed for consumption as a *natural* wine in its own country. The wine is of a similar description to that produced in many parts of France for the purpose of making brandy. To render it fit for exportation a sufficient amount of spirit and saccharine matter are added, thus converting it from its original condition of a *natural* wine to that of a *preserved* wine similar to Marsala sherry. Hambro' does not produce wine, but it has become an important depôt for the cheaper descriptions of the various wine-producing countries, while, being a free port and not subject to any excise regulations, it has special facilities in the preparing of wines for export."

Habemus confitentem reum. Here we have the members of a wine firm writing as men of science, and confessing that this stuff, which is occasionally sold as cheap Spanish sherry (though some houses are so virtuous as to give it its proper name), is wine—so far as it is wine at all—too vile to be drunk and unable to be kept. As Dr. Johnson once said of a stupid book, "Sir, it has not vitality enough to preserve it from putrefaction."

The authors append a table of wine analyses by Dr. Dupré, from which we shall take the liberty of quoting two examples, one of a cheap natural wine, the other of Hambro' sherry of the same price.

	Specific gravity.	Weight of Alcohol.	Strength in Degrees.	Total Free Acids	Real Tartaric Acid.	Total Dry Residue.	Sugar.
Hock 15s. per doz.	993·48	92·0	20·20	5·62	2·550	18·55	0·12
Hambro' sherry 15s. p. doz.	993·02	160·8	35.31	3·47	0·000	40·33	27·00

"*Note.*—An ordinary wine-bottle holds about 1200 grains, and by multiplying the above numbers (save the first) by 12, the number of grains of the different constituents contained in one bottle of wine are obtained."

There is no mistake about the matter here. Wine not fit to drink or to keep—added alcohol and added sugar—here are the elements of a mess, and this it is which is vended as Hambro' sherry, and sometimes as Spanish sherry, The wine *ipso facto* unwholesome, the alcohol probably that coarse kind of potato spirit which gives the Hambro' wines what is known as the taste of tallow and which causes stupid headaches, and the sugar to supply pabulum for acid fermentation in the miserable stomachs of the drinkers. And this stuff is described as "useful (!) wine of low price and good strength." Useful for what? As a sham for shabby-genteel people to entrap their guests with; or worse still, "useful" to delude some poor ignorant invalid who is recommended to drink wine, and who gets this abominable concoction instead.

There are some further considerations which the politician and economist cannot neglect. The duties on distilled spirits yield more than fifteen millions to our annual revenue, and cannot be tampered with. Moreover, we may remind our readers that British spirits pay 10s. per gallon; fortified wine, containing from 26 to 42 per cent. of proof spirit, 2s. 6d. per gallon; whilst wine containing no more than 26, the highest strength of natural wine, pays 1s. per gallon. Now there is an agitation getting up for the reduction of all wines, so-called, to a uniform shilling rate on specious pretences, such as that this reduction of duties would greatly increase consumption, and so forth.

We hope that every one of our readers will use his influence with members of Parliament and in society to oppose the flood of universal spirit drinking which would follow. But let us look at the arithmetical side of the question, for it will be impossible to maintain the duty on spirits at 10s. per gallon if Hambro' wines and those Spanish sherries which Messrs. Gilbey affirm to resemble them are admitted at one shilling.

A gallon of gin, proof strength, is sold for 17s., of which 10s., at the least, represent the duty.

A gallon of Hambro' sherry, which may be fortified up to 42, say 40 per cent., costs 7s. 6d. per gallon, of which 2s. 6d. represents the duty.

If the alcoholic element in each were equally taxed, and if the gallon of gin were taxed the same as the Hambro' sherry now is, it would pay only 6s. 3d., whilst the sherry, if taxed as gin is, would pay 4s. per gallon. If Hambro' wine paid 1s., gin should pay only 2s. 6d. To allow the spirit in these spurious Hambro' wines to come in at a lower rate than the spirit in British gin pays, would be protection in the stupidest form, fostering a vile spurious imitation and allowing it to come in at a lower rate of duty than is imposed on a genuine thing of English manufacture—to say nothing of the sugar.

Certainly, if Hambro' wine is let in at a shilling duty, it will be the cheapest way of drinking spirits. Two bottles, containing 80 parts of spirit, might be got for 2s.; while one bottle of gin, containing 67 parts of spirit—*i.e.*, 33 under proof—also costs 2s.

What differences are made by a name! One portion of ardent spirits of home make, rectified and flavoured and sweetened and called "Old Tom," or "Fine Cordial Gin," is treated as the blackguard of the family. It is mulcted with 10s. duty; people who retail it over their counter must pay fifteen guineas for a licence; the people who drink it are called dram-drinkers; they rank with cads, costermongers, and washerwomen; and after death their miserable livers are held up *in terrorem* as gindrinkers' livers. But take half of the spirit in Old Tom, mix it at Cadiz or Hambro' with a little boiled grape-juice and some ether, and call it "Sherry" or "Spanish Port," and it at once becomes respectable; the customs welcome it at 2s. 6d.; you may retail at a licence of six guineas; the wives of respectable people drink it; country squires and Lady Bountifuls send it to the village sick; and financial jugglers try to induce us to let it in at a shilling duty, as if it were wine!

They might be flavoured, too, after importation, to resemble gin, which might increase their popularity. But, in good truth, there is no reason for any taxation whatever which does not contravene the proposal for reducing fictitious wines to the 1s. duty. The lower duty on these wines, accompanied, as it must be, by a reduction in the spirit duties, would be a loss to the revenue. It would be an offensive and stupid piece of protection, and it would propagate the vile habit of drinking the worst spirits in the most unwholesome combination. Disease and vice would enter with every bottle of the noisome rubbish.

RELAPSING FEVER.

Political, social, and physical conditions are inseparably linked together in the great circle of events which embraces and defines the welfare of communities. Each class of conditions depends to some extent upon, and derives its character from, the others. "The sword, the famine, and the pestilence" still, as of old, typify this relationship. The commercial crisis of 1866 inaugurated a period of depressed trade, from which at present we see no prospect of emerging. Men who earn their bread and support their families by their daily labour are without employment, and must either receive a sufficiency of State assistance or starve. The most perfect system of parochial relief, as administered in the metropolis, will not provide as efficiently for the nutritive requirements of these people as formerly they provided themselves; still less will it give vigour to the desponding mind, which is the copartner of the ill-nourished body. To add to the mischief, the price of provisions has been inordinately high. The price of wheat prior to last harvest averaged 72s., and meat is an article which many of the poor have been unable to obtain at all. Butchers carrying on their trade in the less wealthy quarters of London assure us that this is telling very seriously upon their business, for that the poor, who formerly bought little, now do not buy at all, and those who were good customers in their way content themselves with little. If the physical and disease-

resisting powers of a population are in any degree dependent upon the quantity and quality of the food they consume, there can be no question that among the three millions of London there are thousands who, from no fault of their own, are prepared to become the easy prey to any common or uncommon form of pestilence. But apart from this ordinary result, which applies to morbid causes generally, destitution, which is only another name for famine, for an habitually empty belly and its sad accompaniments, opens the way for the inroad of one special disease, which has passed under different names, such as synocha and famine fever, but is now known in Medical technology as the "relapsing fever." Whether this condition is created by famine alone, whether it requires other conditions to be conjoined, or whether it is necessary that a specific virus should be introduced from without, are questions we do not propose now to discuss. Certain, however, it is that from the sick person a something proceeds which is capable of developing the disease in the healthy, and which operates, as, indeed, all similar contagia operate, most certainly in the crowded, ill-ventilated, dirty, and miserable habitations of the lower classes of society.

Mr. Simon, then, has done well in issuing a note of warning, in a circular which has been sent from the Privy Council Office to all the Metropolitan Medical Officers of Health. Relapsing fever, although as yet not much spoken about, has been existent among the destitute poor of London ever since July of last year. The fact of the earliest cases received into the Hospitals being in Poles, some of them recently arrived in this country, taken in connexion with the fact that relapsing fever had been epidemically prevalent in East Prussia lying to the north of Poland since the end of 1867, and in Berlin and Silesia in 1868, render it probable that it is an imported disease, which has taken root in a soil prepared for its ready development, and is now scattering its seeds and cropping up in all quarters of London. The first cases observed were in Whitechapel, but the 141 Hospital cases recorded since the beginning of this year have been supplied from as many as twenty-five unions, as far apart as Greenwich and Chelsea to the east and west, and as Hendon and Lambeth to the north and south. Mr. Simon adds that no estimate can be made of the numbers of persons who have passed through relapsing fever at their own homes. As none of the Hospital cases were fatal, it is probable that little special note has been made of those other cases, where the distinguishing marks of a disease, of which nothing has been seen in the United Kingdom since 1855, may easily have failed to be recognised in a field of practice not very favourable to accuracy of diagnosis.

But this is not all.

"Of all the results of the disease," writes Mr. Simon, "the most practically important, as regards the community, is the protracted convalescence, with the long-continued bodily weakness of the patient, who, especially if scantily fed, may be left for an indefinite time too weak to earn his living, and a ready subject for other disease."

Dr. Murchison writes:—

"As the spread of relapsing fever and typhus is favoured by like conditions, and both diseases are restricted to the poorest classes of the community, it has been a common observation that an outbreak of relapsing fever has been followed by an increased prevalence of typhus. There are grounds, then, for apprehending that during the ensuing winter the poor of London may be visited not only by an epidemic of relapsing fever, but by an increase of typhus."

From this point of view Mr. Simon very properly exercises his functions as the adviser of the central sanitary authority of the country in calling upon local boards to take precautions —not sanitary boards only, but boards of guardians also, on whom the material relief of distress is incumbent. We may hope, even against expectation, that this warning will not fall upon listless inattentive ears. It cannot be said that it is premature or unnecessary, although doubtless there will be plenty of vestrymen and guardians who will, as is customary with them, turn to ridicule the vaticinations of the "Doctors." It is quite proper for the Medical Officer of the Privy Council to remind the administrators of the sanitary laws of the ample powers conferred upon them; but all such reminders are but as idle tales to persons whom nothing will urge into efficient action but a danger imminent to themselves. What has been done effectually to check the spread of scarlet fever in London? Just as much, and no more, may be looked for as the practical reply to Mr. Simon's appeal. To put the whole matter in plain language, it comes to this—Given an epidemic outbreak of contagious disease, the Medical Officers of Health of the metropolis might fairly engage to arrest its extension, if they were given with it the pecuniary means of doing so. Prevention of disease is another term for a free expenditure of money; it is a money question almost altogether. If the public expect to see our existent sanitary organisation produce the results for which it was established, ratepayers must be prepared to defray the attendant expense.

THE TENT SYSTEM IN GERMAN HOSPITALS.

(*Continued from page* 145, *Vol. I.* 1869.)

We have given a description of the tents and huts recently added to the civil Hospitals in some towns of Germany; we shall now survey the progress the system has made in military Hospitals. It is well known that the majority of the latter were originally buildings destined for some other purpose. In the old or eastern provinces of Prussia we frequently find soldiers' barracks transformed into Hospitals, and in the western parts of Germany (Aix-la-Chapelle, Cologne, and other cities on the Rhine) the sick soldiers are accommodated in buildings which were formerly monasteries. These Hospitals have not always airy and well-ventilated wards; it was therefore a wise act of the military authorities in Prussia to order or recommend the construction of tents. These are now found in perhaps a dozen of the larger provincial Hospitals (Garnison-lazarethe), and in the metropolis. Fortunately many of the old Hospitals can boast of beautiful grounds with fine old trees under the shade of which the tents find a place. They stand on the gravelly soil of the garden, and, where the ground is not quite even, we may occasionally find the bedsteads placed on bricks. The tents have recently been altered in size, and are not so large as the original ones. Their length is forty Prussian feet,(a) their width twenty feet, the height of the sides being five feet, at the top thirteen feet. Four poles, each fixed in a wooden cross on the ground, support the central beam, which is generally composed of three pieces. There are seven columns five feet high at each side. The roof slopes from the centre to the sides, and the former is of double canvas, the latter single. Two compartments five feet long are partitioned off at each end, and serve for attendant's room and utensils.

Air enters through two ventilators which are in the ridge, often provided with a cover to keep off the rain, but they are not always found. The sides may be removed, as they are only tacked on to the roof and fastened to the ground. That side whence the wind comes may be closed, the other one and the front being open. Contrary to the regulations, the tents are sometimes nearly closed, and then the air is bad. The number of beds is sixteen; each patient enjoys 400 cubic feet. In very hot weather the tents are disagreeably hot, and the patients get wet when it rains very hard; nevertheless it is rare that they get a cold—only a few cases of bronchitis are known to have happened in one or two of the tents. The ground where they stand has to be changed frequently, but the attendants (Lazarethgehülfen) are so well trained that they are able to construct a tent in little more than a quarter of an hour. The Surgeons are almost unanimous that the results of amputations and other grave operations are extremely favourable as compared with the operations in the Hospitals. The

(a) One English foot is equal to 1·029 Prussian.

attendants confirm these statements, and the patients themselves are generally very contented. Wounds often heal in a wonderfully short time.

In winter time the tents cannot be used, and they are therefore replaced in some institutions by barrack Hospitals. These are wooden pavilions or (more recently) of wood and stone, raised from the ground, only one floor high, with windows on each side, ample ridge ventilation, verandahs on one or more sides, and two or three large tile-stoves with air channels in the centre of the large ward. Two splendid barracks (Barracken) of the kind are now rising from the ground near Kiel, where they form a remarkable feature of the military Hospital which is being built there on the corridor plan. We shall watch with great interest the development of these structures in the various institutions which are about to adopt or have recently constructed them.

THE WEEK.

TOPICS OF THE DAY.

THE nomination of candidates for the representation of the Universities of Glasgow and Aberdeen took place in the College at Glasgow on Tuesday last. Mr. Archibald Smith, of Jordan-hill, was proposed by Mr. William Towers Clark, and seconded by the Rev. Dr. Eadie; Mr. Edward Strathearn Gordon, Dean of the Faculty of Advocates, was proposed by Mr. Leslie, and seconded by Mr. C. D. Donald. The show of hands was declared to be considerably in favour of Mr. Gordon. A poll was demanded in favour of Mr. Smith, and is fixed to begin on Monday, November 15. It will last five days. The general opinion seems to be that Mr. Gordon is tolerably sure of election—a belief which has certainly ripened under the influence of Mr. Smith's studied protestations of ignorance of the subjects which are of the greatest interest to the Medical graduates. Mr. Gordon, we believe, has pledged himself in favour of an amended Medical Act.

The verdict of the jury empanelled to inquire into the circumstances of the death of Santa Nistri at the County Lunatic Asylum of Hanwell has rightly failed to satisfy the public. We cannot, however, blame either the jury or the coroner for the unsatisfactory nature of their conclusion, for it must be acknowledged that the letter of the evidence did not justify any but a doubtful one. Nevertheless the publication of the story has thrown a heavy load of suspicion on the officials of the Hanwell Asylum, which, in the absence of further public inquiry, must remain. As the history is a short one, we will tell it at the risk of the charge of repeating what is already notorious. On October 11, a man, named Santa Nistri, was admitted into the Hanwell Asylum. His left eye was bruised, but there is no evidence to show that he was otherwise injured. He was an unmanageable patient, and was placed in the padded room. On Sunday, October 17, he was dressed against his will by an attendant named Pile. It appears that he resisted vigorously —"biting and snapping." In order to dress him we are informed that the attendant Pile lay down beside him. It is also in evidence that on the same day Nistri fell on a stone floor, and also that while in the Asylum he fell over a mat on some railings. On the Sunday in question he had a shivering fit, and was ill. On Monday he was able to walk, but on Tuesday he was obliged to be carried. On Wednesday his wife and Dr. Hawkes, who was then sent for, visited him, and found him suffering from serious injuries. The following day he died, and the post-mortem examination revealed fracture of the sternum and a collection of matter under that bone, fracture of the third, fourth, sixth, and seventh right ribs, and of the fourth, fifth, sixth, and seventh left ribs; the left eye was very black and lacerated, and there was a large bruise on the left chest. The jury, "after a short consultation, found that death resulted from injuries received, but how received there was no evidence to show, though the jury believed they were caused after the patient's admission to the Asylum." The opinion of Dr. Diplock, the coroner, seems to have been that the injuries were inflicted on the Sunday, and in his summing up he suggested the theory of the injuries having been caused by some one kneeling on the man's chest. Dr. Hawkes said that he believed it was possible, though very improbable, that the injuries were caused by the fall. We do not, however, care to adopt especially any theory in the matter, for on no supposition is it possible to acquit entirely the staff of Hanwell. Supposing even that the injuries were inflicted before Nistri came under their care, is it possible that a patient can be received at one of our largest lunatic asylums without undergoing examination on his arrival by a Medical officer? If there had been anything like an adequate Medical inspection, this at once would set at rest the theory of the pre-existence of the injuries. If there were not, the authorities of Hanwell are seriously to blame. On the other hand, it would seem that a patient may remain suffering from eight broken ribs and a broken sternum in Hanwell during an unknown period of from three to nine days without his injuries even being examined, to say nothing of diagnosed, by a Surgeon. These observations lie on the surface. Deeper still, there is the grave suspicion of unwarrantable violence on the part of the attendants which the man's condition reasonably suggests. In reference to this suspicion we would ask, where was the necessity for dressing Nistri against his will on Sunday morning? Surely to do so was to violate one of the first canons of the non-restraint system. In a padded room the man would not have taken more harm than when falling about on a stone floor, or kicking, struggling, and biting with a keeper stretched beside him. Could the unfortunate have been worse cared for under the old strait-waistcoat system? This is not the first time of late that the public have been reminded that the whole of the legal machinery for the protection of lunatics is not in perfect working, although two or three qualified Medical men have been prosecuted for receiving harmless patients without the consent of the Commissioners of Lunacy. We do not defend the practice of the private reception of lunatics, but we do say that there are also dangers in the opposite direction. At present the public have no adequate control over the management of our large asylums, and the inspection of those establishments, as now conducted, is ineffectual to insure the decent care of the insane. If we are asked for the proof of our allegation, we need advance no stronger one than the case of Santa Nistri.

The Chancellorship of the University of Oxford seems likely to be conferred, without a contest, on the Marquis of Salisbury.

Mr. Selfe, the Thames-street magistrate, acting under the 26th section of the Sanitary Act, has, at the request of Dr. Ellison and Dr. Woodford, the Medical Officers to the Board of Works of the Poplar District, sent an Irish family, consisting of father, mother, and three children, all suffering under contagious fever, to the Fever Hospital. The 26th section of the Sanitary Act of 1866 provides that "where a Hospital or place for the reception of the sick is provided within the district of a nuisance authority, any justice may, with the consent of the superintending body of such Hospital or place, by order on a certificate, signed by a legally qualified Medical Practitioner, direct the removal to such Hospital or place for the reception of the sick at the cost of the nuisance authority of any person suffering from any dangerous, contagious, or infectious disorder, being without proper lodging or accommodation, or lodged in a room occupied by more than one family, or being on board any ship or vessel." In the case brought under the notice of Mr. Selfe, the fever-stricken family inhabited two rooms, without furniture, conjointly with another family, who had not been yet attacked. They refused to be removed, and the Medical officers, through Mr. Charles Young, the solicitor, applied to the magistrate for powers to remove them by compulsion. The only difficulty in

the magistrate's way arose from the wording of the section, which defines "a Hospital or place for the reception of the sick within the district of a nuisance authority." Now, the Fever Hospital at Islington is not within the Poplar district. Mr. Selfe, however, most laudably acted up to the spirit of the Act, if not to the letter, in signing an order for the removal of the Irish family, and in giving directions for its enforcement. This is said to be the first time this section of the Act has been put in force.

An effort is being made to obtain the disused burying ground in the Gray's-inn-road for a pleasure-ground for the parish of St. Andrew's, Holborn, and the neighbourhood. We heartily wish it success.

The approval the majority of the General Council of the University of Edinburgh, which met on Friday last, has given to the admission of women to Medical study in that University —a measure before resolved on by the University Court—must not be taken as an expression of the opinion of the Medical graduates. It is well known that the Profession of Medicine is in no degree represented in the meetings of the General Council of the University. But very few of the Medical graduates of Edinburgh reside in that city or its neighbourhood; the large majority are in other parts of the United Kingdom and the colonies. Could their votes have been taken on the subject, there is not a question that the admission of women to the Medical classes of the University would have been rejected. As it is, this innovation has been adopted and carried by a number of *doctrinaire* Scotch presbyters and lawyers, whose conception of what is a fitting occupation for "leddies" has been formed without any practical acquaintance with Medical studies or practice. One thing, however, is to our minds clear. The Medical School of the University of Edinburgh cannot be both a school for women and a school for men. The University must elect which it will receive, for it will soon find out it cannot receive both. The University of Edinburgh has derived a large number of its students from England. We venture to prophesy that if this commingling of the sexes is to continue that supply will be cut off. What English father would send his son to a University to receive instruction, with a number of "bonnie lassies," from Professor Bennett on physiology—especially in the present state of the Scotch marriage law?

The inquest on the late Mrs. Fowler, of Penge, has proved that if the public are to be protected from poisoning themselves by legislation, an act of far greater stringency than the recent Sale of Poisons Act must be passed. The case of Mrs. Fowler shows that a person may go into a chemist's shop and ask for poison to kill cats. His name is entered in a book, and he is supplied with five grains of strychnia. The law has been strictly complied with, and no further inquiries are made. The purchaser goes home, leaves the poison, and it is taken by his wife, who seems to have been fully aware of what she was doing. It is clear that the mere entry of the name of the purchaser does not check these occurrences. Admitting the propriety of legislation, ought such poisons as strychnia to be sold without a Medical certificate or prescription?

The Pathological Society on Tuesday night discussed the subject of "Foreign Bodies" in the alimentary canal in general, and in the appendix vermiformis cæci in particular, with peculiar gusto. The case which elicited the discussion was one in which a pin had got into the appendix vermiformis, where it had created local inflammation, which had been followed by abscesses in the liver. Some marvellous stories were certainly told on the occasion. The quotation of Mr. Skey's remark that the appendix vermiformis was made to catch cherrystones drew from Dr. Dickinson a highly pictorial description of the mode in which nature prompts the inhabitants of Switzerland to disseminate the cherry along the mountain roads and passes of that charming country. Other speakers gave instances of the deglutition and passage of needles and gold plates with artificial teeth, which, after they had been subjected to the juices of the alimentary canal, "fitted better than ever." But the climax was reached by Mr. Arnott, who related the case of a woman who, like the child in "Pickwick," "rattled in the inside," and whose cæcum, after her death, was found to contain a number of cherrystones worn by constant attrition. It was impossible to cap this, and it closed the discussion. The newspapers this week have contained an account of a woman at Grayton-le-Marsh who died of peritonitis, and whose stomach and œsophagus were found stuffed with human hair. The history of the case was that for twelve years she had eaten her own hair. Collections of hair have been found in human stomachs before; they are not uncommon in the stomachs of ruminants, which relieve irritation of the skin by licking.

The latest news of Dr. Livingstone is a letter from Dr. Kirk, of Zanzibar, dated September 7, 1869. Dr. Kirk has received a letter from Dr. Livingstone, dated Bangweloo, July 8, 1868. In that letter Livingstone writes:—

"I may say I have found what I believe to be the sources of the Nile, between 10° and 12° south, or nearly the position assigned to them by Ptolemy."

From Arab accounts Dr. Kirk believes the "sources of the Nile" referred to by Livingstone to be large lakes.

In Dr. Richardson's lecture, delivered on Tuesday last, he showed that hydrate of chloral produces sleep when administered as an enema as well as when given by the mouth or introduced subcutaneously. He also showed that butyl alcohol and chloride of amyl, when injected under the skin, produce a deep sleep similar to that from chloral.

ROYAL COLLEGE OF SURGEONS.

The Calendar of this Institution—so great an improvement on the old-fashioned list—contains much interesting matter. We find that, in the Council of twenty-four members, the metropolitan Medical Schools are well represented:—*Guy's* by *Mr. Cock, President; *Mr. Hilton, ex-President; and Mr. Birkett, Professor of Surgery and Pathology to the College. *St. Thomas's Hospital* by *Mr. Solly, Senior Vice-President; Mr. South, ex-President; Clark, ex-Professor; and Simon. *King's College Hospital* by *Sir William Fergusson, Bart., Vice-President. *University College Hospital* by *Mr. Quain, ex-President, and Mr. Erichsen. *St. Mary's Hospital* by Messrs. *Lane and Spencer Smith. *Charing-cross Hospital* by Mr. Hancock, ex-Professor. *The London Hospital* by Mr. Curling. *St. Bartholomew's Hospital* by Mr. Paget, ex-Professor, and Mr. Holden; and *St. George's Hospital* by Mr. Hewett, ex-Professor. [Those with an asterisk are members of the Court of Examiners.] In the Court of Examiners there are now three members no longer on the Council—viz., Messrs. Skey and Partridge, ex-Presidents, and Mr. Adams. Mr. South is the only member of the Council who has twice filled the President's chair; he is now, by the resignation of Mr. Swan, the only life member. The only Medical Schools not represented on the Council are the Westminster and Middlesex. Of the Fellows, there are by examination 389, honorary 210, and by election 730, making a total of 1329. As Members of Parliament, we find Messrs. Brady, Clement, Dalrymple, and Vanderbyl. In the Calendar we find a Minister Plenipotentiary in Sir Rutherford Alcock, a Lord Bishop in Dr. F. T. McDougal, and a great number of magistrates. Of the surviving Fellows and Members who have carried off the Collegial Triennial and Jacksonian Prizes, we find that Mr. Swan obtained two of the former and two of the latter. Messrs. Coote and Harley are the only other Collegial prize-essayists. Of those surviving who have carried off the Jacksonian Prize, we find Mr. Wm. Adams, Sir R. Alcock (two), Messrs. Annandale,

Bird, Birkett, Clay, Crisp (two), Crompton, Curling, De Meric, Downing, Gaskell, Griffith, Heath, Hulke, Edwin Lee, Henry Lee, Poland, J. Smith, Swain, Sir H. Thompson (two), and John Wood. The writer in the *Times* on extraordinary longevity would find some wonderful illustrations of prolonged existence in members of our Profession, as shown in the Calendar of the Royal College of Surgeons of the present year. In a cursory glance we have found just half a score Members whose united ages amount to 946 years, giving an average of 94 years and rather more than seven months to each of these gentlemen. As such distinguished nonagenarians deserve to be handed down to posterity in the pages of the *Medical Times and Gazette*, we subjoin their names with the dates of their diploma, and if to these dates the age of 22 years is added it will be seen that the youngest must be 92, and that the oldest has reached the great age of 99 years. In alphabetical order, then, they appear as Henry Boys, 1796; Thomas Cooke, 1799; W. W. Cox, 1795; Henry H. P. Ferris, 1797 (as this gentleman's address is "Army," are not the initials we have placed in capitals indicative of "half-pay?"); Samuel Grant, 1799; Philip Haffe, 1795; Robert Lowe, 1792; Thomas Smith, 1794; James Williamson, 1799; and J. T. Wylde, 1798. On the *per contra* side of this longevity we find that of the eighteen distinguished students in Human and Comparative Anatomy only half survive—viz., taking them in chronological order, Messrs. *W. A. Hillman, *John Williams, *E. C. Hulme, J. T. Arlidge, *D. H. Monckton, John Falconer, H. V. Carter, J. L. Lizars, and H. R. Silvester. [Those gentlemen marked with an asterisk are Fellows of the College.] The deceased are—William Crozier, J. T. Quekett, James Dunn, S. R. Pittard, George Hansbraw, C. H. Hallett, G. R. Skinner, J. H. Sylvester, and T. H. Stewart. Of the five gentlemen who have received the honorary gold medal of the College there are surviving Messrs. J. Swan (1825), G. Bennett (1834), and W. L. Crowther (1869). Of the officers of the College, Mr. Stone takes the lead by seniority of service, having been appointed in 1832, followed by Mr. Chatto, 1853; Mr. Trimmer, 1859; and Mr. Flower, 1861. Altogether the Calendar of the College of Surgeons will be found to contain much interesting information. N.B.—We must not assume that all the above old gentlemen are alive; only no notice of their death has reached the College. Perhaps their relatives will clear up this point.

THE NOMENCLATURE OF DISEASE.

We understand that the Surgeon-General of the Army of the United States has at present under consideration the propriety of adopting the new nomenclature of disease drawn up in 1868 by the committee of the Royal College of Physicians, London. The nomenclature hitherto in use in the United States Army has been substantially identical with that proposed by Dr. Farr. As the new nomenclature will be employed in the returns of our army and navy for 1869, it would be desirable, for the sake of comparison, that it should also be used in the American and Continental armies.

BEARDS AND MOUSTACHES IN THE NAVY.

Just now, as the question of wearing beards and moustaches in the army at home is engaging attention, an order has been issued by which these appendages are permitted to be worn by all officers and men of the fleet, including the Royal Marines, when they embark for Indian service. The order, however, is imperative in one particular—viz., the use of the razor must be entirely discontinued, moustaches are not to be worn without the beard, nor is the beard to be worn without the moustaches. It is further stated that the permanence of the order is to depend on the neatness and cleanliness of the beards and moustaches of the wearers. "The Admiralty," says the *Indian Volunteer Gazette*, "have thus set the military authorities an example which they would do well to follow. They have in effect abolished the old order by their subsequent instructions, but it would be as well if, like the naval authorities at home, they would come forward and officially and entirely supersede the former senseless orders on the subject of beards and moustaches, and leave no doubts to disturb the minds of the wearers of these appendages." Reform in the services is slow and unsatisfactory. There is too much "red-tapeism" and a too irresponsible and divided authority to hope for any change, however beneficial it may be, unless public opinion is brought to bear upon those in office. But it is difficult to understand how these officials can explain their reasons for withholding from the *military* a privilege which once was thought exclusively their own, when every *civilian* is entitled to it.

FEVER IN THE BAHAMAS.

A correspondent informs us that fevers, chiefly of the severe remittent type, but occasionally running into true yellow fever, have not been so prevalent as they are at present in Nassau since 1865. A considerable increase in this class of disease occurred during September among the civil population, the black troops, and the families of the European officers and non-commissioned officers. The troops have not been moved out into camp, there being no suitable ground available for them during the heavy rains.

DEATH FROM HYDROPHOBIA.

A case of this terrible, though happily rare, disease terminated fatally in the Meath Hospital, Dublin, on Thursday week. From information given by the unfortunate patient himself, and from facts which subsequently came to light at the inquest, it would appear that the subject of the malady, a labouring man, named James Egan, was, one morning in the middle of July last, bitten on the right wrist by a dog which at the time presented undoubted symptoms of rabies. The wound was cauterised, and the man continued in good health up to Saturday, October 23, on which day he complained of uneasy sensations and pain in the vicinity of the original wound. These continued unabated until the following Tuesday morning, when he became unable to swallow fluids. On his admission to Hospital next day, it was found that the mere sight or sound of water produced no effect, but the attempt to drink ever so little of it brought on spasmodic efforts of the most distressing kind. It was noticed at this time that the heart's action was turbulent and excited, and that there existed an occasional irregularity in the rhythm of its sounds. Further than this, no physical condition was observed. During the ensuing night the patient became at times delirious, and in this state he continued for a period of twenty-four hours, when death put an end to his sufferings.

DISLOCATION AT THE HIP.

Reduction of dislocation at the hip-joint by manipulation is such a ready method, when compared with the old-fashioned process by pulleys, that any addition to the history of the subject is valuable, as it may be turned to account and employed by Surgeons single-handed. Mr. Maunder tells us that he has lately effected reduction by manipulation in a child five years of age who had fallen downstairs some ten days previously. The signs of displacement on the dorsum were sufficiently well marked, but flexion and extension of the thigh within certain limits were unusually free. Chloroform having been administered to incomplete anæsthesia, and the pelvis fixed by an assistant, the Surgeon, holding the knee with the right hand, flexed the limb forcibly upon the pelvis, at the same time rotating outwards. From this the extremity was carried by circumduction into a position of extreme abduction, and then, while being passed by continued circumduction towards extension, the head of the bone passed to the acetabulum with a jerk.

On another occasion Mr. Maunder reduced a similar dislocation in an adult without the aid of chloroform; but the drug is useful to prevent voluntary muscular effort. Mr. Maunder's patient, who was submitted to amputation at the hip-joint for tumour of the thigh early last week, is progressing favourably.

SEA WATER IN LONDON.

For a long time past various schemes have been proposed for supplying the inhabitants of London with sea water. One of the most notable of these was the suggestion of bringing sea water from Brighton by means of an aqueduct. The expense, however, was regarded as too great to be remunerative. A company has just been formed under the title of "The London and Brighton Sea Water Company," which has for its object to supply the metropolis with pure sea water, at so low a rate as to bring it within the reach of all. It is proposed to draw the water from the sea daily by means of a steam pump, then to filter it and remove sand and other mechanical impurities. The Company undertake to deliver daily, Sundays excepted, one gallon of water, at the rate of one shilling a week, and five gallons for four shillings and sixpence. For the present the delivery is limited to the western parts of London, but, if the demand is sufficient, other parts of the metropolis will be supplied on the same terms. The project, if properly carried out, is deserving of the support of the public and the Profession, and we hope it may be successful. It is unnecessary to enlarge on the value of the daily use of sea-water as a means of maintaining health and of strengthening and invigorating the system. In the nursery its use is invaluable, and it is to be hoped that it will be generally resorted to.

MEDICAL CLUBS AT PRESTON.

The following circular has been addressed to the secretaries of the various friendly societies and clubs in Preston:—

"At a meeting of the members of the Preston Medical Society, held on July 16, 1869, the subjoined resolutions were unanimously adopted by the Medical men practising in this town:—

"'1. That three shillings be the minimum charge per member per annum for attendance on all friendly societies and clubs, for adult persons residing within the borough.

"'2. That no club Medical officer be required to attend club patients outside the limits of the borough, except on the payment of mileage, as may be agreed on.'

"I beg respectfully to inform you that on and after January 1, 1870, my charges will be in accordance with the above."

It seems scarcely credible that any objection can be offered to these resolutions by the clubs, yet we hear it rumoured that they propose to bring in some qualified person to take the bulk of the societies. We cannot believe that any respectable member of our Profession will accept such an appointment. The result of the experiment in other places has not been successful, and has been somewhat humiliating to us as a profession. In Preston up to the present time clubs have only paid two shillings and sixpence a head!

THE DOCTOR ON THE STAGE.

One of our contemporaries has published an article with the above title. It is difficult to understand for what purpose, unless, indeed, it be to eulogise Mr. Burnand and Mr. Ryder at the expense of Shakespeare. The writer singularly enough finds fault with Shakespeare that his delineations of the characters of the Apothecary in *Romeo and Juliet* and the Physician in *Macbeth* are not so complimentary to our Profession as is the character of Dr. Mortimer in the *Turn of the Tide*. How should they be, looking at the state of the "Profession" in Shakespeare's time? We contend, however, that the character of Macbeth's Physician is honourable to us. He was evidently a man of observation and knowledge. It is true he says but little, and occupies a very small position in the play. But what he does say is to the purpose. His advice to the waiting-woman in the sleep-walking scene proves that he was a sensible man. What Physician of the present day could give better advice, so far as it goes?—

> "Unnatural deeds
> Do breed unnatural troubles; infected minds
> To their deaf pillows will discharge their secrets;
> More needs she the divine than the physician.
> Look after her;
> Remove from her the means of all annoyance,
> And still keep eyes upon her."

So, when Macbeth puts the question—

> "How does your patient, Doctor?"

He replies—

> "Not so sick, my lord,
> As she is troubled with thick-coming fancies
> That keep her from her rest."

And when Macbeth asked him if he could

> "Cure of her that,"

He replies—

> "Therein the patient must minister to himself."

What a contrast is there in all this to the drivelling stuff uttered by the "Apothecary"! The reason is obvious; the Apothecary of the time of Shakspeare (always excepting the founder of the institution in Blackfriars)—and we believe he drew from the life—was a mere culler of simples, an illiterate tradesman, often poverty-stricken. But the Physician was a man of education, and usually of a good family. Shakespeare was contemporary with many of the most celebrated men who have belonged to us. In his time lived Roger Marbeck, the first Registrar of the College of Physicians; Dr. William Bayley, Physician to Queen Elizabeth; Robert Jacob, who was selected by Queen Elizabeth to go to Russia to attend on one of the royal family, and a host of other able and learned men whose names and history are chronicled in Dr. Monk's most interesting "Roll of the College of Physicians." Shakespeare, no doubt, had come into contact with some of these, and drew from the life, making allowances for the scene of *Macbeth* being in Scotland and its action having taken place a long time before. At all events, this is certain: Dr. Mortimer, either in *Macbeth* or *Romeo and Juliet*, would have been as sadly out of place as "the Physician" or the "Apothecary" in the *Turn of the Tide*. By the bye, there is one anecdote with reference to the question of Macbeth and the answer of the Physician which may be mentioned here. Dr. Johnson was lying ill in Bolt-court, and oppressed with that melancholy to which he was often a victim. Dr. Brocklesby was in attendance. Johnson quoted in full the question of Macbeth, "Canst not minister to a mind diseased," etc., and Brocklesby answered in the very words of the "Physician." We have no wish to "run down" the *Turn of the Tide*. It is an excellent piece. The character of Dr. Mortimer is well drawn and admirably acted, but we are sure nothing would be more offensive to Mr. Burnand than a eulogy upon himself which by innuendo speaks slightingly of a name which is idolised and revered by every Englishman.

FROM ABROAD.—THE VELOCIPEDE IN COUNTRY PRACTICE—AQUA-PUNCTURE — M. KRISHABER ON THE PARIS BIOLOGICAL LABORATORIES.

M. P. Matthieu, writing in a recent number of the *Tribune Médical*, calls attention to the great utility of velocipedes in country practice. Speed and Medical practice, he observes, can scarcely be regarded as incompatible, and yet most persons, on first hearing of the velocipede, only regard it as boys' play, little deserving of serious attention. He speaks from experience in the matter; and first, as to the difficulty of this description of equitation, he says it is quite imaginary. Of five velocipedists—the youngest being 37 years of age—of his acquaintance, all acquired the art in about two hours. Once the habit of the exercise acquired, and it is performed, so to say, as instinctively as walking. On a level road it can be

pursued with the eyes shut as easily as possible. Even the lame are put on a par with others, for if one of the winches upon which the feet act is made a little shorter than the other, all goes on smoothly. There is no mode of locomotion attended with less danger, and the accidents that have happened have arisen from using badly made bicycles or preferring tricycles to these. The supposed advantage of these last in rendering the equilibrium more stable is quite illusory. After a few days' practice this becomes established, as it were, instinctively, without any effort. As a practical machine, the two-wheeler is alone possible. The tricycle not only goes much slower, and cannot turn sharp without oversetting, but it is far more fatiguing and can only be manœuvred on a broad level surface. The bicycle can follow the course of the carriages in the street. The fatigue this causes is far less than could be expected. Much depends upon the character of the road, but, as a mean, M. Matthien calculates that for the same amount of route traversed there is two and a half times less fatigue caused than in walking. Although only the femoral triceps is actually brought vigorously into play, the action of the respiration and circulation is vigorous, and a "hygienic moisture" of the skin, if not sweating, is kept up. Walking causes much more general lassitude, as might be expected, as the velocipede supports the general weight of the body, and the *tassement* of the spinal column which takes place at every step in walking is obviated. Certain it is that such fatigue as is produced is dissipated much sooner than that caused by walking. M. Matthieu calculates that a man of medium strength may accomplish without fatigue, on roads tolerably well kept, and in a not too hilly district, eight leagues *per diem*, at a medium speed of seven or eight miles per hour. Fifteen leagues a day and more may be very well managed. As has been said, much depends upon the road, as also on the wind. If the hills are steep, it may be necessary to dismount and walk, the velocipede becoming then a kind of moving walking-stick. But once on the brow, the descent on the other side may be accomplished with far greater rapidity than would be safe on horseback. A bad state of the roads from mud, thawing, etc., offers a great obstacle; but this will be overcome by future improvements. Already much good has resulted from surrounding the wheels with a band of caoutchouc, which it is said enables the velocipede to be used at all seasons, as the caoutchouc does not adhere to the mud, and easily yields to slight obstacles. If the inconveniences are thus not very serious, the advantages are obvious—viz., safety, speed, comfort, hygienic utility, and economy. To speak only of this last, the velocipede may replace the country Doctor's horse or carriage if he hires in bad weather, and especially it may prevent the need of a second horse, and save 500 or 600 francs annually. There is also the economy of time to be considered. Every country Doctor knows what it is to have to wait for his horse or even to saddle it for an urgent night journey, and here he has a docile, patient beast, always ready. Again, many visits at short distances now made on foot might be thus ridden to at a great saving of time.

M. Mallez has been trying in his clinic, in several cases of sympathetic muscular pain, the effects of a new and ingenious form of revulsion invented by M. Matthien, and by him designated "Aquapuncture." Attached to a forcing-pump is a leaden pipe with a filiform adjustment at its extremity. Pressure on the lever of the pump causes the penetration under the skin, through a capillary puncture, of some grammes of water which distend the subcutaneous cellular tissue, forming a small whitish spot, from the centre of which sometimes a droplet of blood issues. The first penetration of the cutis causes a sharpish pain; but this soon ceases, and in fifteen or twenty minutes the effused water disappears, leaving only the traces of a mere puncture, the pain having also disappeared. M. Mallez has employed it in some twenty cases. One of these was an example of severe sacro-lumbar muscular pains accompanying ataxy of the bladder, with enlarged prostate. Twenty-eight points of aquapuncture, made in the region of pain, were followed by immediate relief. Another patient suffering from prostatic discharge, with rachialgia, was instantly relieved after eight punctures in the perineal and four in the lumbar region. The other cases more or less completely resembled these both in the muscular and sympathetic character of the pain and in the speedy relief—or, at all events, considerable alleviation—obtained, and that more rapidly and more completely than by faradisation or other means of revulsion.

M. Krishaber, a writer well acquainted with the state of science both in Germany and France, bears testimony to the activity with which physiological laboratories of the most complete kind are now being organised in Paris. At the Jardin des Plantes one is being prepared under the auspices of M. Claude Bernard, intended rather for experimental investigation than direct instruction, which will leave nothing to be desired. A *chef de travaux* for each of the three chief sections of science has been nominated, the labours of all converging towards the same end—biological experiments. The laboratory of the Collége de France has also been greatly improved, and will be devoted more directly to the instruction of pupils; or rather, owing to the liberality with which the institution is opened, to audiences desirous of instruction. The Faculty of Sciences and the Ecole de Médecine are also making the most laudable efforts to rival these bodies; and, as far as the laboratories and their appliances are concerned, they are quite on a level with, and in some particulars surpass, those of other countries. Nor are the men who are to render their teaching fruitful wanting, as may be known from the work done when such powerful aids to its accomplishment did not exist.

But in M. Krishaber's opinion the great want now is the institution of numerous chairs. In Germany, he observes, from the very first year of their Medical studies, a certain number of the pupils pursue a direction as regards the accessory sciences which as surely conducts them to the professoriat, as a different direction pursued by others of their body leads to practice. Five or six years of study, and three or four, or even less, officiating as assistants, together with the production of some original work—which in such a medium is almost a matter of course—are the usual conditions for obtaining a chair. The multiplicity of schools and their scientific equality facilitate this; and the system of calling from chair to chair in the various universities, constituting a scientific and variable hierarchy, is an admirable stimulus to exertion. Every one has scope to show what he is capable of doing, and a probability of a reward attending his labours. Not only does Germany in this way secure first-rate professors for her own chairs, but she supplies them for Russia, Italy, and Switzerland; but such is the impulse now given to biological science that, notwithstanding the large number of Faculties, there is even in Germany a penury of chairs. Not that all is by any means as it should be in Germany, for Practitioners are there not infrequently insufficiently instructed, in consequence of the deficiency of the essential clinical element in the small schools, and in such a great deal too much is made of what is so pompously styled Physiological Medicine; conclusions are drawn from hasty impressions, and there is an incessant chase after novelties of questionable practical application. But while we admire the abundance, accessibility, and scientific position of the German schools, we need not be blind to their defects, or imitate their imperfections. It is certain, however, that the mere erection of laboratories, however complete and expensive, will never be of much avail unless steps be taken for the foundation of numerous chairs. Those who are desirous of pursuing a scientific career must meet with the encouragement which leads to material participation in the work in hand. The marshal's baton must lie in the knapsack. Great difficulties may lie in the way of accomplishing the changes, but, whether effected or not, at all events the illusion must not be entertained that all has been done for the prosperity of science when biological laboratories have been created.

THE EXISTING LAWS RELATING TO THE PROTECTION OF INCORRIGIBLE DRUNKARDS.

The modern proceeding by commission *de lunatico inquirendo* is based upon no Act of Parliament whatever. It forms part of the ancient jurisdiction or prerogative of the Crown. "The whole prerogative," says Lord Chancellor Erskine, "is this—it falls to the king to take care of those who cannot take care of themselves."

It is singular that the term *lunaticus*, which, though derived from a vulgar error, gives the title to the modern proceeding, is not to be found in any form of the old writ, nor in the statute *de prærogativâ regis*, 17 Edw. II. c. ix. x., defining that prerogative. The words of that Act are—"The king shall have the custody of the lands of natural fools (*fatuorum naturalium*). . . . Also the king shall provide, when any (that beforetime hath had his wit and memory) happen to fail of his wit (*non fuerit compos mentis*), as there are many *perlucida intervalla*, that their lands and tenements shall be safely kept . . . to be delivered unto them when they come to right mind (*quando memoriam recuperaverint*)."

Lord Coke, in his commentary upon Littleton, thus speaks of the term *non compos mentis*:—"*Non compos mentis*," saith he, "explaineth the true sense; and calleth him not *amens*, *demens*, *furiosus*, *lunaticus*, *fatuus*, *stultus*, or the like; for *non compos mentis* is most sure and legal."

The late Mr. Chitty, in his work on "Medical Jurisprudence," published in 1834, says—"The words 'unsound mind,' 'unsound memory,' and 'non-sane memory,' were in the older statutes and in the ancient law books indiscriminately used to signify not only lunacy (which strictly means a madness with lucid or sane intervals), but also any permanent *adventitious* or *acquired* insanity, as distinguished from idiocy, which usually meant congenital incapacity. The recent Act 11 Geo. IV. and 1 Wm. IV. c. lxiv. and lxv., in the enacting clause uses only the term *lunatic*; but then a subsequent clause (sect. 2, the interpretation clause) declares that that term shall extend to any *idiot*, or person of *unsound mind*, or *incapable of managing his affairs*; and the last term may be taken as synonymous to the preceding expression, or at least as a legislative expositiou of the term unsound mind, or indeed as of still more extensive signification—viz., *any incapacity* that has, in the opinion of a jury, rendered the individual unfit to be intrusted with the possession or management of his property, and rendering it essential, in their opinion, that a commission of lunacy should be issued against him, so that some person should be appointed to take care of him and his property, and this without actually finding that the party is an idiot, lunatic, or insane; so that in a legal view there are now four descriptions of mental incapacity—viz., first, *idiocy*; secondly, *lunacy* (where the individual is sometimes sane in *all* respects); thirdly, *insanity*, which may be either general or partial, in the latter case termed monomania; and, fourthly, any such degree of imbecility as to *incapacitate a party to take care of his own property*; and in each of which cases the law interferes, at least as regards civil cases. Indeed, even before the last Act, Lord Eldon and Lord Redesdale, contrary, however, to Lord Hardwick, considered that such a weakness as to endanger the care of property satisfied even the then more strict definition of the term *unsound mind*. But the express words of the last Act, "*or any person incapable of managing his affairs*," remove all doubt, and at all events practically afford to a jury the power of finding their verdict, so as to authorise a commission of lunacy, whenever they think that the party has evinced *such a degree of weakness of mind as to be incapable of managing his own affairs*, so that now a jury need not be perplexed with any Medical technicality upon the precise nature or name of the mental infirmity, and a commission may now be obtained and supported, if a jury should think fit, against any person whose *mental* faculties are so enfeebled as to render him incompetent to act for himself, without any precise inquiry whether he was born an idiot, or afterwards became insane, or has been enfeebled by old age, or by *intoxication*, or other means; and the *substance* of the question is, at least to a jury impanelled to inquire into the propriety of a commission of lunacy, whether the party is capable of managing his own affairs." (Chitty's "Medical Jurisprudence," pp. 343 and 544.)

Such was the opinion of one of the first lawyers of his day. That opinion was based not merely upon the recent Act (which was not an Act for regulating such proceedings, but an "Act for Consolidating and Amending the Laws relating to Property belonging to Infants, Femes-coverts, Idiots, Lunatics, and Persons of Unsound Mind"), but upon the previously expressed opinions of Lords Eldon and Redesdale. Let us therefore refer to the opinions of those learned judges.

In re Ridgway *v.* Darwin (December 18, 1802), reported in 8 Vesey, p. 65, Lord Eldon (Chancellor) said:—"I have reason to believe that in Lord Hardwick's time the Court did not grant a commission of lunacy in cases in which it has since been granted. Of late the question has not been whether the party is absolutely insane, but the court has thought itself authorised (though certainly many delicate and difficult cases with regard to the liberty of the subject occur upon that) to issue the commission, provided it is made out that the party is unable to act with any proper and provident management, liable to be robbed by any one, under that imbecility of mind, not strictly insanity, but as to the mischief calling for as much protection as actual insanity." "In a recent case," continued his Lordship, "the party, when he could be kept sober, was a very sensible man; but, in a constant state of intoxication, he was perfectly incapable, and would have been constantly contracting insanity."

And so Lord Erskine (Lord Chancellor A.D. 1806), *ex parte* Cranmer, 12 Vesey, 448, says:—"I think there ought to be an Act of Parliament, not from any defect in the jurisdiction, but on the immense moment that the Lord Chancellor should not assume an authority that does not belong to him by the ancient jurisdiction, and that may press sorely on the liberty of the subject. . . . The whole prerogative is this—that it falls to the King to take care of those who cannot take care of themselves." And even so long ago as the time of Lord Hardwick (1744), he seems to have hinted at a desideratum which the subsequent statute appears to have supplied.

Ex parte Barnsley, Lord Hardwick said: "Possibly the law may be too strict, and it might be useful in some cases that a curator or tutor should be set over prodigal or weak persons, as in the civil law." If Mr. Chitty's view is the correct one, it is entirely a question for a jury to decide whether the subject of a commission is "capable of managing his own affairs." It certainly was distinctly held by Lord Redesdale in Carew *v.* Johnston, 2 Sch. and Lef. 280, that the words "non-sane memory" used in the Irish statute, 7 Geo. II. c. xiv., include every sort of person of such description, whether idiot or lunatic, or incapable of managing himself or his affairs. It is true that Lord Hardwick decreed in Lord Donegal's case (A.D. 1752) that, "though a jury finds that one is incapable of managing his affairs, yet such a finding is not sufficient; but they must expressly find him to be of unsound mind." But there has been an alteration in the law since his time, and *commissions in the nature of those of lunacy* have since been issued in cases where there is such an imbecility of mind as renders a person incompetent to the management of his affairs or liable to be imposed upon (*ex parte* Cranmer, 12 Vesey, 445, 447, etc.).

We think an incorrigible drunkard clearly comes within the definition of a person "*non compos mentis*," and certainly of one "incapable of managing his own affairs," and as such might well be the subject of a commission *in the nature of those of lunacy*. Neither do we find this view controverted by the modern practice of the courts. The principal case supposed to favour the idea that occasional unsoundness of mind arising from accidental and temporary causes, such as excess in drinking, is no ground for a commission, was really decided upon altogether another ground; for although the Lord Chancellor (Lord Cottenham) used the words just referred to, he qualified them afterwards as follows:—"I refuse this petition because I find no *sufficient* evidence of *unsoundness* of mind *at the time* of the *inquisition or at the date of the affidavits*. New circumstances may possibly render an application proper at some future time." The jury had in this case expressly found a verdict that "J. B. was not a lunatic, but was of sound mind, and was sufficient for the government of himself and his estates," and the application was for a new commission to issue notwithstanding.

If, however, incorrigible drunkenness presupposes, like lunacy, although with lucid intervals, a continuing malady, and not merely an occasional unsoundness arising from excess, although excess may have originally created the malady, then all doubts upon such cases being fit subjects for a commission in the nature of that of lunacy are at once removed. "To be sane, the mind must be perfectly sound; otherwise it is unsound." (Per Sir J. Nicholl in Dew *v.* Clark, 5 Russ. 166,

168, reviewed per Lord Lyndhurst.) If "dipsomania," then, be a condition which may be called a state of mind, originally induced by excess of drink, which morbidly incites to further excess by an uncontrollable impulse, and not merely the state of inebriety itself producing a temporary unsoundness of mind, we think there can be no difficulty, if the case is properly presented, in applying the law to the facts. "In a commission, not of lunacy, but in the nature of a writ *de lunatico inquirendo*, it must be remembered," said Lord Eldon in Gibson *v.* Jeyes (6 Vesey, 272), "it is not necessary to establish lunacy, but it is sufficient that the party is incapable of managing his own affairs." The same principles that bring the dipsomaniac possessed of property within the jurisdiction of a commission in the nature of that *de lunatico inquirendo*, also throw protection around the pauper habitual drunkard, who, by a summary process, might be referred to the Medical officer of the Union to report on his state of mind, and if reported a dipsomaniac, according to the definition before given, he would undoubtedly be entitled to that protection to his person which is included equally with that to property in the exercise of the royal prerogative, the whole of which is this—"It falls to the Crown to take care of those who cannot take care of themselves." W.

HEALTH OF BOMBAY.

Although the report of the Health Officer of Bombay for the first quarter of the present year presents an unfavourable contrast as regards the public health between that city and Calcutta and Madras during the same quarter, it still contains evidence of the beneficial results of improved sanitary conditions. The deaths for the quarter were 4888, more by 931 than for the same quarter of 1868, but less by 314 than the mean for the last ten years. The rate is equal to ·59 per cent. of the population as given by the census, and it is made up as follows:—

	Per cent. per population.	Per cent. on deaths for quarter.
Fever	·16	27·19
Diarrhœa	·02	4·13
Dysentery	·03	5·26
Small-pox	·08	13·77
Measles	·03	4·38
Cholera	·04	7·10
All other causes	·23	38·17
	·59	100·00

Compared with the corresponding quarter of the preceding year, the deaths from fever, *the* disease of Bombay, are less by 218, from diarrhœa 1 more, from dysentery 13 less, from small-pox 370 more, measles 189 more, cholera 346 more, and from all other causes 256 more. During the first quarter of 1868 there had been only one death from cholera, 303 from small-pox, and 25 from measles, these being the diseases by which chiefly the increased mortality of the first quarter of 1869 has been caused. The Health Officer traces the increased prevalence of these preventible diseases to the usual causes—impure water, imperfect ventilation, inadequate drainage, impoverishing diet, and neglect of vaccination. In the presence of such unfavourable influences, the decrease of mortality from fever is at first sight rather remarkable, but may probably be accounted for by the general absence of the property of contagion in fevers of malarious origin, and by the epidemic prevalence of the other diseases. Notwithstanding the increased mortality from cholera during the quarter under report, as compared with the corresponding quarter of the preceding year, it is satisfactory to observe that, taking the average mortality from this cause during the first quarters for the last twenty years, there has been a decrease of nearly 300, also that the decrease in deaths from fever as compared with the same average has been 737. The Health Officer, Surgeon-Major Lumsdaine, observes that in the comparative death-rate by localities there are signs of change, and that although it would be premature to forecast the results of the year, there are strong grounds for hoping that the dawning improvement may be progressive.

The opposition to vaccination by the natives of Bombay is strongly commented on by Mr. Lumsdaine, who, on the "in-for-a-penny-in-for-a-pound principle," argues that the native of Bombay, being already beset on all sides and in every turn of his daily life by legislative acts, schedules, and bylaws, the addition of one more statute rendering compulsory not only the operation of vaccination, but the attendance of the vaccinifer during the period when fresh lymph for the purposes of extension could be procured, could hardly increase his already hopeless bewilderment, or be, in fact, an appreciable addition to the legislative burden he already bears. This is a line of argument which has not yet been employed against the Anti-Vaccination League in this country, however applicable it may be to their enlightened allies in Bombay.

During the quarter there has been a commission upon water supply, but the report is not yet published. In the fort and Colaba, the native town and its surroundings, there is never any actual want of water, as there was formerly; but in less known and less cared-for districts the deficiency of water supply is of annual recurrence, and is most severely felt, and Mr. Crawford, the Municipal Commissioner, remarks that he looks with great apprehension to the state of the town a year hence if something be not done to increase the supply. Mr. Lumsdaine strongly advocates the institution of public baths and washing-places for the native population; also that "dipping-wells" should be abolished, and the number of stand-pipes increased, and that the minimum supply of water should be thirty gallons per head, in order that waste should be amply provided for.

The practice of burning refuse and filth has been considerably extended in Bombay, and with beneficial results as regards economy, and it is considered that, with proper furnaces and appliances, the process has, during the past year, been proved to be harmless in other respects.

This is far behind the experience of certain advanced sanitarians at Darjeeling and Calcutta, who, as we see by recent accounts, have succeeded in converting sewage into gas, which is stated to burn brightly. If this solution of the sewage difficulty prove to be generally applicable, its importance can hardly be over-estimated.

The report is illustrated by a series of diagrams showing the meteorological conditions of the quarter, which, when continued from quarter to quarter, will afford very valuable information as to the connexion between epidemics and atmospheric variations.

SANITARY CHARACTER OF THE MOUNTAINS OF CORDOVA AND THE ANDINE HEIGHTS.

By Dr. SCRIVENER.

(*Concluded from page* 526.)

We have already spoken of the mildness of winter in these regions and of the little intensity of the cold. The mean temperature of this season is between 32° and 34° Fahr. The heat is occasionally excessive in the summer months, particularly in January, but this is properly said of the plains at the foot of the mountains of Cordova, as many localities between them and the Andine heights are more or less cool by elevation, more or less sheltered by mountains, and vary very much in this respect. The mean summer temperature ranges between 73° and 75° Fahr., but may reach to 96°, as we said before, in the plains. The temperature is apt to rise during the summer nights four or five degrees, when there is a complete calm or an entire absence of wind. The rainy season occurs during the autumn, but is irregular in its time of coming. It generally commences about the end of May or beginning of June, and extends to the end of September. It seldom rains more than two days together, and then the rain is not constant. The clouds gradually disperse, and the sun shines brightly in a clear blue sky. It is well known that the greater part of the rain which falls on the American continent is conveyed from the Pacific by north-westerly winds, and from the Atlantic by the north-east and south-easterly winds. Few observations have been made of the quantity of rain which falls in the Argentine Confederation, but, according to Dr. Burmeister, the rainfall in Tucuman, during his residence of eight months in that city, was 38·7 inches, and 8·7 inches during a twelve-month's stay in the town of Mendoza, as seen in the following table:—

	Tucuman.	Mendoza.
Spring	11·2	2·8
Summer	20·4	4·2
Autumn	7	1·7
Winter	0	0
	38·1	8·7

With regard to the other towns this can only be taken as approximate. Dr. Burmeister states that there is a very sensible difference in the quantity of rain which falls to the west of the city of Tucuman, even at a short distance from it.

During the months of July and August deciduous trees begin to lose their leaves, and do not regain them till the spring; notwithstanding which the country presents a green appearance all the year round, as there is a great variety of evergreen trees, among which are the orange, lemon, and lime trees.

The storms which in summer and autumn affect the region of the Andes are not unknown in these lower districts, but first we shall say that those who prefer to seek their health upon the Andine heights instead of the mountains of Cordova will have to supply themselves with mules at Salta or Jupuy. The distance from the mountains of Cordova to La Quiaca, the northern boundary of the Argentine Confederatiou and commencement of the Bolivian territory or Andine heights, is 770 miles or thereabouts. All along this tract of country the air is equally pure and equally adapted for consumptive patients as on the Andine heights or cordilleras of the Andes. The position of the towns varies little in height from that of the mountains of Cordova, some 4000 feet or so above the ocean level. From Jupuy, the last northern town in the Argentine Confederation, or from the city of Salta, all travel northward to Bolivia must be made by mules, as the road lies over lofty mountains, narrow plains, and deep ravines. The sky of the Andine mountains is pure azure, and the atmosphere is bright and clear, and is of such transparency as enables you to see objects at a distance, making them apparently close at hand, although in reality it would require a journey of several days to reach them. The climate is fine and healthy, and the lightness of the air produces an exhilarating effect and an increase of energy and activity. The grandeur of the mountains fills the mind with veneration and awe. As the traveller advances onward into Bolivian territory, the ascent will be from 8000 to 12,000 feet above the level of the sea; a slight oppression will then be experienced in breathing, arising from the rarity of the air. This oppression is more sensibly felt in the wet season, if the extremities become cold, and it is occasionally combined with headache and sickness of the stomach, called in Quichua language by the name of *zorochi*, or sickness of the Puna. It is a curious physiological fact that the Indians of Bolivia do not suffer from the rarity of the air; that they are furnished by nature with more ample lungs, and with a fuller chest in proportion to their frame, and so admirably constructed as not to experience its oppressive effects. The city of Potosi is built on the far-famed mountain of that name—that is, at 13,240 feet above the level of the sea. It is the highest inhabited spot on the entire face of the earth, and though its climate is healthy, it is very disagreeable from its daily changes, as the four seasons of the year are experienced on the same day. The early morn is excessively cold; the forenoon is mild and agreeable; in the afternoon between 2 and 4 the sun is scorching hot, and night extremely cold like morning. It is a fact well known to the inhabitants, that when perspiration is difficult in disease, whatever be the colour of a man's complexion, recovery from it is proportionally difficult; and in these cases they abandon the town for the more genial climate of the valleys. The same remark applies to all the towns of high elevation. There are, however, many fine valleys in Bolivia and Peru which are sheltered from the winds by the surrounding mountains; the temperature is warm and agreeable, the air is clear and transparent, and fog is never seen any more than in the higher grounds at any period of the year. Here patients have lived for years with one lung and with but little inconvenience. It may be easily conceived that in the elevated regions of Bolivia the effects of cold and rarefied air must aggravate affections of the pulmonary organs, especially pneumonia, which is not of infrequent occurrence, but it never degenerates into ulceration of the lungs; for says Dr. Scrivener, "I never saw in Potosi, where I resided for a twelvemonth, and for a more protracted period in other towns of Bolivia, a single case of phthisis pulmonalis; neither did I hear of one in my intercourse with other Medical men. Those who have suffered from irritation of the bronchial tubes will experience a repetition of the complaint during the dry season in the Andine heights, arising from the cold and freezing air; they will find their circulation and respiration accelerated by the least exertion and the consequent congestion of the lungs; but they will find relief in deep respirations, which, by diminishing the pressure of the atmosphere, permit a greater expansion of fluids in the deep-seated organs, in proportion as the external cold drives the contents of the cuticular vessels back on the great centres of circulation."

"It is not cold alone," observes the late Dr. Smith, "that causes resistance to an equal circulation by its dermal and pulmonary capillaries; but the air-cells themselves may be supposed to suffer contraction under an unusually light atmospheric pressure. In this way a preternatural distension and irregular action of the arterial and turgid condition of the nervous system evidently take place. The mountaineer's nimble step and ruddy countenance, indeed, bespeak a free and vigorous circulation, but the purple cheek and turgid eye and livid lip of the old Spaniard tell us surely of his exotic origin."

We shall not attempt to describe the grandeur of a storm in the Andes, a scene of surpassing magnificence which has engaged far abler pens—the sun like a fiery ball, the wide and frequent lightning, the thunder in deafening peals, the dark masses of clouds, the air charged with electricity, the powerful gusts of wind, big drops or floods of rain. Those in autumn come with gales from the south, and the varied shapes and colours in the sky surpass all power of description. We shall rather conclude our task by a review of the more constant of diseases that are found in this part of the globe.

Uterine hæmorrhage is a complaint which occasionally attacks females in the mountain regions, but it is of more occurrence in the plains. Indian women have been seen during the war of Independence, who, notwithstanding the tedious marches of the mountainous districts, have given birth to a child, washed it in the first stream, and continued their journey without losing a single day.

Cerebral congestion is an occasional attendant upon intermittent and remittent fevers, of which I have seen cases in Potosi, La Paz, and Cochabamba. These fevers are not endemic in those towns; but those who have suffered from them in marshy districts and have come to reside in any of them, though in apparent good health, will occasionally be attacked again with the fever in the one form or the other, and with greater violence than in the marshy districts.

"I suffered," says Dr. Scrivener, "from intermittent fever in the town of Salta, situated in a beautiful valley, and surrounded with marshes, and where that disease is endemic. Six months after my arrival at Potosi, though enjoying good health during that period, I was again attacked with the fever with much greater violence than on the first occasion. The stages of the fever are much longer and more violent than in a cold climate."

Intermittent fever is generally of a very dangerous character, and it assumes the form of pernicious fever or *perniciosa*, by which last name it is known to the natives; the fever being higher than in the usual forms, the head more painful, the eyes turgid, and delirium frequent. A second attack of the fever occasions congestion of the brain, and terminates in death.

Typhus fever is a common disease in the valley of Cochabamba and in many of the mining districts; it does not degenerate, as in many climates, from an intermittent fever, but is from its commencement a slow and continued fever.

This typhus fever, when complicated with gastro-enteric symptoms, is called by the natives *tabardillo entripado;* and with pneumonia, *tabardillo entarbillado*. It developes itself spontaneously, often suddenly, but is not contagious under the usual form of typhus.

In no Catholic country, perhaps, are there so many holidays as in the republic of Bolivia; there all parties of every grade and station commemorate the great saints and patronise their birthdays with appropriate festivity. The Indians, on these occasions, indulge in highly spiced dishes, and drink to excess their favourite liquors, chica and brandy. They frequently pass the night in the open air up to their ankles in mud, regardless of the season of the year. They lie down upon the ground when overcome with sleep, and, if in the wet season, will rise next morning chilled with cold, and covered with snow, or soaked with rain, or, if in dry weather, half frozen with the night air. They now complain of headache or disorder of the stomach, of pulmonary symptoms, or chills, or rheumatic pains, which are accompanied with fever; they are, in fact, in the first period of typhus fever, commencing with a strong and rapid pulse, and shortly passing to the lower type, characterised by a small, frequent, or irregular pulse, delirium, coma, subsultus tendinum, and attended with strongly marked pneumonic symptoms or those of gastro-enteric complication, which distinguish it more particularly in the mountainous districts from its ordinary course in the lower lands.

There are but few eruptive diseases in Bolivia, and I do not remember to have seen a case of small-pox. Measles, hooping-cough and scarlet fever are more common in the valleys than in the mountains; and the predisposition to these diseases is in proportion to the height of their localities.

There are a great many cases of dropsy among the Indians

in the valley of Cochabamba; they arise from their drinking to excess their favourite liquors, chica and brandy, at the celebration of the festivals of their very many saints, as aforesaid.

It has been the report of travellers that cretinism is a disease to be found in the cordilleras of the Andes; but this is incorrect, as, during my long residence in those regions, I never saw or heard of a case, and if the disease had existed I should very certainly have seen it. Cretinism is endemic, it is true, in the towns of Salta and Jupuy, which lie in the Argentine territory, and is there attributable to the character of the water, which falls in minute rivulets from the sides of the snow-capped mountains, and goes to form the river which furnishes the inhabitants with their supply.

The diseases incident to the inhabitants of the mountains of Cordova are much the same as those upon the Andine heights; they are not so numerous, and perhaps not so severe, as those in Europe, which may be attributed to the pureness of the air, to the construction of the houses, which are spacious and well ventilated, with large courtyards, to the cleanliness of the lower classes, and to living a great deal in the open air. The patient with phthisis will not here, as in other health resorts, "have constantly before his imagination the phantoms of numerous victims, his predecessors in the same hopeless career, to cast the shadow of death upon a being already depressed in mind by disease and loneliness, and pining after the familiar sounds he may never see again." On the contrary, he will be in the midst of all that is grand. A thousand magnificent objects will excite his attention and divert him from his unhappy malady, on which he will not dwell, but rest confidently on the reasonable expectation of a recovery and a speedy return to his friends.

PROVINCIAL CORRESPONDENCE.

IRELAND.

DUBLIN, November 3.

THE annual distribution of honours awarded at the termination of the preceding session, at Dr. Steevens' Hospital and Medical College, took place on Saturday, 30th ult., in the anatomical theatre of the institution, Dr. Fleming in the chair. The following are the names of the successful competitors:—Cusack Medals and Exhibitions—Senior: Abraham Colles, Dublin. Middle: William Bookey, Carnew. Junior: John Bookey, Carnew. Surgical Clinical Prize and Medical Clinical Prize: Abraham Colles, Dublin. Midwifery Assistantships: Mr. R. Swan, Mr. T. Flood. Certificates of General Attention and Proficiency at Terminal Examinations: T. Bayly, G. G. Cooke, J. G. Little, D. Rice, R. A. Rutherford, W. Symes, T. Taaffe, C. Turner, E. W. Wrightson.

Dr. Fleming in the course of his address alluded to the fact of the senior Cusack medal having been won by the grandson and namesake of the eminent Surgeon, Abraham Colles, who was so long connected with Steevens' Hospital, and he expressed his hope that he would labour to walk in the footsteps of his ever-to-be-revered grandfather. He pointed out the great advantages which the students enjoyed in having Hospital and school united under the same roof, and he concluded by strongly impressing on them the necessity of cultivating clinical study incessantly and diligently.

The session was opened at the Meath Hospital on Monday, the 1st inst., by Dr. Stokes, who selected for his theme the important subject of "Medical Ethics." Among the crowded audience were the Presidents of the College of Physicians and the College of Surgeons, the Earl of Dunraven, Drs. Churchill, Beatty, etc., etc.

In the afternoon of the same day a meeting of the friends of the Mater Misericordiæ Hospital was held in the Board-room of the institution. The chair was taken by his Eminence Cardinal Cullen. The meeting was addressed by the chairman, the Lord Chancellor, the Earl of Granard, Sir James Power, Bart., Sir William Wilde, M.D., Dr. Stokes, Mr. Serjeant Dowse, M.P., Mr. Pim, M.P., and others. It was stated that the south-eastern wing of this magnificent building, now in progress, would be finished and ready to receive patients on May 1, 1870, and that it was hoped that the western or second wing would be complete by May-day, 1880. In a Medical point of view it is probable that the most interesting fact mentioned was that of a recent innovation, well worthy of imitation in Dublin Hospitals—viz., the appointment of Assistant-Physicians and Surgeons, which was announced by Dr. Stokes in the following words:—

"The addition just made to the Hospital justifies, and I may say necessitates, the course already resolved upon by the authorities of the Mater Misericordiæ Hospital, of appointing Assistant-Physicians and Surgeons. This has been done, following the example of some of the London Hospitals, and I am permitted to announce the names of the gentlemen selected for the first time for this honourable distinction. The Assistant-Physician is Dr. Christopher Nixon, and the Assistant-Surgeon Dr. Charles Coppinger. Both of these gentlemen were distinguished pupils of the Hospital, and their appointment is a natural and proper course. Medicine advances by experience on the one hand and discovery on the other. The senior Physician walks in the first path, the junior in the second; and he is aided by all the instruments and all the improvements in diagnosis which are every day produced by modern science. Thus the one becomes the complement of the other. The junior officer will act as tutor to the student, and the dispensary patients can be attended by him, who can at all times command the help of the Physician or Surgeon in any case of difficulty. As regards the Medical charities of Dublin, I was glad to hear your Eminence say that, with one exception, they were not obnoxious to the charge of sectarianism; and it must be remembered that most of them were instituted and endowed at a time when the Catholic element of society was in a state of great depression. Your Eminence will agree with me that the resolution requires little further comment. Zeal and devotion are, I am proud to say, the characteristics of the Profession throughout the world. I may be excused, in the presence of the staff, from expressions of eulogy, especially as two of them, Dr. Hayden and Dr. Cruise, have long been my trusted friends, and often counsellors; and I conclude by congratulating the devoted Sisterhood for having secured the services of such gentlemen."

The fifteenth Medical session of the Catholic University was opened on Tuesday, the 2nd inst., by Dr. Quinlan, with an able address, which was, however, not Medical, consisting exclusively of a zealous advocacy of the system of denominational education.

GENERAL CORRESPONDENCE.

HOT WATER AND ITS USE IN CHOLERA.

LETTER FROM DR. JOHN MACPHERSON.

[To the Editor of the Medical Times and Gazette.]

SIR,—Your remarks on the use of hot water and on the changing fashions of Medicine, in to-day's issue, make me trouble you with a few notes I have had occasion to make on hot water.

Hot water appears to have been used among the Romans not merely to dilute their wines, but also as a luxury at their banquets, taken very hot. I need not quote various passages of authors that have been adduced in proof. Suffice it to say that Bacon expressed his regret that the practice had been abandoned. "Verulamus does marvel that it is so much gone out of use." Many authorities on mineral waters have not merely recommended thermal waters to be drunk hot, but have advised cold waters to be heated—a practice to be seen followed at some baths, but one not generally to be followed. I think that there can be little question in the case of thermal mineral waters containing no more, or possibly less, solid ingredients than ordinary drinking water, that the benefits derived from their use must be mainly attributed to their temperature, and to the quantity in which they are swallowed.

Most of us have seen or heard of the use of cold water in cholera, and I have frequently seen it treated with lukewarm water and common salt, but hot water does not seem to have been used of late years. Nevertheless hot water was very commonly exhibited by the ancients, and by European Physicians two hundred years ago in the forms of cholera which they had occasion to treat. I have thought it worth while to transcribe some of their remarks on the subject, especially as their theory appears to be quite correct according to the current doctrines of elimination.

"The choleric affection is a painful rejection upwards and downwards of a bad humour, induced by its irritating presence. As in this complaint the evacuation of the peccant matter is not at first to be repressed, Physicians begin by directing hot water to be drunk freely at the commencement. It makes the vomiting easier, dilutes and washes away the vicious humours,

and derives to the intestines. Aretæus writes—'If the patient vomits everything, we must have recourse to hot drinks; but let the hot drinks be the very hottest.' The best explanation of this is that the hot water is well suited to wash away the poisonous matter which is inclined to adhere to the walls of the intestines. And Forest considers that the object is not to produce vomiting, but to wash away the noxious matter." Whatever may be the theory of its use, the employment of hot water in cholera is at least as rational as many other modes of practice in use. About the theory or practice of elimination I shall say nothing, as whoever meddles with it gets inevitably into hot water. Finally, it has been said, "Aqua calida laxat, aperit, emollit, attenuat, fundit, et simul devehit et abluit." The subject is one on which it would be easy to dilate, but I shall say no more.

October 30. I am, &c. JOHN MACPHERSON, M.D.

CORRIGENDUM.

LETTER FROM MR. BERKELEY HILL.

[To the Editor of the Medical Times and Gazette.]

SIR,—In the notice with which you honoured an operation I performed recently for removing the whole tongue, the key mentioned as being so useful in drawing together the wire suture that held the divided halves of the lower jaw is attributed to Mr. Worthington instead of to Mr. Hugh O. Thomas, of Liverpool, whose invention it is, and who has been very successful in treating fractures of the lower jaw by wire sutures. May I beg you will insert this rectification?

November 1. I am, &c. BERKELEY HILL.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY.

FRIDAY, OCTOBER 22, 1869.

Mr. PAGET, President, in the Chair.

THE PRESIDENT brought under the notice of the Society the case of a man who, with extensive necrosis of the occipital bone, had muscular atrophy of one side of his tongue. After removal of many pieces of dead bone from about the foramen magnum, the wasted side of the tongue increased in bulk to a considerable extent.

Mr. SPENCER WELLS exhibited a new clamp for ovariotomy, made for him by Mayer and Meltzer, which effects a circular compression of the pedicle, and appears to answer better than other clamps previously used.

Mr. MARSH read notes of a case in which a Cleft of the Soft Palate had been cured by operation in a child sixteen months old. The patient was admitted into the Hospital for Sick Children in June last, and, as a preliminary step, incisions were made in the palate to divide the levatores palati muscles; but an attack of diarrhœa which set in next day rendered the child for the time unfit for the operation. In August, however, the operation was performed. Chloroform was used, and the parts were brought into view by Mr. T. Smith's gag. The edges of the cleft were pared, and then brought together with horsehair sutures. The arches of the palate were snipped with blunt-pointed scissors. The greater part of the wound healed in eight days, but a hole as big as a kernel of wheat remained where the soft joined the hard palate. The author offered the case as a contribution to the data on which it might be determined at what age in childhood the operation for closing fissure of the palate should be undertaken. Experience was required to settle this question; but it seemed reasonable to believe that the earlier the operation could be successfully performed the better would the child's future power of articulation be. He referred to a statement made by Mr. Lawson Tait in the *Lancet*, to the effect that he had operated with success on a child nine months old—of this case, however, no particulars were given by Mr. Tait—and also to a case in which Mr. Frank Buszard, House-Surgeon at the Northampton Hospital, had closed a fissure of both the hard and the soft palate in a child six months old at a single operation.

Mr. T. SMITH was still uncertain as to the age at which men should operate. In forty-two operations of his own, half were under seven, the others earlier. In the very young he had experienced many complete failures. The operation on the hard palate generally succeeds, not so with the soft, the latter being subject to all kinds of contingencies. One child would put its hand in its mouth, another had mumps, a third scarlatina, a fourth hooping-cough, and so on. Mr. Maunder had in one instance met with sloughing. The worst thing he had had to encounter was ulceration.

Mr. SPENCER WELLS asked the result of the operation on speech. When last he saw M. Nélaton that gentleman had given up the operation, as vulcanite palates did much better. In his own cases there was not much improvement.

Mr. SMITH could scarcely say, as he had chiefly operated on very young children, whose speech was not yet matured. The shape of the palate was important. In adults mechanical appliances seemed to do better, but, with the perseverance they implied, the same might have been said after an operation.

A gentleman present said he had recently had a case where the obturator gave trouble up to the tenth day. After that there was little or no annoyance. The speech was much improved.

Mr. C. DE MORGAN related a case of Fracture of the Base of the Skull. The patient fell on his head in a state of intoxication, was stunned, and had bleeding from the right ear. He gradually recovered, and was in about three weeks so well that he was desirous of going home. But he was then attacked with slight shivering, and became drowsy and lost his appetite. Soon after he was perfectly comatose, and had complete paralysis of the left side of the body. From this state he entirely recovered, and in about ten days he was nearly as well as before the attack, but he had severe pains in the head and restlessness. On August 3, he again became drowsy, and complained more of his head, and remained much in the same condition till the 12th, when he was suddenly taken much worse and died. He had no return of paralysis. The skull was found to have a fissure at the base on the right side, with marks of old effusion of blood about it. There was an abscess in the under and outer part of the middle lobe, near the seat of fracture, which had ruptured shortly before death into the right ventricle.

Mr. CALLENDER asked if the speech was affected, to which Mr. DE MORGAN replied that there was paralysis of the tongue, but no hesitation about words.

Mr. BARWELL had notes of a case which was under the care of Mr. Green at St. Thomas's Hospital, and was identical with this one in almost every respect. There was a large abscess in the frontal lobe on the left side. He considered the abscess secondary.

Mr. DE MORGAN said the point was rather how the man could so perfectly recover after the formation of an abscess.

Dr. GREEN thought it difficult to account for the facts, but thought embolism might have been produced by thrombosis of the arteries round the abscess. The congested cerebellum pointed at an attempt to set up collateral circulation.

Mr. CALLENDER thought there was pain only in injuries to the outer portion of the brain.

Dr. SYMES THOMPSON had seen an abscess involving the greater part of the brain, yet there was no pain or anything else till just before death.

Dr. OPPERT thought there was no pain except when the membranes were involved.

Dr. GREENHOW related a case of Diphtherial Paralysis in a woman aged 21. The local disease had been most severe on the left side of the throat, and the paralytic symptoms, which successively affected the muscles of the fauces, tongue, lips, cheek, eyes, and limbs, were most strongly marked on the left side of the body. The patient was first treated with the tincture of perchloride of iron and with strychnia in the proportion of one-sixth of a grain daily, and was then galvanised from the knees to the feet and from the elbows to the hands on alternate days. She made a rapid and perfect recovery. Dr. Greenhow remarked, with reference to this case, that he had usually observed, when there was any marked difference in the intensity of the disease on the two sides of the throat, a corresponding difference in the severity of the paralytic symptoms on the two sides of the body. He had also noticed that the paralysis usually appeared to spread from the seat of the local disease to the fauces, tongue, lips, and other neighbouring parts, and thence to the eyes, trunk, and upper and lower extremities. In conclusion, Dr. Greenhow drew the distinctions between diphtherial paralysis and the paralysis of motor asynergy (locomotor ataxy), which have been compared by some persons; showing that, although the disorders of movement in the two diseases presented some similarities, they differed in many essential respects, arose from different causes, and ended, as a rule, in different results.

Dr. WEBER said that in his experience loss of sight followed paralysis of the throat and mouth, but preceded that of the

limbs, whilst the legs went quite as often before the arms as *vice versâ*. In several cases over-exertion caused serious symptoms, but the paralytic intensity depended on the local intensity. He asked if paralysis was as frequent now as formerly; in 1862 it occurred in 6 per cent. of the cases. Since that time only two slight cases had occurred in forty-two.

Mr. NUNN thought the defect rested with the sentient fibres rather than the motor. He thought diphtheria might waste itself in the periphery of the nerves.

Dr. BAEUMLER had seen under Ziemssen a case much worse than that described. The mucous membrane of the larynx was insensible above the vocal cord. Electro-motility was diminished. A quarter of a grain of strychnine was given hypodermically. Ziemssen thinks the paralysis peripheral.

Dr. GREENHOW had seen in some fatal cases paralysis of the heart, so that the pulse was only 24.

OBITUARY.

MR. LOWE WHEELER.

THIS gentleman, who died in July last at his house in the Overton-road, Brixton, was the fifth son of the late Mr. Thomas Wheeler, F.L.S., formerly apothecary to Christ's and St. Bartholomew's Hospitals. The name of Wheeler will always be remembered in connexion with the efforts which are allowed on all hands to have been successfully made by the Society of Apothecaries to improve the education of the General Practitioner. Mr. Thomas Wheeler, the father of the subject of this notice, was a prominent member of that Society, and his acknowledged position as a botanist of great learning and ability, a successful lecturer on his favourite science, together with his position at St. Bartholomew's and intimacy with its brilliant staff, then numbering amongst its members Abernethy, Sir James Earle, and Lawrence, were some of the circumstances which naturally led to a choice of the Medical Profession by his son. Undoubtedly his father's position gave him peculiar advantages in prosecuting his Professional studies. He filled the office of House-Surgeon at Bartholomew's, and, after obtaining his diploma at the College of Surgeons, he went to Paris, where he resided for the purpose of continuing his studies in anatomy, Surgery, and chemistry, and where he was fortunate enough to cultivate an acquaintance and become on terms of intimacy with Thénard, Gay-Lussac, and Baron Larrey. On his return to England he lectured at the Giltspur-street School of Medicine on Anatomy and Surgery, but he retired early from active Professional life, and devoted his time to scientific pursuits. In his latter years, as a member of the Court of Assistants of the Apothecaries' Society, he exercised his influence in the councils of that body in favour of the utilisation of the means at the disposal of the Society for scientific purposes. We believe it is no secret that the Profession are in a great degree indebted to Mr. Lowe Wheeler's influence for the course of admirable lectures on spectrum analysis by Professor Roscoe to which the Society invited them. Mr. Wheeler's course was cut short before he filled the Master's chair, but we know that he looked forward to occupying it with pleasure, as it would have given him the opportunity of advancing the scientific interests of the Society, which were always uppermost in his thoughts. Mr. Wheeler died in his 72nd year. He was emphatically a truthful, sincere, and clear-headed man.

NEW BOOKS, WITH SHORT CRITIQUES.

Elements of Chemistry: Theoretical and Practical. By W. ALLEN MILLER, M.D., D.C.L., Professor of Chemistry, King's College, London. Fourth edition. Vol. III. London: Longmans. Pp. 976.

*** The merits of Professor Miller's text-book of Chemistry are now so well known that we need not do more than announce the appearance of the third volume, completing the fourth edition. The most important alterations consist in the introduction of the metric system of weights and measures and the use of the centigrade scale of temperature as well as those more commonly employed in this country. The notation now employed is uniformly the new one, there being no barred symbols as in the last edition. Berzelius's system of nomenclature has also been adopted—that is to say, the term potassic nitrate is used instead of the nitrate of potass, sodic sulphate for sulphate of soda, and so on. These changes, we need hardly say, were not only suggested, but absolutely necessitated, by the present state of chemical science, with which Professor Miller always keeps his readers *au courant*. To facilitate the adoption of these changes, a table of symbols and atomic weights as used in this volume is prefixed.

Outlines of Chemistry; or, Brief Notes of Chemical Facts. By WILLIAM ODLING, M.B., F.R.S., F.R.C.P., Vice-President of the Chemical Society, and Fullerian Professor of Chemistry at the Royal Institution. London: Longmans. Pp. 468.

*** This volume constitutes, so to speak, the essence of Dr. Odling's lectures at St. Bartholomew's, being the notes from which the lectures were delivered. Their use will do much to spare the student's note-taking in the class, a process which, especially in chemistry, is apt to interfere with the attention necessary to master the experimental part of the subject. The sentences are not, properly speaking, sentences, seeing that, as a rule, they contain no verb, but rather condensed and curt headings. Organic chemistry is not discussed at any length. But the student acquires, under the heading of carbon, some insight into its mysteries, the methyl and cyanogen compounds being there treated. But it is in the introductory chapters that condensation is most noticeable, for in a few pages the author contrives to give the student a fair idea of symbolic notation, of volumes, atomicity, quantivalence, and of the theory of acids and salts—no easy thing to do with such a limited space. The nomenclature is not uniform, sometimes one set of terms being employed, sometimes another. The author rejects Kekulé and Crum Brown's system of symbolic notation. We cordially recommend the work to the student of chemistry.

Chemistry, General, Medical, and Pharmaceutical; including the Chemistry of the British Pharmacopœia. By JOHN ATTFIELD, Ph.D., F.C.S., Professor of Practical Chemistry to the Pharmaceutical Society of Great Britain, etc. London: Van Voorst. Pp. 624.

*** Dr. Attfield's work is *sui generis*, and combines many properties in a remarkable manner. It is a good work for beginning the study of theoretical chemistry. It is the same as regards practical chemistry, for, beginning with the third page, we encounter full instructions as to the collection of gases, the bending of glass tubes, the kind of heat to employ, and so on. Nor does its usefulness stop here; it is a valuable guide to practical Medical chemistry, and an admirable companion to the British Pharmacopœia. It is rare to find so many qualities combined, and quite curious to note how much valuable information finds a mutual interdependence. It is difficult to say for whom the work is best adapted—perhaps for the student of pharmacy, with whose needs Dr. Attfield has a peculiar and intimate acquaintance; but, for those who have no guide or teacher, the questions appended to each substance will constitute a valuable clue to the most important passages. The appendix contains much information, chiefly of a numerical kind, and the work is terminated by a very complete index.

Exercises in Practical Chemistry. By A. G. VERNON HARCOURT, M.A., F.R.S., Senior Student of Christ Church, and Lees Reader in Chemistry, and H. G. MADAN, M.A., F.C.S., Fellow of Queen's College, Oxford. Series I. Qualitative Exercises. Oxford: The Clarendon Press. Pp. 335.

*** The volume just issued from the Clarendon Press is intended as a companion to the valuable and suggestive work on "Theoretical Chemistry" by Professor Williamson. It constitutes a complete guide to qualitative chemical analysis. Ample instructions are given to the student at every step, and the instructions are further enforced by excellent illustrations. The first portion consists of an examination of the principal gases, and of the principal radicles and their salts, whilst the second treats of the systematic analysis of a single salt. The appendix contains a variety of useful tables. Many useful practical hints are dispersed throughout the volume, which is one worthy in every respect of a place in the Clarendon Press series.

IT is proposed to amalgamate the Leeds Eye and Ear Infirmary with the Leeds General Infirmary, and to establish a special eye and ear department in the latter institution.

IT is so notorious that it is not worth while to pretend to conceal it, that not one graduate in Medicine, in one hundred in this country, can translate without aid a dozen lines of Virgil; not one in fifty but would be puzzled to give the genitive of some of the commonest nouns in the Materia Medica. As for the druggists, they do not pretend as a body to any knowledge of the "learned languages."—*Philadelphia Medical and Surgical Reporter.*

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentlemen were duly admitted Members of the College on October 28, 1869:—

Dalton, William, late of Cheltenham.
Shearman, Edward James, M.D., Moorgate, Rotherham—*olim* Extra-Licentiate.
Garlick, John William, M.D., 6, Lord-st., Halifax—*olim* Extra-Licentiate.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS, EDINBURGH.—DOUBLE QUALIFICATION.—The following gentlemen passed their *First Professional* Examinations during the recent sittings of the Examiners:—

Yeld, Horace Parr, Carlisle.
Paterson, J. D., Glasgow.
Lindsay, Francis Woodley, Cork.
Browne, W. R., Tasmania.
Bell, Henry, Groomsport.

The following gentlemen passed their Final Examinations, and were admitted L.R.C.P. Edin. and L.R.C.S. Edin.:—

Bridgford, John Sawyer, London.
Keith, William Gregory, Colombo, Ceylon
Saville, John George, Woolwich.
Kelsey, William, Haxey.
M'Manus, George Frederick Alexander, Virginia.
Flood, Alexander William, Danesport.
Mills, Daniel Ernest, Tenterden, Kent.
M'Donnell, Martin Ambrose, Roscommon.
Shirres, David, Aberdeen.
Gregory, William, East Indies.
Dundee, John, county Antrim.
Leland, John Smallman, county Roscommon.

ROYAL COLLEGE OF SURGEONS, EDINBURGH.—Mr. Christopher Campbell Bonthron, Buckhaven, passed his *First Professional* Examinations during the October sittings of the examiners; and the following gentlemen passed their Final Examinations, and were admitted Licentiates of the College:—

Merrick, Alexander Stewart, Cork.
Cameron, John, New Pitsligo.
Tomkins, Arthur Wellesley, Cork.
Kelly, Bernard, Banagher.
Lang, Alexander Morrison, Kirkintilloch.
Hogg, James, Liverpool.
Finnie, John Thom, Peterhead.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, October 28, 1869:—

Curnow, John, Penzance.
Hewby, William Cooke, Ripon, Yorkshire.
Kingsford, Percival, Sunbury, Middlesex.
Kynaston, Albert Edward, Bdlingborough.
Milles, George Ridley, St. Margaret's, Kent.
Smith, Arthur William, Halifax.

The following gentleman also, on the same day, passed his First Professional Examination:—

Willmore, F. W., Queen's College, Birmingham.

At the recent competitive examination of Medical students for the prizes in Materia Medica and Pharmaceutical Chemistry, annually given by the Society of Apothecaries, the successful candidates were:—1st, William Johnson Walsham, St. Bartholomew's Hospital, a gold medal; 2nd, William Allnutt, King's College, a silver medal and a book.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

BAKER, Dr., F.R.C.S.Ed.—Honorary Assistant-Surgeon to the Ladies' Charity and Lying-in Hospital, Liverpool.

FISH, Dr. J. CROCKETT—Physician to the Royal Hospital for Diseases of the Chest, City-road.

FLACK, JAMES, L.R.C.P. and M.R.C.S.—Medical Officer to the Holywell District of the Shoreditch Union.

MOORE, Mr.—Surgeon to the Hospital for Women, Soho-square.

PARKER, ROBERT WM., M.R.C.S. Eng., has been appointed House-Surgeon to the Stratford Dispensary, *vice* Dr. Oswald Baker, resigned.

MILITARY APPOINTMENTS.

19TH FOOT.—Staff Assistant-Surgeon John Leader, to be Assistant-Surgeon, *vice* Henry Walker, appointed to the Staff.

31ST FOOT.—Staff Assistant-Surgeon Charles Edward Jones, to be Assistant-Surgeon, *vice* James Hector, M.B., whose appointment, as stated in the *Gazette* of August 31, 1869, has been cancelled.

60TH FOOT.—Staff Assistant-Surgeon James Patrick Rooney, to be Assistant-Surgeon, *vice* Robert Owen Hayden, appointed to the Staff.

63RD FOOT.—Assistant-Surgeon John Barlow Hannah, M.D., from 101st Foot, to be Assistant-Surgeon, *vice* John Carlaw, who exchanges.

101ST FOOT.—Assistant-Surgeon John Carlaw from 63rd Foot, to be Assistant-Surgeon, *vice* John Barlow Hannah, M.D., who exchanges.

MEDICAL DEPARTMENT.—Assistant-Surgeon Robert Owen Hayden, from the 80th Foot, to be Staff Assistant-Surgeon, *vice* James Patrick Rooney, appointed to the 60th Foot. Assistant-Surgeon Henry Walker, from the 19th Foot, to be Staff Assistant-Surgeon, *vice* John Leader, appointed to the 19th Foot.

The transfer of Assistant-Surgeon Alexander Ferrier Churchill, M.D., from the 31st Foot to the Staff, which appeared in the *Gazette* of August 31, 1869, to be *vice* Charles Edward Jones, appointed to the 31st Foot, and not *vice* James Hector, as therein stated.

BIRTHS.

BIRD.—On October 31, at St. Leonard's-place, York, the wife of William Bird, M.R.C.S.E., of a son.

BULL.—On October 30, at Hereford, the wife of Dr. Bull, of a daughter.

MARRIAGES.

ASHTON—SERVANTE.—On October 26, at the parish church, Queenstown, Ireland, Gough Ashton, Staff Assistant-Surgeon, to Emily Margaret, second daughter of the late Lieutenant Charles Servante, R.N.

BRODIE—MCFARLANE.—On October 31, at All Souls, Langham-place, London, David Brodie, M.D., of Columbia Lodge, Liberton, Edinburgh, to Jessie Morrison, only surviving daughter of Archibald McFarlane, late of Edinburgh.

BROWN—ROLFE.—On October 26, at St. Helen's Church, Charles Rowland, third son of Thomas Brown, Esq., M.R.C.S., 16, Finsbury-circus, to Alice Eliza, eldest daughter of Mr. Thomas Rolfe, of 10, Great St. Helen's, City.

CLOVER—HALL.—On November 2, at St. Margaret's, Westminster, Joseph T. Clover, F.R.C.S., of 3, Cavendish-place, Cavendish-square, to Mary Anne, elder daughter of the Rev. T. G. Hall, M.A., of Kingshurst, Paignton, Devon.

ELTON—ELTON.—On November 2, at St. Saviour's, Maida-vale, Henry Nathaniel Elton, Surgeon-Major Bengal Army, to Mary Anne, eldest daughter of the late T. Marwood Elton, Esq., of 68, Portsdown-road, and granddaughter of the late Henry Elton, Esq., of Winford-court, Somerset.

JONES—WYBURN.—On October 30, at St. George's, Hanover-square, Podmore W. H. Jones, M.D., of 66, Harley-street, W., son of Dr. S. Haden Jones, of Stone House, Wellington, Salop, to Clara, youngest daughter of the late James Wyburn, Esq., of 38, Porchester-terrace, Bayswater, and of Surbiton, Surrey.

LARCOMBE—GREET.—On October 27, at Norham, Northumberland, Samuel Slee Larcombe, M.R.C.S., of Castle Cary, Somersetshire, to Louisa Greet, daughter of the late Thomas T. Greet, of Queensborough House, Isle of Sheppy.

NEW—WALKER.—On October 28, at Pellon-lane Chapel, Halifax, Geo. W. New, Surgeon, 35, Harrington-square, London, to Elizabeth, youngest daughter of John Walker, Esq., of West-parade, Halifax.

DEATHS.

HARRIS, ISABELLA, widow of the late Henry Barham Harris, M.D., at Walthamstow, Essex, on October 20, aged 58.

LESTER, CHARLES SLOANE, M.D., Surgeon R.N., at Blackheath, on November 1.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

BLACKBURN INFIRMARY.—House-Surgeon; must be legally qualified. Applications and testimonials to the Secretary.

BRIGHTON AND HOVE DISPENSARY.—Resident House-Surgeon; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Chairman of the Committee of Management on or before November 29. Election on December 7.

CHOLSEY NEW PAUPER LUNATIC ASYLUM.—Medical Superintendent. Applications and testimonials to J. T. Morland, Esq., Clerk to the Committee of Visitors, at the Asylum, Cholsey, near Abingdon, Berks, on or before December 16.

CLEOBURY MORTIMER UNION.—Medical Officer for the Second District of this Union. Candidates must possess the qualifications prescribed by the orders of the Poor-law Board, and be registered. Applications and testimonials to Mr. A. P. Trow, Clerk to the Guardians, Cleobury Mortimer, on or before November 5. Election on the 10th.

HOSPITAL FOR SICK CHILDREN, 49, GREAT OSMOND-STREET, W.C.—House-Surgeon; must have one qualification, and be unmarried. Applications and testimonials to the Secretary on or before November 16. Election the next day at 4.30 p.m., when personal attendance will be required.

LEEDS DISPENSARY.—Senior Resident Surgeon; must have both Medical and Surgical qualifications, and be unmarried, and above 30 years of age. Applications and testimonials to Dr. Eddison, 19, Park-square, Leeds, on or before November 17.

LINCOLN COUNTY HOSPITAL.—Physician; must possess a Medical qualification. Applications and testimonials to Mr. J. W. Danby, Lincoln, on or before November 20. Election on the 22nd.

ROYAL KENT DISPENSARY.—Resident Medical Officer; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Secretary, J. Carrtar, Esq., Catherine House, Greenwich, on or before November 8. Election on the 19th at 8 o'clock p.m.

ST. MARY'S HOSPITAL AND DISPENSARY FOR WOMEN AND CHILDREN, MANCHESTER.—Resident Medical and Surgical Officer; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Secretary on or before November 6.

SPALDING UNION.—Resident Medical Officer for the Gosberton District of this Union. Candidates must possess the qualifications prescribed by the Orders of the Poor-law Board, and be registered. Applications and testimonials to Mr. A. Maples, Clerk to the Guardians, Spalding, on or before November 8. Election the same day, when personal attendance will be required.

STOURBRIDGE DISPENSARY.—House-Surgeon and Secretary; must be L.R.C.P. Lond. and M.R.C.S. Eng. Applications and testimonials to the Secretary on or before November 11. Election on the 23rd.

SUSSEX COUNTY HOSPITAL.—House-Surgeon. Applications and testimonials to A. Veysey, Esq., Sec., Brighton, on or before November 24.

SUSSEX COUNTY HOSPITAL.—Dispenser. Applications and testimonials to the Drug Committee on or before November 15.

Swansea New Hospital.—House-Surgeon; must be legally qualified. Applications and testimonials to the Secretary, 23, Gower-street, Swansea, on or before November 24. Election December 1.

Westminster General Dispensary.—Surgeon; must be M.R.C.S., not practising midwifery or pharmacy, and be registered. Applications and testimonials to the Secretary on or before November 22.

Worcester General Infirmary.—House-Surgeon; must be legally qualified. Applications and testimonials to the Secretary, 50, Foregate-street, Worcester, on or before December 10.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Isle of Wight Union.—Mr. H. B. Tuttiett has resigned the Godshill District; salary £80 per annum.

Merthyr Tydfil Union.—The Merthyr Town District is vacant; area 3297; population 16,840; salary £25 per annum.

APPOINTMENTS.

Chapel-en-le-Frith Union.—Albert O. Haslewood, M.R.C.S.E., L.S.A., to the Castleton District.

Dolgelley Union.—Hugh James Lloyd, L.R.C.P. Edin., L.F.P.S. Glas., L.S.A., to the Barmouth District.

Freebridge Lynn Union.—John Henry Ashton, M.R.C.S.E., L.S.A., to the First South-Eastern District.

Oldham Union.—Edward Drummond, M.D. Edin., M.R.C.S.E., to the Second District.

Pocklington Union.—Daniel Widdas, L.R.C.P. Edin., L.F.P. and S. Glas., L.S.A., to the Sutton-upon-Derwent District.

Redruth Union.—Henry Harris, M.R.C.S.E., L.S.A., to the Gwennap District.

Ross Union.—Benjamin M. Bradford, M.R.C.S.E., L.S.A., to the Third District.

Tiverton Union.—William F. Terry, M.R.C.S.E., L.S.A., to the Tiverton and Washfield District, and the Workhouse.

We hear that Dr. R. Douglas Powell, of the Brompton Consumption Hospital and the Evelina Hospital for Sick Children, is a candidate for the Assistant-Physician's post at University College Hospital, which will be rendered vacant by the promotions consequent on Dr. George Harley's resignation.

Medical Club.—The members and their friends held their first dinner for the present season on Wednesday last. Sir W. Fergusson, Bart., took the chair, and was supported by Sir J. Gray, M.P., Sir C. McGrigor, Bart., Dr. B. W. Richardson, Dr. Forbes Winslow, Mr. Digby Seymour, Q.C., Colonel Seymour, Mr. Erasmus Wilson, Mr. Edwin Saunders, Dr. McEwen, Dr. de Meric, etc.

The Working Men's Fund of the Queen's Hospital, Birmingham.—This fund, up to the end of October, had reached the handsome sum of £1511, and is daily increasing in amount.

General Medical Council.—We are glad to announce that on Tuesday afternoon Dr. Humphry, of Downing College, was elected representative of the General Medical Council, *vice* Dr. Paget, of Caius, who has been elected President of that College. Mr. C. Lestourgeon was also nominated. Dr. Humphry polled 68 votes, Mr. Lestourgeon 15.

A Venerable Lady.—Mrs. Catharine Budd, aged ninety-one, the oldest person in North Tawton, Devon, was last week followed to her grave by her seven sons, six of whom are Physicians—C. Budd, of North Tawton; G. Budd, London; S. Budd, Exeter; J. W. Budd, Plymouth; R. Budd, Barnstaple; W. Budd, Clifton, Bristol; and Mr. Octavius Budd being the principal mourners.

Multiplicity of Returns.—Indian Surgeons complain grievously of the multiplicity of returns required of them, and of the greatly increased amount of office work.

At a meeting of the committee of the Medical Club on Wednesday, Dr. Richardson proposed, and Mr. Edwin Saunders seconded, "That Dr. Livingstone be elected an honorary member of the Club, and that the Honorary Secretary be requested to write to Dr. Kirk, Zanzibar, conveying to him, for Dr. Livingstone, the above resolution, and expressing the gratification which it will afford to the members and committee to offer to Dr. Livingstone a home at the Club upon his return to England." The motion was carried unanimously.

Odontological Society of Great Britain.—The first ordinary monthly meeting of the session 1869-70 was held at 32, Soho-square, on Monday, November 1, at 8 p.m., the President, H. J. Barrett, Esq., M.R.C.S., in the chair. Dr. Ormerod related a case in which spasms of the sterno-cleido-mastoidei muscles were cured by removal of diseased teeth by W. A. N. Cattlin, Esq. The President exhibited casts of a case of double harelip, giving particulars as to its treatment. Mr. Mummery then read an elaborate paper on "The Evidences of Dental Caries among Ancient Races of Mankind and Existing Savage Tribes." After some remarks from Professor Flower, the meeting adjourned.

Cholera in the 76th in India.—Advices report one or two severe outbreaks of cholera in this regiment. It broke out in May, and carried off two men, three women, and four children, out of thirteen patients, in five days, spite of the fact that all the inmates were at once camped out. One man died on May 29; again, five cases and two deaths took place during the first week of August.

At the evening meeting of the Anthropological Society of London, held on the 2nd inst., Dr. Beigel, V.P., in the chair, Mr. Pike read a paper "On the Methods of Anthropological Research." It was useless to speak of methods of research without some previous definition of the objects of research. Anthropology was the most practical and the most comprehensive of all the sciences: its great end was the discovery of the laws of human life, upon which must eventually be founded all education, all government, all colonisation, all social arrangements, all principles of right and wrong—so far as those principles might be independent of religion. The three things needful were observation, generalisation, and verification. The real difficulty in anthropology was to know what to observe, and how to verify.

Statistics of the German Universities.—The number of universities in which the subjects are taught in the German language amounts to twenty-nine. Of these three are in Switzerland—viz., Basle, Berne, and Zürich; one in Russia—viz., Dorpat; and one in Bohemia—viz., Prague, all consisting of four "faculties"—Divinity, Law, Medicine, Philosophy—with the only exceptions of Münster and Brannsberg, which have no Faculty of Medicine. The note of interrogation is to signify that the numbers of students or teachers are not known. We give only the statistics of the Medical Faculties.

Name of University.	Number of teachers.	Number of students.	Average number of students to one teacher.
Basle	?	19	?
Berlin	50	401	8
Berne	26	131	5
Bonn	18	209	11·6
Brannsberg	—	—	—
Breslau	20	179	9
Dorpat	17	137	8
Erlangen	12	75	6·25
Freiburg	?	52	—
Giessen	13	68	5·25
Göttingen	21	157	7·5
Gratz	?	161	—
Greifswald	16	260	16·25
Halle	18	108	6
Heidelberg	22	72	3·27
Jena	10	76	7·6
Innsbruck	?	35	?
Kiel	16	77	4·8
Königsberg	24	102	4·25
Leipzig	33	191	5·79
Marburg	15	131	8·7
Munich	40	230	5·75
Münster	—	—	—
Prague	36	281	7·8
Rostock	12	46	3·8
Tübingen	14	176	12·5
Vienna	80	?	?
Würzburg	20	246	12·3
Zürich	?	55	?
Total number of Medical students			3675

Balliol College.—On November 29, 1869, there will be the following elections at Balliol College:—To a Scholarship on the foundation of Miss H. Brakenbury, "for the encouragement of the Study of Natural Science," worth £70 a year for three years; open to all such candidates as shall not have exceeded eight terms from matriculation. This examination will begin on Friday morning, November 19. Papers will be set in the following subjects:—(1) Mechanical Philosophy and Physics; (2) Chemistry; (3) Physiology. But candidates will not be expected to offer themselves in more than two of these. There will also be a practical examination in one or more of the above subjects, if the examiners think it expedient. Candidates are requested to communicate their intention to the Master of Balliol, by letter, on or before Friday, November 12, enclosing testimonials from their colleges or schools, and (if members of the University) certificates of their matriculation, and stating the subjects in which they offer themselves for examination. The holders of any of the above scholarships or exhibitions will be allowed to reside either within or without the walls of the College. If resident within the College,

they will be subject to the usual College payments; if residing out of College, they will pay to the College a deposit of £5, instead of £21, for caution money; and, yearly, a sum of £25 for tuition, £1 for University dues, and 8s. for College dues.

Deaths, and the State of the Public Health, for the Months of July, August, and September.—The number of deaths registered in the third or summer quarter of the year was 114,651, or 15,818 less than in the same period of 1868, when the prevalence of diarrhœa in London and in other large towns raised the number of deaths considerably above the average. The rate of mortality in the quarter was 20·77 per 1000, and in the same quarter of 1868 it was 23·89, the average of the season being 20·63. Taking the eleven great divisions of the country as they appear in the tables, it will be seen that in London 19,207 deaths were registered, compared with 19,149 in 1868, and 16,567 in 1867; the mortality of the quarter was at the rate of 21·31 per 1000. Small-pox caused 62 deaths, measles 337, hooping-cough 869, typhus 534, diarhœa 2644, summer cholera 192, diphtheria 85, and scarlet fever 1770; this last disease was epidemic, and increased rapidly from 75 deaths in the third week of the quarter to 238 in the last week. Few districts were exempt from this disease, but it was most fatal in the East districts, where 642 deaths were ascribed to it; in the West districts it caused 127 deaths, in the North districts 315, in the Central 247, and in the South 439.

Medical Education.—The following authentic copy of an official document has been sent us from one of the counties of this State. We recommend it as a model form:

Post Mortem

——day of July, 1869.

Alexander Montgomery, deceased; found upper portion of Oss Frontalis lacerated and entirely Anti-Anastimose, also the Ossa Parietals for half way back towards the Oss Occipital Anti-Anastimose, the entire wound being immediately along the coronal suture; from internal examination found buried deep in the Cerebrum two pieces of Stone which I removed therefrom.

——————, M. D.

The whole of the above I certify to being true and correct.

Philadelphia Medical and Surgical Reporter.

Composition and Quality of the Metropolitan Waters in October, 1869.—The following are the returns of the Metropolitan Association of Medical Officers of Health:—

Names of Water Companies.	Total Solid Matter per Gallon.	Oxygen required by Organic Matter, &c.	Nitrogen.		Hardness.	
			As Nitrates &c.	As Ammonia.	Before Boiling.	After Boiling.
Thames Water Companies.	Grains.	Grains.	Grains.	Grains.	Degs.	Degs.
Grand Junction .	17·63	0·072	0·049	0·001	13·2	3·2
West Middlesex .	16·89	0·064	0·049	0·000	12·6	3·0
Southwark & Vauxhall . . .	18·23	0·079	0·069	0·000	14·1	3·3
Chelsea . . .	17·37	0·069	0·123	0·002	13·4	3·3
Lambeth . . .	17·13	0·058	0·129	0·001	13·1	3·0
Other Companies.						
Kent	28·97	0·041	0·190	0·000	20·1	6·0
New River . .	18·30	0·059	0·066	0·000	13·8	3·3
East London . .	16·77	0·066	0·066	0·000	13·30	3·4

The average quantity of water supplied daily to the metropolis during the preceding month was, according to the returns of the Water Companies to the Medical Officers of Health, 106,740,029 gallons, and the number of houses supplied was 468,127. This is at the rate of 33·6 gallons per head of the population daily.

Note.—The amount of oxygen required to oxidise the organic matter, nitrites, etc., is determined by a standard solution of permanganate of potash acting for three hours; and in the case of the metropolitan waters the quantity of organic matter is about eight times the amount of oxygen required by it.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

As we were going to press an account of the meeting in favour of Medical reform, held at the Medical Club, Spring-gardens, reached us, but too late for insertion this week.

Dr. Beveridge's note and communication have been received.

Dr. Sutton's paper on Venesection is in the hands of the printer, and shall appear shortly. The following are in type:—Krishaber on Polypus of the Larynx; Bell Taylor on Cataract; Chapman on Spinal Ice-bags; Ross on Death by Chloroform.

Lex.—Willcock's book is now obsolete. There is no work that gives a satisfactory account of the present laws regulating the Medical Profession.

Civis will find in our present number a note on the existing laws of England so far as they relate to the case of persons who indulge in excessive drinking. This will be followed by notes on the American law and practice, and by an attempt at a draft of a bill; but the subject is very difficult.

A Union Surgeon.—The case would come under the category of "extras." The fee is three guineas.

An Assistant.—Unless there is some specific contract to the contrary, a month's notice is sufficient. The fee belongs to the principal, but, under the circumstances, it would only be just to award half of it to his representative on the occasion; but he has no legal claim upon it.

A New Comer.—There is no fixed rule, but the new comer usually calls upon the resident Practitioner.

A Guy's Man.—The Hospitals of Guy's and St. Thomas's were, for a long period, united. The disruption took place during the Surgeoncy of Sir Astley Cooper. It is our intention to refer to this matter in detail on some future occasion.

A St. Bartholomew's Student should address the governors. The complaint appears to have a just foundation, and is one that should receive the attention of the Board. If our correspondent could obtain the general co-operation of his brother students, it would add great weight to the suggested application.

The Sanitary Condition of Salisbury.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—As a Surgeon resident in this city for many years, I am in a position to affirm that Mr. Middleton's statements in the *Times* to which you allude in your issue of the 30th ult., as to the sanitary state of Salisbury, are not altogether correct. Referring to my case-book for the last three years, I see that typhoid and scarlet fevers have been prevalent on several occasions, and that rheumatism and consequent disease of the heart are very common. I have every regard for our ancient city, and much has no doubt been done by zealous co-operation to improve its drainage, but much still remains to be accomplished, and we cannot flatter ourselves that an hygeic millennium has yet arrived, Mr. Middleton notwithstanding.

Salisbury, November 2. I am, &c. A Surgeon.

Lector.—There is reason to believe that premature burial occasionally occurs in some parts of the Continent, where the law requires the burial to take place within twenty-four hours of death. In this country it is most rare, if indeed it ever occurs, as we keep our dead until decomposition has taken place to a considerable extent. The Jews, however, in all countries, acting under the Mosaic law, bury their dead at the expiration of a day and night. Some very curious information on the subject is contained in a treatise just published by M. Ramboson.

The Foot-and-Mouth Disease and Milk.—The question now being constantly asked is, "Does the foot-and-mouth disease in the cow injuriously affect the milk of the diseased animal? All that can be said at present in answer is, that there is no direct evidence on the subject upon which we can rely. *A priori* reasoning would lead us to infer that the milk must be more or less deteriorated, and some facts would lead us to the same conclusion. Thus, in the *Times*, a few days since, a writer stated that he had been able to trace ill-effects in two of his children to the milk in question; and several cases of a somewhat similar kind have come to our knowledge. The evidence in all these cases has not, however, been sufficiently conclusive to determine the "cause" of the "effect." In a case in which so grave a doubt prevails, the best course to pursue is not to use the milk of diseased cows.

The Origin of Parr's Life Pills.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—With reference to the notice of Parr's Life Pills at page 534 of last Saturday's *Medical Times and Gazette*, it should also be stated that the late Dr. Smaith, of Boston, was the reputed author of their formula. Dr. Smaith was eccentric and blunt, but clever, kind, and respected. Mr. Ingram, at the time a poor but enterprising man, appealed to his fellow-townsman, Dr. Smaith, for pecuniary assistance, to enable him to start in some small way of business in London. Dr. Smaith, discerning the "pushing" man he had to deal with, satisfied Ingram's importunity, and saved his own pocket, by the pill formula. This anecdote has been current in Boston and the country round for many years, and the truth of it was, I believe, never denied by the Doctor. I am, &c. Wm. J. Marsh.

Littlemore, November 1.

M.D. and F.R.C.S.—It was the late Joseph Henry Green, President of the Royal College of Surgeons, who, on his examination before a Parliamentary committee, said, "We should as soon think of examining in theology as in Medicine." Time works wonders.

"*One Faculty.*"—Many old Medical reformers, happily surviving, know that long ago Dr. Edwards Crisp openly and boldly proclaimed a Faculty of Medicine in each of the three kingdoms, and showed how it might be formed in the *London Medical Examiner and One Faculty Journal*, vol. i. p. 32 *et seq.*, 1850. Even so long ago as January 21, 1837, a speech of Dr. Crisp's was reported in the *Lancet* at p. 606 on the same subject.

Histologist, Southampton.—The term "protoplasm" is applied by Mohl to the colourless or yellowish, smooth or granular viscid substance, of nitrogenous constitution, which constitutes the formative substance in the contents of vegetable cells, in the condition of gelatinous strata, reticulated threads, and nuclear aggregations. It is the same substance as that formerly termed by the Germans "Schleim," usually translated in English works by "mucus" or "mucilage."

Dipsomania.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—With your permission, I would make a few additional remarks on this important question. I have no desire to enter the lists of gladiatorial psychology, to be derided, like many dons, by outside observers, in contentions for the settling the point whether this or that is a case of lunacy or dipsomania. I wish to look at drunkenness with the eye of commonsense as a fact, and not through the mystic glass of our Professional scrutiny. A drunkard, a lunatic, an idiot, a madman are all opeu to identification in their localities equally with the tinker or tailor, the parson or the Doctor; and this is the description of drunkard I fix my attention upon, and mark him out for a legislation which shall reform him, or, at all events, stop him in his career of offensiveness and danger to others. The newspapers of the day teem with his brutalities and murders before the law as it now stands meddles with him. No doubt, under drink, temperament has much to do with effect. One becomes quarrelsome, perverse, and everything bad; another, dronish and quiet. The first, being prominent, is the individual, I presume, we all wish to deal with more particularly. It is of no use for such a character to say—"I cannot help getting druuk, and, when drunk, am not responsible for my acts." If drunkenness makes him for the time mad, however from habit he becomes weaker to resist the temptation, his guilt increases with the indulgence, or there is an end of all condemnation under law, human or Divine. I would ask, eannot the police, or some public officer, be instructed to report habitual drunkards, so that, like lunatics, they may be sent to places appointed for them—reformatories, under probationary retention? I can easily believe that the very knowledge of such a restraint being held over them would exercise a most salutary influence. I am, &c.

Nailsworth, October 26. Thomas Stokes.

COMMUNICATIONS have been received from—

Mr. John H. Gornall; Dr. Gray; Dr. T. C. Allbutt; Dr. Fayrer; Dr. J. Macpherson; Dr. Bakea; Mr. R. W. Parkea; Mr. W. J. Marsh; Mr. J. L. Emary; Mr. Maunder; Mr. Berkeley Hill; Dr. J. Flack; Colonel Lane Fox; Mr. C. J. Fox; Mr. C. L. Kemp; Mr. Stude; Mr. J. W. Benson; A Surgeon; Dr. John Chapman; Mr. Arnott; Mr. Gaskoin; Mr. Haynes Walton; Mr. J. Chatto; Dr. Kelly; Mr. H. Bewley; Dr. Ross; Dr. Lethery; Mr. W. Bird; Mr. J. Robertson; Dr. H. G. Sutton; Dr. J. J. Phillips; Dr. Meere; Dr. J. Matthews Duncan.

BOOKS RECEIVED—

Bennet's Winter and Spring on the Shores of the Mediterranean—Fenwick's Medical Diagnosis—Report of the Sub-committee of the Association for Promoting the Extension of "The Contagious Diseases Act" of 1866—Curwen's Address delivered before the Medical Society of the State of Pennsylvania—W. and H. Hutchinson's Pamphlet on an Improved Magneto-Electric Machine—British Journal of Dental Science, November—Pharmaceutical Journal, No. 125—Symond's Address on Health—Edinburgh Medical Journal, No. 173—Odling's Outlines of Chemistry—Report of the Foochow Native Hospital and Dispensary—Strangeway's Veterinary Anatomy—Monthly Microscopical Journal, No. 11—Edinburgh Medical Journal, November—Practitioner, No. 17.

NEWSPAPERS RECEIVED—

L'Union Médicale—The New York Medical Gazette—Edinburgh Daily Review—Indian Volunteer Gazette—The Philadelphia Medical and Surgical Reporter.

VITAL STATISTICS OF LONDON.

Week ending Saturday, October 30, 1869.

BIRTHS.

Births of Boys, 1077; Girls, 1102; Total, 2179.
Average of 10 corresponding weeks, 1859-68, 1989·5.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	803	733	1536
Average of the ten years 1858-67	631·3	615·8	1247·1
Average corrected to increased population	...	...	1372
Deaths of people above 90	...	1	1

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-cough.	Fever.	Diarrhœa.	Cholera.
West	463388	...	2	16	5	3	5	5	...
North	618210	1	6	40	...	6	12	7	...
Central	378058	...	4	28	1	7	10	3	...
East	571158	...	10	76	2	15	11	11	...
South	773175	1	7	69	3	14	6	8	...
Total	2803989	2	29	229	11	45	44	34	...

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·850 in.
Mean temperature	40·0
Highest point of thermometer	55·4
Lowest point of thermometer	27·9
Mean dew-point temperature	33·9
General direction of wind	Variable.
Whole amount of rain in the week	0·21

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, October 30, 1869, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the year 1869.	Persons to an Acre. (1869.)	Births Registered during the week ending Oct. 30.	Deaths. Corrected Average Weekly Number.	Deaths. Registered during the week ending Oct. 30.	Temperature of Air (Fahr.) Highest during the Week.	Temperature of Air (Fahr.) Lowest during the Week.	Temperature of Air (Fahr.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3170754	40·7	2179	1462	1536	55·4	27·9	40·0	0·21	21
Bristol (City)	169423	36·1	98	76	*76	58·9	29·5	42·9	0·48	48
Birmingham (Boro')	360846	46·1	217	175	170	55·0	30·4	41·7	0·36	36
Liverpool (Boro')	509052	99·7	366	295	309	53·2	33·1	46·3	0·69	70
Manchester (City)	370892	82·7	260	210	*220	55·5	28·0	40·0	0·54	55
Salford (Borough)	119350	23·1	91	60	67	56·4	29·0	40·8	0·55	56
Sheffield (Borough)	239752	10·5	207	126	126	54·0	30·5	41·1	0·16	16
Bradford (Borough)	138522	21·0	92	71	63	56·1	29·0	39·8	0·35	35
Leeds (Borough)	253110	11·7	194	129	136	57·0	30·0	42·0	0·42	42
Hull (Borough)	126682	35·6	71	53	58	...	...	...	...	...
Newcastl-on-Tyne, &c.	130503	24·5	74	69	80	...	...	...	...	...
Edinburgh (City)	178002	40·2	127	86	75	50·7	31·0	40·3	0·40	40
Glasgow (City)	458937	90·6	359	268	236	55·6	28·5	40·5	0·30	30
Dublin (City, etc.)	320762	32·9	131	158	127	55·0	32·7	43·8	0·36	36
Total of 14 large Towns	6546587	35·5	4466	3244	3279	58·9	27·9	41·6	0·44	44
Paris (City)	1889842	...	...	...	889 Week ending Oct. 23.	...	...	...	...	...
Vienna (City)	605200	...	...	...	...	Week ending Oct. 23.				

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·850 in. The barometrical reading decreased from 30·11 in. on Monday, Oct. 25, to 29·60 in. on Wednesday, Oct. 27.

The general direction of the wind was variable.

Note.—The population of Cities and Boroughs in 1869 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous.

* The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

† Inclusive of some suburbs.

APPOINTMENTS FOR THE WEEK.

November 6. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m. King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 1½ p.m.

8. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 1½ p.m.; St. Peter's Hospital for Stone, 2½ p.m.

Medical Society of London, 8 p.m. Dr. Sansom, "On a Case of Constriction of the Mitral Orifice, with Cerebral Symptoms simulating those of Typhoid Fever." Mr. Wm. Adams, "On Hip-joint Disease."

9. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.

Ethnological Society, 8 p.m. Mr. C. T. Gardner (of the Chinese Legation at Shanghae), "On the Chinese Race, their Language, Government, Social Institutions, and Religion."

Royal Medical and Chirurgical Society, 8½ p.m. Dr. Heale (of Winchester), "On the Physiological *Rationale* of Pneumonia and Bronchitis." Dr. Waters (of Liverpool), "On the Treatment of Pneumonia."

10. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.

Hunterian Society. 7½ p.m.: Meeting of Council. 8 p.m.: Messrs. Couper and James Adams, "Cases of Amussat's Operation."

11. *Thursday.*

Operations at St. George's, 1 p.m. Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

12. *Friday.*

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

EXPECTED OPERATIONS.

London Hospital.—The following Operations will be performed on Wednesday next, November 10, at 2 p.m.:—

By Mr. Maunder—Tumour of Jaw; Trephining of Humerus; Vesico-Vaginal Fistula.

CHOCOLAT-MENIER.

(Manufactured only in France.)

ANNUAL CONSUMPTION EXCEEDS 5,000,000 lb.

The healthiest, best, and most delicious Aliment for Breakfast known since 1825; defies all honest competition, unadulterated, highly nutritious, and pure.

Sold in Half-pound Packets.

Wholesale, MENIER, 23, Henrietta-street, Strand, London.

Retail by all respectable Houses.

LIEBE-LIEBIG'S NOURISHMENT IN SOLUBLE FORM,

For INFANTS, WEAK CHILDREN, and CONVALESCENTS.

Prepared by J. PAUL LIEBE, Apothecary, Dresden.

No indigestible husk, no wood fibre, can derange the child's stomach, and no difficulty in cooking will impede the salutary effects of Baron von Liebig's formula.

Sold by all Chemists. Wholesale from all Wholesale Drug and Patent Medicine Houses.

Sole Wholesale Agents for Great Britain—A. and M. ZIMMERMANN, 7, Fen-court, Fenchurch-street, E.C.

MEAT WITH FRUIT.—GUICHON'S MUSCULINE.

The pulp of Raw Meat combined with Fruit, in the form of Sugared Tablets, manufactured at the Monastery of Notre Dame des Dombes, France.

Dr. C. M. Tidy, Joint-Lecturer on Chemistry at the College of the London Hospital, having made an analysis of GUICHON'S MUSCULINE, reports that it contains about 51 per cent. of animal matter, the remainder being for the most part Sugar. Each Lozenge weighs on an average about 28 grains—a little more than half of which, therefore, is MEAT.

The "MUSCULINE" is strongly recommended as a nutritious Diet, and a powerful agent in overcoming debility consequent upon disease.

Introduced into England by THOMAS TOMLINSON, Chemist, 6, Lower Seymour-street, Portman-square, London, W., of whom it may be obtained in Boxes, 2s. each; by post, 2s. 2d.; or 22s. per dozen, carriage free; and through all Chemists.

The usual Discount to the Profession.

PARRISH'S CHEMICAL FOOD,

OR

SYR. FERRI PHOSPH. CO. (AMERICAN),

Is imported FRESH EVERY MONTH by his Sole Agents,

P. & P. W. SQUIRE,

CHEMISTS IN ORDINARY TO THE QUEEN AND THE PRINCE OF WALES.

Mr. SQUIRE introduced into Medicine (*Vide* "Lancet," March 4th, 1839)

SOLUTION OF BIMECONATE OF MORPHIA,

Which has been employed by all branches of the Medical Profession.

Dr. Roots thus writes of it:—"I have taken it myself daily now for very nearly four years, and during that period I have frequently prescribed it in my private practice. The result of my observations on its effects on myself and others amounts to this—namely, that it disturbs the head less, that it distresses the stomach less, and that it constipates the bowels less, than any other preparation of Opium. I have taken every other preparation of Opium, but from none of them have I obtained the same degree of quiet rest that I have enjoyed from this Bimeconate of Morphia."

ASTRINGENT RED GUM LOZENGES,
Taken for Relaxed Throat.
In Bottles 2s. each.

MURIATE OF AMMONIA LOZENGES
Taken by persons suffering from Bronchitis.
In Bottles 2s. each.

Each bottle has the Seal SQUIRE, OXFORD-ST. to insure that it is genuine.

ONLY SILVER MEDAL AWARDED 1867.—JUROR 1862.

MORSON'S PREPARATIONS OF PEPSINE.

MEDICINAL PEPSINE

(Poudre Nutritive, or "Pepsine Acide Amylacée" of the French Codex).

Contains the active digestive principle of the gastric juice, purified and rendered permanent and palatable. Dose—15 to 20 grains.

PEPSINA PORCI,

A concentrated and NEUTRAL preparation of Pepsine, free from any disagreeable taste or smell. Dose—5 to 10 grains.

☞ These preparations of Pepsine are carefully examined and tested by a professional Chemist, and certified to answer to the tests indicated. Every bottle containing the preparations named, and bearing the Trade Mark of T. MORSON AND SON, is sold with a guarantee to that effect.

PEPSINE WINE, PEPSINE LOZENGES, PEPSINE GLOBULES,

Are convenient forms for the administration of Pepsine.

SACCHARATED WHEAT PHOSPHATES,

A Dietetic Preparation, supplying an important deficiency in the ordinary Food of Invalids and Children.

Manufactured by T. MORSON and SON, Pharmaceutical Chemists,

31, 33, and 124, SOUTHAMPTON-ROW, LONDON, W.C.

ORIGINAL LECTURES.

A DISCOURSE DELIVERED IN THE THEATRE OF THE MEATH HOSPITAL

On Monday, November 1, 1869,

By WILLIAM STOKES, M.D., D.C.L., F.R.S.,
Regius Professor of Physic in the University of Dublin.

Gentlemen,—May I ask of you to refrain from expressions of approbation or dissent at anything I may say in this discourse? Remember that we are assembled in an Hospital, the house of the sick, and that everything which might disturb the repose of the inmates should be religiously avoided.

In discourses of this kind, the speaker may often directly or indirectly be led to give undue prominence to such parts of our coercive curricula as he himself professes, and such subjects as those of anatomy, chemistry, and physiology may be too highly exalted as the A B C of Medicine.

These things are not the A B C of Medicine. We may know them all and be unfit to treat the most common case of disease. I am not going to tread the beaten ground of Medical education, but I take this opportunity of saying that, as Medicine deals with life, the amount of light thrown upon it by the study of that which has no life has been hitherto very small. Do not misunderstand me as undervaluing the studies in question. But I wish to show you that, at least as far as Medicine is concerned, they are subsidiary to a higher study.

The end of all is Professional fitness, and in regard to this there is an influence greatly overlooked by our makers of systems of education. It is that of the practice of Medicine itself, under necessity. There are men who in their student days have been idle, neglectful of opportunity, deaf to advice, yet who manage somehow to get through a so-called test examination, and who, with the growth of a more sober judgment, and under the silent influence of experience, become good and useful Physicians and Surgeons. To such men the power comes late, but it often does come. They learn every year things that are in no curricula, subjects more important than any they have been examined in—charity, self-abnegation, courage, caution, reflection, patience, modesty—all the while their minds tinctured with a poignant regret for the time they have wasted, when they remembered not their Creator in the days of their youth. Their manners may be rugged, their extra-professional learning scanty, but they may become, notwithstanding their early habits, if not accomplished, at least conscientious and often successful soldiers, in the fight with disease and death. God forbid that I should counsel you to follow their example in your early days, but I mention this as a matter which should be more weighed than it has been by the framers of coercive systems of education, and more especially of examination.

One word as to the duty of teachers, and this applies to those of other sciences as well as Medicine. It is not to convey all the facts of a subject to their hearers, but it is by precept and example to teach them how to teach and to guide themselves. If they succeed in this, they have done their duty in the largest sense of the word.

In speaking of Professional fitness there is a subject which lies outside the formulised systems of education, and which deals with our conduct to society, to Medicine as a science, to our Profession as a calling, and to our brethren in practice as fellow-soldiers.

The question of Medical ethics has not received the attention it deserves as a matter of instruction. We are compelled to devote ourselves to a host of subjects, among which the crowning one is but a unit; but who among us has been asked to think on those principles which make our Profession a calling for the gentleman and the Christian. From what professorial chair has such teaching emanated? We have the lectures of Gaubius, "De Regimine Mentis quod Medicorum est Habitus," published at Leyden more than a century ago, which relate principally to doctrine; and those by Gregory on the "Duties and Qualifications of a Physician," published in 1788, dealing principally with the circumstances which retard Medicine as a science, though there is also much of value in regard to the manners and conduct of Physicians. We have, further, smaller works, such as those of Percival in 1792, of Petit of Lyons, and of Hooker, which mainly refer to what has been called Medical etiquette, a term commonly misunderstood by the public. It may be said of all these books that they are insufficient and rarely read.

Medical ethics differ in no respects from ethics in general, and the term expresses only the application of ethical principles, or the laws of opinion as to right or wrong, to a particular set of circumstances. Locke, in his "Essay on the Understanding," indicates the three kinds of law to which human actions are referred in judging of their rectitude or obliquity—the Divine law, the civil law, and the law of opinion, or, as he calls it, reputation; and he adds, "By the relation they bear to the first of them men judge whether their actions are sins or duties, by the second whether they be criminal or innocent, and by the third whether they be virtues or vices. He shows that everywhere vice and blame, virtue and praise, go together, and are so united that they are often called by the same name. Thus Cicero says, 'Nihil habet natura præstantius quam honestatem, quam laudem, quam dignitatem, quam decus.'" After all, these laws of professional conduct are but the laws of morality, honour, and courtesy, and in many men of well-attuned minds there is little danger that they will be wilfully departed from. But our Profession is a large one, and composed of men of varied moral and intellectual qualities, of different ranks of life and degrees of education, and all may not follow the strait way. Therefore it is right that by its members, while they are in their youth, these things should be thought of, and we may hope that a part of the seed will fall into good ground, and bring forth some thirty-, some sixty-, and some a hundredfold.

Our duties, which imply the application of these principles, are many and varied. The practice of such in our younger days prepares us for our more mature years, just as that of virtue and religion in this life prepares us for that which is to come. It is well remarked that habits, whether belonging to the body or the mind, seem to be produced by repeated acts, whether they be good or bad. As habits, such as those of envy or revenge, become part of our nature by indulgence, so, on the other hand, those of charity and justice, of self-government and honour, are acquired by exercise. "Thus," a great writer says, "by accustoming ourselves to any course of action we get an aptness to go on, a facility, readiness, and often pleasure in it. The inclinations which rendered us averse to it grow weaker, the difficulties in it, not only the imaginary, but the real ones, lessen. The reasons for it offer themselves, of course, to our thoughts on all occasions, and the least glimpse of them is sufficient to make us go on in a course of action to which we have been accustomed, and practical principles appear to grow stronger absolutely in themselves by exercise, as well as relatively with regard to contrary principles, which, by being accustomed to submit, do so habitually and of course."

Therefore, looking forward to your mature life, its duties, and its trials, begin early to train yourselves, and be sure that these things and these habits are above all else necessary.

As to the relations of the Profession to society, it has been too much the habit among us to find fault with Government and with the public, and there is a large class among us who seek to remedy the evil by complaints of injustice and by attempts at class legislation, which some call Medical politics. All this is a mistake; the Legislature will pass no law to serve the interests of a class, unless it can be shown that the public will be gainers thereby. These evils, admitting them to exist, will not be remedied until, on the one hand, the public mind is better educated, and, on the other, the Profession become wholly a profession, getting rid of the principle of trade—its members learning to be just and generous one to another, "learning what manner of men they are, where they are going, and what is best to do under the circumstances." And it is not until these things are learned that any change for the better can be expected. Meanwhile, the existence of such evils should rather stimulate us to the faithful discharge of our social duties, and I beseech of you to lay this to your hearts.

A recent writer, after speaking of our advance in scientific power since the apostolic times, says:—"Christ commanded his first followers to heal the sick and give alms; but he commands the Christians of this age, if we may use the expression, to investigate the causes of all physical evil, to master the science of health, to consider the question of education with a view to health, the question of trade with a view to health, and, while all these investigations are made with free expense of energy, and time, and means, to work out the re-arrangement of human life in accordance with the results they give."

These are your duties to society; you must be as soldiers in a field of battle—you must do good for God's sake, whether it

be to the rich or to the poor, and not measure your needful exertions by the amount of any earthly reward. You must bear with fortitude the slights that public ignorance may put upon you, and ever seek to be in the vanguard of social progress. And you must labour to remain uninfluenced by pride, passion, or self-seeking, or by any narrow sectarian feeling which would divide you from your fellow-man of any denomination. This precept is of general application; yet, if there be a country in the world where it more requires to be followed than another, it is our own loved and still divided Ireland.

Now, as to our duties to our Profession as a science and a calling, little weight is to be placed on collective movements for the declaration of grievances, for demanding protective laws, for the making of tariffs, or agitations for the phantasm of uniformity of education, or for establishing the minimum amount of knowledge necessary to obtain a licence to practise on our fellow-creatures. Not thus is our Profession to be advanced in public estimation, and therefore dignity, but it is by each one of us resolving that during his life he will hold the honour of Medicine as a jewel intrusted to his safe and personal keeping, and that to preserve that honour and to advance it is his clear and inviolable duty. Any one can indicate a duty—it is not all that even from their nature can perform it; but if all did so act, the cumulative effect would be immeasurable.

When speaking of practices which are the result of this want of consideration of the nature and character of our calling, Professor Smith, in his address to the British Medical Association, during its memorable visit to Dublin—an address which to have heard was the marking of an era in our lives—in speaking of the fathers of Surgery in Great Britain and Ireland and on the Continent, said:—"Independent of the valuable information their writings contain, the works of the authors of the past generation further repay the reader by the correctness of their style, by the terseness and succinctness, and, at the same time, the fulness and clearness of their descriptions. There is no inflated language, no giving to self an undue prominence, no magnifying of trifles, no appropriation of merit that might not be justly claimed. They wrote with a pure object, the advancement of science and the benefit of mankind. There is still another important feature of these works: they are the result of large and long experience. There was no hurrying into print with some ephemeral production, no rushing into authorship in the hope that experience would follow, no premature publication of cases that had not terminated, of operations whose final result was not known."

To use the words of Dr. Acland, "No truer guide to the temper in which Medicine should be followed could be found than what then fell from the lips of the eloquent Professor of Surgery." If our young men were to ponder on these words, how much discredit would our Profession escape from!

The abuse of statistics to confirm particular views would cease, the climbing into notoriety by the alleged power of this or that remedy would become more rare, the extreme difficulty of settling the real value of any therapeutic agent would be admitted, dogmatism would become unknown, and jealousies disappear.

A feature of some schools of the present day is irreverence. I do not mean in a religious sense, but as regards the respect due to our noble band of predecessors. The disciples of some vain men affect to despise the past without knowing the past. How few of them know anything of the old Egyptian Medicine! Which of them has read Hippocrates? Which of the so-called anatomical school has studied Bonetus or Morgagni? To confine ourselves to Medicine, how few have read John Peter Frank or Sydenham, Haygarth or Gregory! I will not enlarge on this topic, but only exhort you to cultivate the modesty of science, and to remember that among our predecessors there were great Physicians and Surgeons—great because they were good observers. This contempt for them, or this ignorance of them, is among the saddest things relating to Medicine that I know. Even great men of the last generation are virtually declared to have been either bad observers or dishonest men. O shame, where is thy blush!

It is in the nature of things that although the path to eminence is open to all it is not successfully trodden by all. Swift has said that "in every crowd there is room over their heads." Now, there are two ways to distinction — one the wrong way, the other the right one, even though the former leads to a kind of success. Men climb into eminence, and men float into it; the first class are ambitious men, selfish, often unscrupulous in the attainment of their object. They are false or true, as may serve their turn, and Medicine is their means, and not, as she should be, their mistress, loved, worshipped, and served for her own sake.

Yet the history of the Profession shows that it is not from this former class that the higher ranks in Medicine and Surgery have been recruited. Who will deny that the fathers of British, and Irish, and Continental, and American Medicine and Surgery were, in a scientific sense, morally worthy of their place?

Strive to imitate them, for they rose not by climbing, but by floating. Buoyed up by their zeal, their love of their science, their earnest, untiring, disinterested labour, they became relatively superior to their fellows, until, by the voices of their brethren and the world, they found themselves in positions to which they never dreamt of attaining.

And this leads me to speak of one fruitful source of unhappiness and of discredit to the character of Medicine. I allude to the practice of controversy in general, but especially as to priority in observation or discovery. It is proper that merit should have its due, but the assertion of our right to that merit should rarely come from ourselves. It is given to few to make what may be called a master-discovery, such as that of a new world, of the law of gravity, of a new planet, the laws of light, the spectral analysis, or the preventive powers of vaccination. But, in smaller matters, discovery as such is an easy, almost a necessary, result of investigation. All physical and natural sciences advance by discoveries, one leading to another, and if we do make any new observation, if we are permitted to add another stone to the building up of the temple of science, it should satisfy us to be the means of laying it without demanding that our poor names be engraved upon it. The combatants in discussions of this kind excite no public interest beyond that which used to be attached to the gladiator in the arena, or the boxers in the ring, and men look on them with much of the same feeling.

When so many minds are occupied at the same time in similar researches, it becomes more probable that the discovery of A. has been made simultaneously with that of B. than that B. appropriated the work of A. to himself. If the interest of science were subserved by these disputes, something might be said for them. In such angry controversies by insignificant men there is often betrayed a want of knowledge of Medical literature which would have shown that the discovery was made long before. Where this is not the case, where ignorance cannot be pleaded as their excuse, they may then be described as the mere camp followers of science, who live by plundering the dead.

The circumstances which not seldom attend on the giving of Medical evidence in court are often a source of discredit. I do not speak of diversity of opinion, for though the adage of "Doctors differ" becomes every day less and less applicable, yet good and even learned men may occasionally take opposite views of any question. But still the giving of Medical evidence often lowers our Profession in the eye of the public, and, still worse, in that of the judge.

Two causes contribute to this result—one, that the witness permits himself to become more or less a partisan; the other, that with imperfect knowledge he volunteers and defends opinion.

In the report of the State Medicine Committee of the General Medical Council, which was brought up this year, there are the answers to queries on this subject from many eminent authorities.

I shall read extracts from letters by the present Lord Chancellor of England and the Lord Chief Justice Sir William Bovill in answer to the following queries:—

"What are the deficiencies you have observed in Medical witnesses?"

"How would you propose to remedy them? by what education, legal and scientific?"

The Lord Chancellor, after objecting to the use of technical phrases in Medical evidence, and distinguishing as to the evidence of facts and of opinion, says (see Report, page ii.):—

"A much more serious defect is common to all scientific witnesses, engineers, surveyors, barristers (who are sometimes witnesses as to Scotch or other foreign law), no less than Medical men, and this defect is one arising from our system of evidence.

"A witness to facts knows that it would be base beyond measure to bend his evidence so as to suit the case of him in whose behalf he is called, and that his only duty is to state plainly, without colour or fencing, what he knows as a fact.

"But the witness who speaks to opinion is selected by the litigant, after communicating with many, perhaps, of the same profession as the witness, and when so selected is expected to

express a particular opinion. He honestly entertains it, I doubt not, when first selected, but then it is like the case of a counsel's opinion: the counsel gives his opinion on the statement of facts submitted to him; perhaps after hearing the other side he would find the case wholly altered, and would say so. But the scientific witness called into court by a plaintiff is generally expected by plaintiff to support his case in cross-examination, when many views may be suggested that may really modify the witness's judgment, and even after facts may have been proved that ought to modify it; and the witness too frequently acts in this manner.

"But every witness should eschew altogether the notion of partisanship. He should be ready frankly and unreservedly to give his opinion, regardless of how it may tell. He is there not as an advocate, but in order to inform the court or jury according to his best judgment.

"In fact, I think the judge ought to call in scientific evidence (as in lunacy the Lord Chancellor and Lords Justices do) of his own selection, and I doubt whether any evidence of opinion on oath should ever be given. The jury would then see that it is opinion only; the witness would with more decorum defend his opinion, and would acquire the habit of believing himself to be, not a partisan, but an expert, rendering his assistance the greater."

Sir William Bovill observes (see Report, page xii.):—

"With reference to the sixth printed question, I may mention that the great misfortune and defect in Medical testimony hitherto has been that Medical men, like many other professional witnesses, have been too much in the habit of making themselves partisans in endeavouring to support the particular views of the parties on whose behalf they have been called; and this has led to conflicts of opinion, which sometimes have appeared not very creditable to the Profession.

"The remedy rests with the individual members of the Profession."

To the same effect Dr. Alfred Taylor remarks:—

"Medical men would rebel against the proposition that they should be excluded from giving evidence at inquests or assizes until they had qualified themselves to pass such an examination as is here sketched out. And yet what can be more absurd than our present practice of selecting the Medical man who happens to live nearest to the body of a person found dead under suspicious circumstances to give an opinion on a number of matters on which he had never previously thought, or on which he had had no previous experience?

"When a legal case of difficulty arises, a man does not select the nearest attorney for the purpose of removing it, or helping him through an action or indictment; but he takes the best man he can find—at any rate, a competent man, and one who has had experience in that particular department in which the question of difficulty arises.

"The truth is, the greater number of Medical Practitioners are disqualified from giving evidence in Medico-legal cases. They want experience, judgment, logical accuracy, forethought, and all those qualities necessary for a Medical witness in a court of law."

Now, what should be the proper course to follow? The Medical witness must go into court untinged by partisanship with the plaintiff, the defendant, or with himself. He is there to give his opinion, careless of how it may tell. When he is summoned, as often takes place, in consequence of his having given an opinion upon an *ex parte* statement, it is in human nature that he will seek to defend that opinion, even though facts, which he learns in court for the first time, be opposed to it. Therefore to give an opinion on a one-sided statement, and, in consequence, to be retained as a witness, is to be avoided; otherwise you run the risk of being doubly partisans—of the side which retains you, and again of yourselves.

But a wider source of discredit is that our brethren give evidence on questions of opinion of which it would be better that they should confess their ignorance.

In courts of justice it is too often held that, because a man happens to be a licensed Practitioner, he is therefore competent to deal with Medico-legal questions, and great evils are the result. There is hardly a day on which I do not see evidence as to the cause of death at inquests which is behind the state of knowledge. One would think that to determine the cause of death was a very simple thing. Dissection reveals a disease or an injury, a sworn opinion is given that this accounts for the death, and the inquiry is at an end.

But the question remains whether, if the man died with the disease, he necessarily died of it. There are some diseases and conditions which are known to be incompatible with life, and the discovery of such would give a great probability that it was the cause of death; but such cases are exceptional. Life can exist with a vast amount of anatomical changes, both acute and chronic, and death occur without a perceptible lesion. In the present state of knowledge, to determine the cause of death by dissection alone is often impossible, so that the belief that these inquiries may end as well in the concealment as the detection of crime is justifiable.

In how much better a position would the Medical witness stand who had the knowledge and the moral courage to say "I cannot tell," than he who swears to opinions on insufficient and unscientific grounds!

It is certain that the ordinary experience of practice does not qualify any of us to give an answer to a large number of questions of legal Medicine.

Hear what the representative of Irish Medicine says in addressing his class in this Hospital:—"But you are told that you may be called on to decide questions of Medical jurisprudence which demand an accurate knowledge of chemistry; that you will be required to test poisons and detect them when accidentally or purposely mixed with food or drink. What should you do in such cases? Why, do not undertake any investigations of the kind; refuse to make them, refer them to those who are competent to the task. Where will you find a man engaged in the practice of Physic fully capable of deciding such questions? What practising Physician or Surgeon is competent to enter at once upon an investigation of this nature? I have lectured some three or four years on Medical jurisprudence, and have bestowed a good deal of attention on the subject, and yet, if called on to decide a case of poisoning, I would refuse, and say I was incompetent to the task. What, then, is to be done under such circumstances? This is a matter of deep importance to society. It is of the utmost consequence that the wretch who poisons should not escape, and that the innocent should not suffer. It therefore behoves the Government to employ and pay persons capable of deciding such questions. Then, and not till then, will the task be duly performed, and the decisions be such as the public can look up to with respect and confidence."

The subject of State Medicine, which includes Forensic, Psychological, and Preventive Medicine, Medical topography, and vital and sanitary statistics, thanks to the long-continued exertions of one enlightened member of the Profession, Dr. Rumsey, now occupies a prominent place in the consideration of the Profession, the Medical Council, and the Government. The Medical Council have appointed a State Medicine Committee under the presidency of Professor Acland, and a Royal Sanitary Commission has been formed, which has already taken a mass of evidence, especially on Preventive Medicine and the registration of disease. It has been recommended by the committee of the Council that in any amended Medical Bill which may be prepared for Parliament it is desirable that the requisite permissive clauses for registering a qualification in State Medicine be inserted in addition to any of the qualifications sanctioned by the Medical Act.

We may then confidently expect that ere long these great questions, the decision of which is so essential to the public, will be settled in accordance with the advance of knowledge.

We have touched on our duties to society and to our Profession; let us now briefly speak of the duties to our patients. These duties, as relating to the treatment of the sick, are best learned in those monuments of Christian charity, our Hospitals and dispensaries. Here I take leave to say that in the student's career, his clinical attendance and study cannot be begun too soon. It is held that the student should learn his anatomy, his chemistry, and his materia medica, before he enters the wards, but will these teach him to know the living, which it is his business to know? Will this teach his hand, his eye, his ear? But more. Will these things teach the look of a sick man, sympathy with the sick, charity to the sick, patience with the sick? Will they soften his heart by witnessing their sufferings, or rejoice it by feeling their gratitude? No, and yet these things are of more importance to the moulding of his character and to his future usefulness than any knowledge of the accessory sciences, and he cannot begin to feel their blessed influence too soon.

We have heard much of the necessity of determining the minimum amount of knowledge that would justify the granting of a licence, and the Medical Council has long been pressed to declare it. Is the minimum amount of the moral qualities, so precious to all, to be determined also?

In relation to practice among the better classes it may be said that, outside Medical skill, one of the most essential qualities is that of secresy. As the rule, this has been long and well understood. Yet a few of our brethren, while observ-

ing strict honour in great things, have the habit of talking about their attendances. Nothing tends more to shake the confidence of the public than this, for it will be thought that if little things are talked about and made the tittle-tattle of a neighbourhood, greater matters will be so also. You will avoid this. Practice the bridling of the tongue, for not to your nearest and dearest should such things be revealed. The habit of talkativeness unfits men for the Profession, for, as has been well remarked, men cannot go on for ever talking of nothing, and will come to reveal things of greater importance.

But another example of talkativeness is to be noticed as a constitutional defect. It is that of *thinking aloud*. It happens every day that organic disease remains long silent—that is, either wholly latent, unprogressive, and productive of slight, if any, symptoms. By accident it is discovered, and those who have this failing seem incapable of concealing it from the patient. The consequences are that they destroy his peace of mind, and do their best to convert an indolent into an active disease. It commonly happens to the Consulting-Physician to be addressed in this way, "Sir, I have an aneurism of the aorta—or patency of the mitral valve—or tubercular atrophy of my lung—Bright's disease—or encephaloid of the left lobe of the liver." I could tell you terrible examples of the effects of such communications.

There is a darker side to this picture. The declaration of the disease may proceed from the desire of showing a superior skill in diagnosis. This is bad enough so far as the patient is concerned, but when done in the absence of the regular attendant, it becomes one of the gravest breaches of Medical ethics.

One thing more as regards our patients. Do not hold that you have, so to speak any property in them, or any right, real or implied, that you should be employed by them on a future occasion. Nor are you to look for what is called Medical gratitude, and you will be saved many a heart-burning. You may have brought your patient through a terrible illness, and exerted your best skill in the case; but another occasion arises in his own person or that of one of his family. If he by any circumstance is led to believe that by employing another the chances of cure will be increased by an infinitesimal degree, you may be discarded, and have no cause of complaint. It is unreasonable to expect that the smallest presumed chance of a favourable result should be given up for your sake, or in consideration of your former services. Preserve your own independence, be free from self-seeking, eschew servility, and the public will respect you the more. While you do your duty to your patients, hold them with a thread of silk, of cobweb.

In relation to society, no high-minded man will ever touch on the subject of his success in practice; and I would counsel you, when the belief in quackery is spoken of in mixed society, to remain silent. If you said that it would be well for all that the alleged cures brought forward were real, you will be met by the assertion that they were true, for in all such cases the public use the *post hoc ergo propter hoc* argument without seeing its fallacy. If you condescend to discussion you are set down as an interested witness. You will do well to remember, in reference to this matter, that there is a condition of the mind in which the reception of the false is preferred to that of the true, and, while in this condition, it will not be convinced of its error though one should rise from the dead. With the progress of education these things will cease to be, but meanwhile you will consult the dignity of your Profession by abstaining from such discussions. And do not think too hardly of those who reject legitimate Medicine; from Plato and Aristotle down we have examples of great men becoming irrational when they have touched on Medicine without a knowledge of its foundation—"observation rendered fruitful by study."

In relation to our duties to our Profession, it is obviously right that in mixed societies, as it is at present constituted, we refrain from the discussion of Medical topics. To be able to speak of nothing but what pertains to our calling is to give an unfavourable idea of the Profession to the public mind. And this is another reason for insisting on a large and liberal education in arts by our young men.

This outline—for it is but an outline of what our conduct should be—would be wanting did we not consider our duty to our brethren also. And here is the golden rule in all cases—first to consider the interest of our patient, next of our brother, and last of ourselves.

There is no profession in which the motives, acts, and characters of its members can be more easily and, so far as concealment goes, more safely assailed. Therefore it behoves us all the more to be on the watch over ourselves, lest, even though unwittingly, we inflict a stab in the dark.

Professional honour is public safety; and if the skill of a brother comes in question before any of you, seek not to rise on the ruins of his reputation. While you do what is right, watch that if an error has been committed it be not exposed. This is another instance of the quality of secresy and of the value of not thinking aloud. A little exercise of tact can effect all that is right to be done. I am making no charge against my Profession. On the contrary, I believe it, looking at its temptations, singularly pure and chivalrously honourable.

All men, even the best, may err in judgment; but all men, also, are given a rule in conduct from on high—"Do ye unto others what ye would that they should do to you." As the source of happiness consists in living not for self but for others, so success, with a satisfied conscience, depends on your thinking more of your brother's interest than of your own.

If there be one class of Practitioners by whom more than another these precepts should be observed, it is that of metropolitan Physicians and Surgeons. Patients resort to them from all parts of the country, often without notice to their Medical attendants, who may be hundreds of miles away. Here is the rule. Seek not to make property of such patients. Do not tell them they should have consulted you before. Do not invite them to correspond with you except through their attendant, and should you discover anything that has not been discovered, or should you see any reason for a change of treatment, write in the first instance your opinion to your country brother. This may be, and has been, sneeringly called Medical etiquette. It is but the conduct of a man and the morality of Medicine.

The safety of the framework of Medical society depends on the adoption of these principles. Let us, while we profess Christianity, try to follow its moral precepts.

But you yourselves may be injured. Bear it without murmur. Have no Professional quarrel, no matter what the offence may be. If a brother injures you, meet him as if nothing of the kind had happened, for when you are angry every man becomes your master, for you cease to be so yourselves. The Professional quarrel may be attended by a desire for, and often an indulgence in, revenge; but though evil be done, we are not to render evil for evil. "You may be forced into a dark tremendous sea of cloud. Bind God's lamp to your heart, and you will emerge."

A great authority says, "What would be the consequence, malice or resentment towards any man hath plainly a tendency to beget the same passion in him who is the object of it, and this again increases it in the other. It is of the very nature of this vice to propagate itself." Perseverance in the right course will make it easier and easier, and, while you preserve your own dignity to your enemy, you may at last convert him from being such into a fast and enduring friend.

"Good my lord," says Hamlet to Polonius, "will you see the players well bestowed?" Polonius answers—"My lord, I will use them according to their desert." Then comes the reproof—"Odds bodikins, man! better. Use every man after his deserts, and who shall escape whipping? Use them after your own honour and dignity; the less they deserve, the more merit is in your bounty."

"Suppose," says Bishop Butler again, "that you were under the apprehension of approaching death or the final judgment; that you were going to appear naked, and without disguise, before the Judge of all the earth, to give an account of your behaviour towards your fellow-creatures. Could anything raise more dreadful apprehensions of that judgment than the reflection that you had been implacable and without mercy to those who had offended you, without that forgiving spirit towards others, which, that it may be exercised towards yourself, is your only hope. A forgiving spirit is therefore absolutely necessary, as ever we hope for peace of mind in our dying moments, or for the Divine mercy on that day when we shall stand most in need of it."

Gentlemen, I have done. No one in this room can be more convinced of the insufficiency of this discourse in relation to its subject than he who has addressed you. May you all long live to discharge the duties of your great and honourable Profession with success, and "in peace and goodwill to all!"

We learn that Sir John Gray, the member for Kilkenny, accompanied by his son, sought and readily obtained permission to be present at the oral examination on Tuesday last. It is to be hoped that the hon. member saw reasons for modifying his strongly expressed opinion against the examinations at the Royal College of Surgeons.

ORIGINAL COMMUNICATIONS.

THE ALLEGED SALUBRITY OF SMALL HOSPITALS.

By J. MATTHEWS DUNCAN, M.D.

Small Hospitals are now said to afford to patients greater chances of recovery than large Hospitals. Cottages are said to afford still better chances than small Hospitals. Therefore, say the enemies of Hospitals, large and small Hospitals should be supplanted by a system of cottages. The reasoning is specious, but the proof rests mainly on statistics. While I cannot admit the validity of the kind of statistical reasoning adduced against Hospitals, I purpose now to inquire how far mere statistical data confirm the view that small Hospitals are better than large ones.

It will be readily and on all sides admitted that the data of maternity Hospitals offer us an excellent means of conducting this inquiry, and I propose to confine my observations to obstetrical data. There are various ways of pursuing the subject. To be comprehensive, I shall employ three methods. First, I shall examine the data of one small Hospital; second, I shall examine the data of a promiscuous collection of small Hospitals; third, I shall examine the data of some highly praised small Hospitals.

The Data of one Small Hospital.

In a question like that now before us, a careful and shrewd inquirer is sure, if he have a convenient example of a small Hospital, to examine its results first of all. Nothing is more convincing to the man of common sense than what he personally knows and inspects. He cannot know many Hospitals intimately, but he may know one. Now, for me, there is a convenient Hospital for the present purpose—namely, the Royal Maternity Hospital of Edinburgh. It happens to be particularly valuable in the present crisis, remarkably appropriate for my purpose, because it is under the care of a body of distinguished obstetricians, with Sir James Simpson, a considerable party in the present question, at their head. This gentleman accepts a special yearly vote of thanks for his interference in the management of the institution and the treatment of the patients.

This Hospital is a small one, for it has only about twenty beds occupied at once, and its annual number of deliveries is considerably below 300. The celebrated obstetrical statistician, Dr. Churchill, says (*Dublin Quarterly Journal of Medicine*, August, 1869, p. 251) that, during the years 1844 to 1868, there were in it 3824 deliveries and 62 deaths, or 1 in 61. During the year 1867, there were 259 women delivered in it and 6 deaths, or 1 in 43. This is a very high mortality. The great Dublin Hospital, the largest in Great Britain, has, in an experience of above 100 years and above 190,000 cases, had a mortality of 1 in 72. During the famous mastership of Collins, lasting seven years, and an experience of above 16,000 cases, the mortality was 1 in 100.

This looks dark for small Hospitals. One, that may be called Sir James Simpson's, presents a picture which would have deterred most men from asserting that small Hospitals are more salubrious than large ones. But all this does not settle the question; it only shows that smallness is a quality of an Hospital which offers no security for superior so-called salubrity. It shows this irrefragably. Other individual small Hospitals might be cited to show the same thing.

A Promiscuous Collection of the Data of Small Hospitals.

I am happy to be able to refer to two such masses of statistical data, gathered respectively by Dr. Churchill, the obstetrical statistician, and by Le Fort, the enemy of Hospitals.

Dr. Churchill's collection is from eleven sources. It comprises 27,300 cases. Among these were 405 deaths, or 1 in 67.

How do small Hospitals look? 1 in 67! The great Dublin Hospital mortality is 1 in 72. Drs. Collins, and Johnston, and Sinclair, in 28,528 cases, which they had in this large Hospital, had a mortality of only 1 in 123. But small Hospitals, according to Churchill, have a mortality of 1 in 67. According to the same authority, large Hospitals have a mortality of 1 in 62. It is necessary, however, to remark that this last mortality of large Hospitals is only arrived at by Dr. Churchill including in his data figures derived from such institutions as are to be found in Paris and St. Petersburg, having mortalities quite extraordinary, and far above anything known in this country.

Le Fort's collection is from 31 sources. It may be epitomised as follows:—

Institutions receiving annually above 2000 lying-in women: 300,503 cases; 12,244 deaths, or 1 in 23.

Institutions receiving annually from 1000 to 2000 lying-in women: 39,885 cases; 1444 deaths, or 1 in 27.

Institutions receiving annually from 500 to 1000 lying-in women: 14,393 cases; 386 deaths, or 1 in 37.

Institutions receiving annually from 200 to 500 lying-in women: 9755 cases; 299 deaths, or 1 in 32.

Institutions receiving annually from 100 to 200 lying-in women: 4558 cases; 126 deaths, or 1 in 36.

Institutions receiving annually under 100 lying-in women: 548 cases; 46 deaths, or 1 in 12.

What, then, does this Le Fort method of calculating tell regarding small Hospitals? It makes them to be the worst of all. The smallest have the most frightful mortality. Naturally, Le Fort says, when describing the data which we have above given, "the statistical researches are there, to prove that one must not seek the cause of the greater or less mortality of the lying-in in the size of the establishments, and that all Hospital hygiene cannot be reduced to questions of architecture. . . . It is easy to see, in running over the figures, that the relative mortality in the small and large maternity Hospitals does not formally plead in favour of the small establishments." ('Des Maternités,' p. 75.)

Whatever may be said of much of the reasoning that Le Fort has used, there can be no doubt of the wisdom of the passages we have just quoted. We leave them without further comment.

The Data of Selected Small Hospitals.

I take the selection made by Dr. Evory Kennedy, because it is made by a friend of small Hospitals. I myself know of no data of small Hospitals that are reliable, else I would have taken them in preference to the selection of Dr. Evory Kennedy. The cause of my want of reliance is simply the smallness of the number of cases collected. This circumstance damages Le Fort's general collection, as well as Dr. Evory Kennedy's selection.

Dr. Kennedy's selected examples are the following:—

"*Cottage Hospitals.*—New Ross: 30 annually; total 924; 1 in 185. Waterford (23 years): 115 annually; 1 in 295. Limerick: 367 annually; 1 in 367." (*Dublin Quarterly Journal of Medical Science*, May, 1869, p. 295.)

Now this selection by Dr. Kennedy certainly has an aspect favourable to the view that small Hospitals are very salubrious. But it must be scrutinised, and then objections to the validity of its evidence are easily found.

It proves too much for the enemies of Hospitals, for the mortalities recorded are smaller than those in the practices of the best private Practitioners. Private practice can, I believe, nowhere show such fine results as these little Irish Hospitals. The Dublin Practitioners, as a whole, have a mortality above 1 in 114. The Edinburgh Practitioners, as a whole, have a mortality probably nearly the same as their Dublin brethren. There must be something misleading in Dr. Kennedy's selection. If it prove anything, it is that Hospitals are safer for lying-in women than the cottages or dens of the poor, the houses of the better classes, or the mansions of the rich. In short, it is a selection that does not command the confidence of the intelligent obstetrician. There is plenty of evidence to prove that a mortality of 1 in 295 or 1 in 367 has never, on a large scale, been known in this world.

The selection further presents us with too small numbers. The very small mortality shown in Dr. Kennedy's selected Hospitals will certainly be corrected, as time rolling on increases the numbers to judge by. The whole number of cases in the three Hospitals is probably about 4000. It is easy to extract from the great Dublin Hospital's experience data of consecutive years as splendid as those of the three small selected Hospitals, and which might be quite as justly applied to indicate its mortality as those of the three small Hospitals are held to indicate the salubrity or mortality of the little institutions; and the citation will serve as a good example of the danger of small selected figures. In 1807 and 1808, there were delivered in the great Dublin Lying-in Hospital 5176 women; of these 25 died, or 1 in 207.

In conclusion, then, we find that the statistics of Maternity Hospitals afford no countenance to the notion that small Hospitals are better or more salubrious than large. Indeed, they at least appear to show that the reverse is true. They, however, indisputably prove that smallness is no guarantee of success or salubrity.

It is a matter of course that a small Hospital is likely to be more salubrious than a large one. A small family is more easily managed than a large one. But there is no evidence that the difficulties attending the management of a large Hospital or a large family are insuperable. And just as a man may not find it prudent to break up his large family into two or more establishments, so a community may not find it prudent to break up the mass of their sick poor, and lodge them in two or more small establishments, instead of one large Hospital.

In an address published in a daily Edinburgh newspaper, Sir James Simpson speaks as follows (*Scotsman*, October 27, 1869, p. 7):—"When," says he, "such a simple operation as amputation of the forearm is performed upon a poor man in the country and in his own cottage home, only about 1 in 180 dies; but the statistics of our large and metropolitan Hospitals disclose the stern and terrible truth that, if these men had been inmates of their great wards, thirty of them, or about 1 in 6, would have perished."

All our cherished Edinburgh Hospitals depend mainly for their support on voluntary contributions. The sick poor are tended, Medical education is carried on. Can any further support be expected from that portion of the public who may unfortunately believe that the above quotation is even an approximation to the truth? I have, in this short paper, tried to find out what is the truth as to large and small Hospitals in a department of Medicine with which I am somewhat familiar. My readers will then easily understand how sadly I deplore the appearance of such statements as I have quoted. I know nothing that, if only listened to, is fitted to be more injurious to the sick poor and to the Medical Profession.

ABSENCE OF ONE KIDNEY IN A SINGULAR CASE OF BRIGHT'S DISEASE.

By F. R. WILSON, M.B., Staff Assistant-Surgeon.

No. 373, Private James Webb, 76th Regiment, aged 30, and of a worn unhealthy aspect, was admitted to Hospital at Colchester on the arrival of the 76th depot in this command. He was then suffering from general anasarca, especially of the lower extremities, with slight puffiness of face and some dyspnœa. Constant dull pain was complained of in the lumbar region, where there was considerable tenderness on pressure. The stethoscopic examination of the heart gave negative results, and the liver did not appear to be diseased. The urine was scanty, and of a dirty smoky appearance. It was found to be profusely loaded with albuminates. Origin referred to a "wetting." The case was entered as Bright's disease. The treatment was palliative and tonic, but only gave temporary relief, and on the fiftieth day after admission the patient died quietly in a state of uræmic coma, having been completely "waterlogged" for many days previously.

The post-mortem examination was conducted thirty-four hours after death, and gave the following results:—General aspect: Œdematous swelling of entire surface of body, which was of a dirty tallowy colour. Head not opened. Thorax: The pericardium contained eight ounces of serum. The heart was pale and flabby, but the valves were not diseased. The lungs, though congested in the upper lobes, were here still crepitant, though in other situations profoundly œdematous. Abdomen: Liver of a dark coffee colour, and in a state of oily degeneration; weight three pounds and a quarter. Spleen soft and friable. The right kidney was apparently absent, but on a careful dissection of the connective tissue a minute, ductless, glandular-looking body was detected. It somewhat resembled in size and shape a flattened date, and appears to have represented a rudimentary kidney. The left kidney was greatly enlarged, and on removal weighed over thirteen ounces. The capsule was readily detached, and on section the organ presented a nearly uniform pale aspect, with apparent loss of distinction between the cortical and medullary portions. The characteristic amyloid reaction occurred with iodine. The pyramidal bodies towards their apices had nearly disappeared, being cleanly chiselled out, and leaving cavities of the size of a plum. At the back of the pelvis of the kidney a hard tumour existed, and on section this was found to contain a mulberry calculus about the size of an olive, but somewhat triangular in shape, with numerous spicule over its surface, and completely encysted. It weighed exactly sixty grains. Only one ureter existed, but it was of large size.

I have preserved the left kidney, the rudimentary right one, and the calculus.

NOTE ON VACCINATION IN HOLLAND.

By Dr. A. M. BALLOT, Rotterdam.

Since the year 1799 there has been erected here (in Rotterdam) a society for the promulgation of vaccination. As a subdivision thereof, in April, 1868, there was opened a *parc vaccinogène*. The first calf was sent to Brussels to Dr. Warlomont to be vaccinated by him, and so Dr. Blanc, who promulgates everywhere animal vaccination, might have enumerated Rotterdam among the places where *parcs vaccinogènes* exist.

Dr. Bezeth, who, in our Medical journal, has inserted many articles on this subject, says that the experience acquired here agrees not with that acquired in other places. Hitherto the animal vaccine from calf on calf has lost in the end its action on man, so that it has been necessary to renew from time to time the lymph by vaccinating the calf with human lymph.

When the child had been vaccinated with animal lymph with little success, when there were only very few pustules, the child was often revaccinated with lymph out of those pustules—a sort of Bryce's test, and a combination of human and animal vaccination.

Four times every week—twice with human and twice with animal vaccine—everybody can be vaccinated here gratuitously; and, on demand, everywhere over the whole country, the lymph is sent out also without remuneration.

But not only in Rotterdam, but also in different places in our country, there exist societies on the same principles.

It was the spirit of Jenner who inspired the society of Rotterdam to introduce here the animal vaccination. It was to yield as much as possible to the prejudices of that public, who have all sorts of scruples, only that the chief object—the vaccination—should be obtained.

Amsterdam has followed the example of Rotterdam; a *parc vaccinogène* has been opened in the Zoological Gardens.

The variola mortality was in our country, in a population of 3,500,000, in 1866, 1413; in 1867, 542; and in 1868, 143.

Rotterdam.

AMPUTATION OF THE ARM AT THE SHOULDER-JOINT FOR OSTEO-MYELITIS—DEATH FROM PYÆMIA.

By J. FAYRER, M.D., C.S.I.

The following case is an exceedingly illustrative one, not only as to the disease in the bone, but of the pyæmic condition thereby induced. It shows how rapidly blood poisoning may result from osteo-myelitis, and how necessary it is that the Surgeon should be constantly on the alert, to detect the earliest symptoms of constitutional mischief, lest the time for re-amputation may pass, and the patient be left in a hopeless condition, with lungs or other viscera disorganised, and beyond the reach of Surgical aid.

The disease, I am happy to say, has been comparatively rare in the Hospital for the past eighteen months, and the present case is the only one that has occurred for a considerable time, showing, I think, that the diminution of the number of beds from 24 to 16 in each ward, and the introduction of other sanitary improvements, have had the effect of reducing this fertile source of pyæmia and death.

I do not assert that the hygienic improvements alluded to have been so effective as to remove all sources of surgical fever, or that the causes of blood-poisoning have altogether disappeared—far from it. I and my colleague Professor Partridge have observed that, whilst certain forms of disease that lead to toxæmia have diminished, such as osteo-myelitis, others remain as prevalent as formerly. Pyæmia from other sources still occurs; and that condition where death results from the formation of cardiac coagula is, if anything, more frequent than before. This is a subject on which I have previously recorded my views.

The recurrence, occasionally, of a well-marked case of osteo-myelitis and consequent pyæmia shows that the original causes, although much in abeyance, are not altogether extinct; and it also suggests the thought that even under favourable hygienic conditions, just as happens with other diseases, it may sometimes occur. To say that pyæmia only appears under unfavourable hygienic conditions, and in Hospitals, is to say more than the truth. I have known the most flagrant examples of it to follow operations in isolated cases, treated under the

most favourable circumstances, and where its causation could not be referred to any such origin.

The diffused form of suppurative inflammation in the medulla of a bone may, like other morbid conditions, occur sporadically, and when the patient is placed under the most favourable hygienic conditions; and therefore, after all operations involving section of bone, it is right to bear in mind the possibility of its occurrence, and to be prepared to recognise and deal promptly with the earliest symptoms. The danger is of interfering when it is too late. This interference, as I have elsewhere pointed out, is nothing less than complete removal of the affected bone by amputation at or above the next joint, as amputation through the bone itself will rarely, I may almost say never, succeed in saving life. In an interesting work on pyæmia, recently published by Dr. Braidwood, the following remark, among others, occurs:—"Of late the origin of suppurative fever from osteo-myelitis has been promulgated by Professor Fayrer, of Calcutta, but in support of this theory a very small amount of evidence is producible." Dr. Braidwood can hardly have read what I have published, or have studied the cases I have recorded. I imagine he has been fortunate enough to have had little experience of this disease in his Hospital practice, or he would not doubt that osteo-myelitis is a potent cause of pyæmia. I believe, indeed, there is none more certain or inevitable. Diffuse suppuration having occurred in the cancellated tissue and medulla of a bone, pyæmia is the certain result, unless that bone be altogether removed by a timely operation before blood-poisoning or embolism has involved the internal organs in mortal disease. But though I must unhesitatingly pronounce the evidence of my own experience to be conclusive on this point, I am not aware that I have anywhere stated or implied that the group of pathological conditions somewhat incorrectly and vaguely, perhaps, called pyæmia, are due only or always to osteo-myelitis. Few Hospital Surgeons, I imagine, have had more or better opportunities than myself of knowing that such is not the case, and that there are indeed many others. But I repeat that among them all none is more certain of giving rise to it, and none in which the condition is more hopeless, than in the pyæmia of osteo-myelitis, unless, as I have before said, it be early recognised and promptly dealt with. There are other points in Dr. Braidwood's admirable and thoughtful work, in which I cannot altogether concur with him; but, for the present, I need only refer to the one in question.

B. L. B., a Hindoo boy of 9 years of age, was admitted on May 21, 1869, with a fracture of the radius and compound fracture and dislocation of the lower extremity of the right humerus. A portion of the articular surface of the humerus had been removed before admission, and the denuded and irregular extremity of the bone protruded from a lacerated wound in front and to the inner side of the joint. The lower end of the humerus was stripped of its periosteum for about an inch; but as the denuded bone looked pink and healthy, only the rough and irregular articular extremity was removed just above the condyles. The ulnar nerve was found stretched over the protruding bone, and was in a doubtful state of vitality. The brachial artery had escaped injury. The end of the bone having been removed, the fracture was reduced, and the wound was dressed, the arm being placed on an angular splint on the radial side of the limb. His friends stated that fever came on daily in the afternoon, but on admission he was free from fever. The edges of the wound were partially sloughing. It was dressed with petroleum, a substitute for carbolic acid that I have been using freely lately and with very satisfactory results. Under this dressing the wound soon cleaned. On the 23rd water dressing was applied under the petroleum. He had also been taking salines when feverish, and quinine during the intervals. He was apparently doing well. On the 24th, in the morning, he had a rigor, and after it his temperature rose to 105°; this fell to 102° in the evening. Again on the 25th, at 1 a.m., he had another rigor. The temperature again rose to 105°, but at 7 a.m. he was quite free from fever, and the temperature had fallen to 98°. On the 26th, he had another rigor followed by delirium, which lasted half an hour. The temperature rose to 103°. On the 27th he had another rigor at 4.30 a.m. Although the wound and the bone looked healthy, I felt satisfied that pyæmia was rapidly setting in, and I suspected the bone, notwithstanding its healthy appearance, might be the cause, and I regret that I did not act on that suspicion on the first rigor making its appearance.

I amputated the arm on the 27th at 9.30 a.m. at the upper third, prepared to remove it at the shoulder-joint if necessary. On dividing the humerus, that looked perfectly healthy, I found the medulla full of pus, which evidently extended to the head of the bone. I at once amputated at the shoulder-joint. He bore the double operation well, and lost very little blood. The fever gradually subsided by evening, the temperature falling from 103° to 98° at 5 p.m. The following morning he had a return of fever, but the temperature did not rise above 101°, the pulse remaining soft and weak. He did not improve after this; the pulse continued rapid, the respiration hurried, and the temperature high (102° to 104°) until the 31st, when the temperature began to decline. He had no rigors after the operation, but he complained occasionally of a sense of chilliness. The tongue was generally coated and dry. The bowels acted freely, and diarrhœa set in on the 30th. The abdomen became tender and tympanitic, peritonitis evidently setting in. The respirations were quick and irregular, and on the 31st diarrhœa ceased. The kidneys acted well throughout. The urine contained no albumen and no phosphates, but a considerable quantity of bile pigment, and was slightly acid—sp. gr. 1010. He sank, with hurried respiration and all the symptoms of cardiac coagula and of complete exhaustion, on the 31st at 4.30 p.m.

The post-mortem examination took place sixteen hours after death. Thorax: Bloody serous effusion in the left pleura and pericardium. Firm fibrinous decolorised clots in right cavities of the heart. The left cavities contained some frothy black blood. The right pleura filled with a puriform fluid. There was a patch of dead lung of about one and a half inch square and an inch deep at base of left lung, and a number of smaller patches, varying from the size of a pea to a sixpence, scattered throughout the lung. These were of an ash or puriform colour, surrounded by an areola of condensed and congested lung tissue, some suppurating, all when cut into giving exit to fœtid sanies and puriform fluid. In some, when cut into, there was a dark nucleus. These are the so-called pyæmic abscesses, and are described as such by Dr. Braidwood and others. They certainly do present the appearance of an abscess in some cases, and when cut into real pus as well as puriform fluid may exude. The true pus is that which is formed round the dead tissue in the centre, when an effort is made to throw it off, just as in the case of the suppuration which takes place round the "core" of dead areolar tissue that gives rise to a boil. The pus is the result, not the cause, of the death of the lung tissue. These local deaths are found also frequently in the liver and other viscera, and to those who have had the opportunity of studying them in this climate it seems odd how they can be confounded with ordinary abscesses, as is still so frequently the case. The surface of the lung was adherent to the parietes by a yellow puriform shaggy-looking lymph. The right lung contained a few patches of dead tissue, but not so many as the left. The left axillary vein was not thickened; it was healthy from the spot where it had been divided. Peritonitis of a low form was incipient. The bone was examined on the 27th directly after the amputation; a section was made from end to end of the pieces. The medulla was full of pus up to the line of the epiphysis, but there it stopped. Here and there, where the cancellated tissue had broken down, there were small collections of fœtid pus of the size of a split pea. The arrest of the suppuration was remarkably well shown at the line of the epiphysis. Part of the shaft was stripped of periosteum, but where it remained it was found to be thickened.

It appears to me that this is as typical a case of osteo-myelitis as we are likely to meet with. Unfortunately it has formerly been of very common occurrence here, and has given us ample opportunities of studying its pathology. That it is a certain cause of pyæmia there can be no doubt, and if it be not detected early and treated promptly the pyæmic (I use the conventional word) condition it induces is certain to cause death, and the post-mortem appearances in this case well illustrate the nature of the pathological changes that precede death. These changes are effusion into the thoracic cavities, the formation of fibrinous coagula in the heart and pulmonary circulation, and the death (not abscesses) of portion of the lungs, liver, and other viscera.

Calcutta.

THE VACCINATION ACTS.—A man named John Turnhill has been summoned, for the second time, to the Sheffield Police-court for neglecting to have his child vaccinated. He said his child had not been vaccinated, and "never should be." He was fined 20s. and costs, or fourteen days' imprisonment, and was ordered into custody.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

THE MIDDLESEX HOSPITAL.

CASE OF CROUP—TRACHEOTOMY—DEATH.

(Under the care of Dr. GOODFELLOW.)

The following case is of unusual interest. The history points in the first place to a long and severe attack of hooping-cough, which commenced before the child was twelve months old, and probably produced part of the collapse of the lung which was found to exist after death. The spasmodic attacks from which the child suffered for two years are peculiar, and might be supposed to have had some influence on the present attack, but the chloroform administered as an anti-spasmodic did not seem to effect any change in the symptoms. Again, the tube which was passed into the trachea was found after death to have detached and broken off the false membrane from the mucous surface of the trachea and pushed it aside, so as to permit the passage of a limited quantity of air by an indirect route to the orifice of the tube. This accident, no doubt, hastened the death of the child; still, it can scarcely be believed that it materially affected the chance of the child's recovery, when we consider the extensive exudation of false membrane in the trachea and bronchi, and the very general collapse and emphysema of the lungs.

Alice G., aged 3, was admitted into the Middlesex Hospital, under the care of Dr. Goodfellow, a little after midday on October 7. The features were almost livid, the respiration extremely difficult, the sternum being pulled in with each inspiration, and the pulse uncountable. It seems that when 8 months old she was seized with hooping-cough, which continued 11 months. About a year ago she was observed to awake frequently with a shrill cry, accompanied with a crowing noise and difficulty of breathing. These attacks occurred with sometimes a week's intermission. She was able after the attack to be up and play with other children. She had suffered for two years from ascarides. Tracheotomy was performed by Mr. De Morgan at half-past one, inhalation of chloroform having been tried without any apparent result, and followed by speedy relief. The face was no longer dusky, the pulse could now be counted, but was still quick (120), and the patient began to sleep quietly at intervals. Carbolic acid, one part in fifty, was ordered for inhalation by means of the steam pipe and curtains, and equal parts of dilute acetic acid and water to be used with a feather in cleaning out the tube. Linseed meal and mustard cataplasms were also put alternately to the back and front of the chest. On the following morning the child remained in much the same state; she had slept at intervals, and taken a good deal of milk; her pulse was still (9 a.m.) quick, her respiration 48. She was ordered a powder containing half a grain of subchloride of mercury and a tenth of a grain of tartrate of antimony, to be taken immediately, and a mixture of squills, nitric ether in haust. ammon. acet. every four hours. The little patient, however, did not seem to derive any benefit from these remedies, and towards evening her respiration became again affected, the surface of her body became more and more dusky, and she died in convulsions at half-past six o'clock.

The post-mortem examination was made by Dr. John Murray, nineteen hours afterwards. The fauces were reddened, but devoid of false membrane. The under-surface of the epiglottis and the lining membrane of the whole respiratory tract below, as far as the primary divisions of the bronchi, was more or less covered with false membrane. In moderately firm patches as far as the first ring of the trachea, from this downwards to the primary divisions of the bronchi it formed a complete cast, thick and firmly adherent to the raw and deeply injected mucous membrane. But for about half an inch above and below the opening made into the trachea during life the false membrane was detached and pushed away. At the lower end it had broken, and here there was a communication between the canal of the trachea and the tracheotomy tube. The false membrane about the commencement of the primary branches of the bronchi became looser and purulent, and more and more so as it extended to the minute bronchi, some of which became choked up. At the bifurcation of two moderately large bronchial tubes in the upper lobe of the left lung was found a piece of membrane forming a plug, and preventing the entrance of air. Behind this the lung tissue was in a state of considerable collapse. But this was not the only collapsed lung, for throughout the whole organ were found numerous portions of collapsed tissue of variable size. The intervening lung was in many places emphysematous. There was an apoplectic clot in the lower border of the left upper lobe of the lung, and in the right apex a hard, mostly cretaceous mass, the size of a filbert. The lung was here firmly adherent to the walls of the chest. Both lower lobes were also firmly adherent. There was slight pericardial effusion, and over the base of the heart was a thin layer of lymph. The other organs were healthy.

RHEUMATIC PERI- AND ENDO-CARDITIS WITHOUT ARTICULAR AFFECTION.

(Under the care of Dr. MURCHISON.)

The following interesting case we saw during Dr. Murchison's visit:—

The subject was a boy, who was admitted six weeks previously on the fifth day of his illness. He was sent to the Hospital as a case of rheumatism, with feverish symptoms and pains; but there was no swelling of the joints and no muscular pain on movement. These pains disappeared in two or three days, but the fever kept up increasing towards evening. He had, however, no diarrhœa and no spots; still it was thought not unlikely to be a case of typhoid fever. Up to this time his temperature had remained at 100° to 101°, and on the fourteenth day, when he began to convalesce, it was normal. On the twenty-first day his pulse was noticed to be irregular, and on examination on the twenty-second a pericardial to-and-fro murmur was detected, and, in addition, his pulse rose from 84 to 100. The temperature, however, remained as before. These symptoms lasted for several days without rise of temperature, but still there was no affection of the joints, and four or five days after the appearance of the pericarditis endocarditis supervened. He is now, however, convalescing.

Dr. Murchison remarked that the interest of the case was the latent character of the rheumatism. There was little doubt but that it was a case of rheumatic peri- and endo-carditis. With typhoid fever you almost never get peri- or endo-carditis, but in rheumatism you may get the heart affected, as in the case of a woman in Seymour Ward, with unmistakable endo-cardial murmur, who came in three months after being discharged convalescent from acute rheumatism; so this boy, if exposed to wet and cold, may get a rheumatic articular affection.

"DREADNOUGHT" HOSPITAL SHIP.

A CASE OF ABSCESS IN THE ABDOMINAL WALLS.

For the report of the following case we are indebted to Mr. Harry Leach.

Thomas M., aged 16, admitted into the *Dreadnought* Hospital Ship on April 5 last, with pain over the hepatic region, and, according to his own account, relaxed bowels for four days. These, the only prominent symptoms, appeared to have been caused by a fall that occurred at play, when he was thrown violently against the capstan upon his right side. During the first sixteen days of residence in Hospital, he complained of persistent abdominal pains, want of sleep, and little appetite. No action of the bowels took place, and, in accordance with the practice adopted here in all cases of obstinate constipation, opium was given continuously in half-grain doses, with milk diet, and linseed poultices to the abdomen. On the seventeenth day, copious stools were passed, the acute symptoms subsided, and the patient appeared to be convalescing rapidly up to the twenty-fourth day of residence, when a firm tumour, about the size of a hen's egg, appeared over the left lobe of the liver, apparently connected with the abdominal viscera. This tumour in the course of the next week increased, reddened, and pointed, and during this last interval the bowels were relieved occasionally, the urine was normal, tongue clean, appetite good. Adhesion appeared to be well established round the tumour, which was then punctured, and discharged gradually, during the following twelve days, a large quantity of healthy pus, with no peculiarity tending to indicate whether it had come from the abdominal walls, from the liver, or from any other visceral organ. The bowels were at this time very irregular. The opium was continued at intervals, steel was given with mutton diet, and the abscess finally closed two months after the date of the boy's admission. About nine or ten days subsequently he was attacked with all the symptoms of peritonitis, was treated with calomel and opium, and, after

long and continuous accessions of pain, again improved. No other acute attack occurred up to the middle of September last, when he was discharged from Hospital, looking tolerably robust. There was then some hepatic enlargement, and a sense of dragging on the abdominal walls after any exertion, with occasional and very slight œdema of the lower extremities. In endeavouring to arrive at a correct diagnosis of the process of elimination, it appeared tolerably certain that all the thoracic organs were sound, and that there was no organic disease of the kidneys, pancreas, spleen, or intestinal canal. The history of the case negatives the supposition that the abscess was hepatic, for the boy is but 16 years old, has never suffered from dysentery, and never been out of London. No pus was found at any time in the alvine evacuations, and no bile in the pus discharged from the abscess. If, therefore, we arrive at the conclusion that the case is simply one of abscess in the abdominal walls, caused by a blow, it is not easy to account for the obstinate constipation that first occurred, and the subsequent severe peritonitis.

ST. BARTHOLOMEW'S HOSPITAL, CHATHAM.

ANEURISM OF POPLITEAL ARTERY—FAILURE OF TREATMENT BY FLEXION AND COMPRESSION—LIGATURE OF FEMORAL ARTERY—SUPPURATION OF SAC—AMPUTATION OF THIGH—RECOVERY.

(Under the care of Mr. A. W. NANKIVELL.)

R. M., a widow, aged 40, was admitted on July 4, 1868, with a popliteal aneurism in the left leg, the size of a hen's egg, and with strong pulsation. The woman had not noticed the swelling for more than two months. There was no history of any blow, but the patient herself attributed the mischief to her practice of straining up on tiptoe to adjust linen on a clothes-line. It caused her considerable pain, especially upon any unusual exertion, as walking uphill, and had already acquired such dimensions as to increase the circumference of the affected limb over its fellow by an inch and a half.

The limb was at once flexed and kept in that position during twenty-five days, tourniquets being kept on the femoral artery during part of the time; but the pain continuing, and œdema of the foot and leg, with swelling of the thigh, coming on, the woman refused to submit to the treatment longer. On July 30, therefore, firm compression over the femoral was substituted, the whole limb being evenly bandaged. A week later (August 5), the tumour still increasing in size and pulsating as strongly as ever, the femoral artery was tied in the usual situation, with the effect of considerably reducing the size of the tumour, the vitality of the foot and leg remaining good. The thread came away on the fourteenth day (August 9), and the limb then measured an inch and a half less than at the date of the ligature; but even now the circumference over the centre of the tumour was four and a half inches greater than at the corresponding point of the sound limb. Ten days later (August 29) severe fever, heat, redness, and tenderness over the aneurism, with free suppuration from the track of the ligature, proclaimed that inflammation of the sac had set in. Effervescent salines were prescribed and evaporating lotions applied to the tumour, but the symptoms increased in severity, fluctuation became well marked in the swelling, and on September 13, the discharge being now abundant and sanious, a tourniquet was applied over the femoral artery at the groin, and free incisions made into the tumour, releasing five ounces of sanious pus to the patient's great relief. Poultices were then applied, and carbolic acid used as an injection to the wound.

Next day the patient was in a very weak condition, an erysipelatous blush covered the back part of the thigh, the pulse was 120 and feeble, and eight ounces of fœtid pus escaped from the wound on the removal of the dressings. The erysipelatous skin was painted with a strong solution of nitrate of silver, and wine and ammonia freely given.

Two days later (September 17), the patient having rallied somewhat, Mr. Nankivell proceeded to amputate the limb. This he did by the circular method through the upper third of the thigh. There was free bleeding from the enlarged vessels, but the flaps and bone at the point of division seemed healthy. Stimulants were continued on the return of the patient to the ward, and kept up during some days. The main ligature came away on the twelfth day, and from thence the woman made good progress towards recovery, in spite of the delay occasioned by the formation of a large bedsore. She went out with the stump quite healed on December 3.

Examination of the amputated limb revealed a foul sloughy cavity, the size of an orange, at the upper part of the popliteal space, lined with a rough "pyogenic" membrane, and filled with horribly fœtid pus. The suppuration had extended upwards along the track of the obliterated artery. The popliteal surface of the femur was rough and denuded of its periosteum.

ANEURISM OF FEMORAL ARTERY—FAILURE OF TREATMENT BY COMPRESSION—LIGATURE OF EXTERNAL ILIAC ARTERY—SUPPURATION OF SAC—AMPUTATION OF THIGH—DEATH.

(Under the care of Mr. A. W. NANKIVELL.)

J. E., aged 30, the wife of a marine, was admitted on October 21, 1868, with a strongly pulsating tumour, the size of a small orange, in the middle of the right thigh, causing much pain on exertion. She could remember no strain or other injury, and had only noticed the swelling for two months. The leg and thigh were smoothly bandaged, and a Skey's tourniquet applied below the groin. Up to November 10 the tumour continued to increase in size, œdema of the foot and leg set in, and the superficial vessels enlarged considerably. The use of the tourniquet was continued until December 9—forty days—but the symptoms nevertheless increased in intensity, and, the skin becoming excoriated, all pressure was now removed, and the whole limb carefully bandaged and elevated.

On December 19, two tumours could be felt, the one underneath the sartorius, and the other three inches below Poupart's ligament, both pulsating. The œdema of the leg and foot had disappeared. The external iliac artery was now tied by Mr. Nankivell. The ligature came away on the eighteenth day, and all seemed going on well, until on February 4, forty-seven days after the tying of the vessel, rigors, vomiting, headache, and some discharge from the track of the thread were noted. The rigors continued to recur, suppuration deep in the iliac fossa was detected, and a vent formed for the discharge by a tent inserted into the nearly healed wound. The aneurismal tumours had remained firm and small since the operation, but the intermitting febrile symptoms continued, and on February 18 the patient was sent home for change of air. On February 25, however, she was sent to the Hospital, suffering from phlebitis and an abscess in the calf of the right leg, which was opened at once.

During the first week of March the aneurism began again to increase in size, redness of the thin covering skin, pain, and fluctuation were noted, and on the following day the sac was opened, and a large putrid clot turned out, the wound plugged, and the woman taken into the Hospital.

Two days later, Mr. Nankivell amputated the thigh three inches below the trochanter, but the patient continued to lose strength, and she died on March 13, 1869.

ANEURISM OF FEMORAL ARTERY—LIGATURE OF EXTERNAL ILIAC—RECOVERY.

(Under the care of Mr. NANKIVELL.)

R. F., a labourer, aged 34, unmarried, was admitted on June 3, 1869, with an aneurism of the right femoral artery, the size of a large orange, extending from Poupart's ligament downwards for four inches. There was no history of any strain or other injury; the patient's notice had been first attracted to a swelling the size of a pea, he said, in the same position nine months before, since which time it had been steadily increasing in size, with pain chiefly in the knee, so as to disturb his rest greatly during the past fortnight.

The circumference of the affected limb over the tumour exceeded the corresponding measurement of the sound thigh by five inches. The general health was good, but the whole limb was œdematous, and enlarged veins ramified over the tumour.

Two days after admission, Mr. Nankivell ligatured the external iliac artery, making the incision an inch higher than usual, and tying the vessel as high up as possible where the coats seemed quite healthy. The peritoneum was slightly injured in separating it from the iliac fossa.

Next day there was no pulsation in the tumour, good warmth of leg and foot. The wound partly healed by first intention; but six days after the operation (June 6) the patient complained of pain in the sac, the tumour beginning to increase in size. Evaporating lotions were applied, but three weeks later bagging of pus in the track of the ligature was noticed, and there was distinct fluctuation in the sac. These symptoms, however, as

gradually subsided, but in spite of daily traction the ligature did not come away until July 29 (fifty-fourth day). The patient subsequently made a good recovery, and was discharged well on September 15, 1869.

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Medical Times and Gazette.

SATURDAY, NOVEMBER 13, 1869.

THE REGISTRATION OF DISEASE AND THE DEPUTATION TO THE PRESIDENT OF THE POOR-LAW BOARD.

The deputation which waited on Mr. Goschen, the President of the Poor-law Board, on Tuesday last, on the subject of the registration of disease, accomplished what was unmistakably a real success. Its object, as stated fully by the Chairman of the Committee which sent the deputation, was to lay a comprehensive basis for the complete survey of disease, a survey of the course, the cause and the results of disease throughout the whole of England. This basis means the utilisation of the weekly returns of the Poor-law Medical officers. These gentlemen in their daily work report, from nearly 3500 stations, on the conditions of disease affecting the poorest stratum of the community. It is calculated that in the course of the year not less than 3,000,000 cases of disease come under their observation, and are recorded by them. At present, however, the returns they have to supply serve no more than a local and a temporary object; they are written in order to render to the various boards of guardians of the union districts such particulars relative to the sick which it is necessary for the boards to have before them for the performance of their administrative duties. After this the returns are useless; they are the explicit and faithful accounts of the physical evils of the people, noted as they occur, but so soon as they are produced they are cast aside. Dr. Richardson, who about sixteen years ago first broached the idea of utilising these records of disease, said of them at that time that, while they might be considered the most important tables that had ever been drawn out by a large corps of scientific men, they were allowed to rot in obscure corners, or were sold as waste paper to be used by the shopkeeper as the wrappers for wares and commodities. Up to the present time this same statement has been true, and we are therefore bound to recognise as a national question the proposal for the utilisation of the returns for the general good, which at length seems to promise to be adopted as a practical measure. The plan itself, as it was placed before the Minister, is of the simplest kind. Each week, after the Medical officer's return of disease has been before the guardians of the district in which the officer carries on his duties, a portion of the return is to be torn off, as a cheque is torn from a cheque-book, and is to be posted to a registrar of disease resident in the metropolis. The slip thus sent away (the duty of sending will be carried out by the clerk to the board of guardians) will contain all the information the registrar of the central office will require. It will give the facts of all cases of disease, of age, of sex, of commencement of disease, nature, termination. By it the central authority will be made at once conversant with the presence of epidemic disorders among the poor in all districts, their prevalence, the intensity, the mortality. By it he will in course of time learn, and in turn teach, the existence of the endemic maladies of each locality, and by connecting his knowledge on this point with a further knowledge of the physical and social conditions of the locality, he will be enabled to put a mark on those persistent causes of local maladies which at this time are hidden or but obscurely known.

These are advantages which have but to be mentioned in the briefest terms to be appreciated fully, and it is most satisfactory to know that they may be secured at a cost of labour and time which is comparatively trifling. The board of guardians will lose nothing, inasmuch as the part of the return-book which they retain will still supply them with all the information they require; and the Poor-law Medical officer will lose nothing, inasmuch as he will merely have to perform the amount of work he now is obliged to carry out for a much less extended purpose. The additional cost belonging to the practical application of the registration scheme will consist, not in the supply of the returns, but in the processes of their classification, analysis, and publication. For this work a central office will be required, in which must be placed an efficient registrar and a competent staff of assistants, all prepared, by proper and efficient training, for their important labours. At once it occurs to the mind that the Registrar-General's department is the place for this work; or, if not, a new department analogous in character. In time, if the plan is adopted and succeeds, it will hasten the great change that must inevitably come, in the appointment of a Minister of Public Health, who will take his place in the House of Commons as a responsible chief having control over all the departments in which subjects relating to life, disease, and death are considered as subjects worthy the occupation and thought of the legislator. We have time on this occasion only to refer to the admirable tone in which Mr. Goschen met the deputation. The members of the deputation, who represented four large and influential societies in Medicine—viz., the Medical Society of London, the St. Andrews Medical Graduates' Association, the Association of the Metropolitan Medical Officers of Health, and the Poor-law Medical Officers' Association—must have experienced an agreeable surprise. The Minister was frankness itself; he announced unhesitatingly that "in spirit he was entirely with them;" he suggested the few difficulties which seemed to lie in the way, not as discouraging the effort, but with the view of removing all difficulties; he showed the most scrupulous care to avoid adding the least labour to the Poor-law Service, and took pains to grasp the whole question in a complete and practical manner. We are convinced, in short, that if the basis of the registration of disease on the returns of the Poor-law Medical Officers be not carried out, as suggested, the fault will not lie with the present head of the Poor-law Department.

CASES UNDER THE SANITARY ACT, 1866.

We expressed last week our opinion that the arrest of contagious disease is a money question. But it is also a question of *prestige*. That is to say, if the public, and especially that class which comprises small lodging-house keepers and their lodgers, learn to believe in the power of the officer of health as entirely as they do in that of the relieving officer or the policeman, they will carry out without question the orders which they may receive. In this way the matter becomes

less and less one of money, in so far as it obviates the necessity of recourse to law, with its proverbial uncertainty in all but expense. On this ground every instance in which a magistrate, on the application of a health officer, makes an order under the Sanitary Act, tends to familiarise people with the idea that when a Medical officer of health says that a specific thing shall be done, he has the power to compel compliance. The habit of obedience grows in obeying.

We have already recorded a case in which Mr. Selfe, at the Thames Police-court, signed an order for the removal of an Irish family, suffering from contagious fever, to the Fever Hospital at Islington. Although in that case the 26th sect. of 29 and 30 Vict. c. 90, seems to have been subjected to some slight pressure, the pressure was in the right direction.

The next case to which we would refer in illustration of our remarks occurred on the 13th ult. Dr. Tripe, Medical Officer of Health for Hackney, made an application to the sitting magistrate at Worship-street for an order for the removal of certain dead bodies to the public mortuary. The bodies were those of some children who had died from infectious disease, and were lying in rooms which were used as sleeping-rooms by other persons. In one instance four persons slept in the room in which the corpse was lying. The orders were applied for under section 27, and were granted by the magistrate.

Again, on the 22nd ult. James Tapp was summoned, before Mr. Ellison, by order of the sanitary authorities of Shoreditch, for removing, on October 13, infected bedding and clothing from his residence, where there had been scarlet fever, such bedding or clothing not having been disinfected or cleansed as required by sections 38 and 39 of the Act. The sanitary inspector stated that on October 7 he served a notice requiring Mr. Tapp to cleanse and disinfect all bedding and clothing in the second-floor room. On calling upon two subsequent occasions he found that the notice had not been complied with, and, on October 13, he learnt that the defendant had removed the bedding without disinfecting it. There was then put in the certificate of the Medical officer of health to the effect that the disinfecting of the bedding would tend to prevent infectious disease. The defendant stated that there had been no fever or contagious disease in his house, but a notice was produced, which had been served on the Medical officer of health, showing that, in the room in question, two persons were suffering from fever. The defendant, who called no witnesses, was fined 20s., with the alternative of a fortnight's imprisonment.

The last case was at Clerkenwell Police-court, where Thomas and Hannah George, of Upper Bemerton-street, Islington, were charged with letting, without previous disinfection, a room in which there had been a case of fever. Mr. Layton, clerk to the Islington Vestry, appeared to prosecute, and said that these proceedings were taken under the 29th and 30th Vict., chap. 90, sect. 39, which enacted that if any person knowingly lets any house, room, or part of a house in which any person suffering from any infectious disorder has been to any other person without having such house, room, or part of a house, and all articles therein liable to retain infection, disinfected to the satisfaction of a qualified Medical Practitioner, as testified by a certificate given by him, such person shall be liable to a penalty not exceeding £20. From the evidence of the sanitary inspector to the Vestry of St. Mary, Islington, and Mr. A. D. Harston, Medical officer, it appeared that on the 4th instant Mr. Harston went, by order of the guardians, to 76, Upper Bemerton-street, Caledonian-road, to attend two children. He examined two children, Thomas and Eliza, aged 3 and 6, and found they were suffering from scarlet fever. Three days after, Martha, aged 13, was also attacked, and she was so bad that he ordered her removal to the Fever Hospital, where she still remains. The other two children are now also under his care. Information was given to the sanitary inspector that scarlet fever had broken out in the house, and he inspected it and found the house an eight-roomed one, at the time occupied by five families, consisting of four men, six women, and twenty-two children. The children who had the fever were living with their parents in two underground kitchens. A Mrs. Lane moved away from the house at four o'clock on Saturday, the 9th, and at half-past four another family of the name of Broderick entered the rooms and took possession of them, the defendant not telling her when she entered the rooms that the last lodgers had been suffering from scarlet fever. As soon as it came to the knowledge of the vestry, Mr. Mayes served orders on the defendant to cleanse the rooms and stop the overcrowding. Dr. Ballard, the Medical officer of health, detailed the steps taken by him on being informed of the case, and referred specially to the efforts required to keep down fever in Islington, where it is spreading severely.

The defendants alleged that they did not know that the children were suffering from scarlet fever, and, on the first hearing, the case was adjourned for the production of further evidence on both sides. Subsequently proof was given that the defendants were aware that the children had been suffering from fever. The vestry clerk observed that the defendants had made themselves liable to a penalty of £20, but, that, as this was the first case in the parish, the vestry did not wish to ask for the full penalty. The magistrate remarked to the effect that the sooner the amount of the penalty was made known the better it would be for the public. He inflicted a fine of 20s. with 20s. costs, or fourteen days' imprisonment in default of payment.

ACTION FOR ASSUMED MALPRACTICE.—AN EPISODE IN AUSTRALIAN MEDICAL LIFE.

Some time since an action was brought against Dr. Edward Barker, Surgeon to the Melbourne Hospital, by the friends of a man named Donaldson, to recover damages for injuries resulting from the Surgical treatment of the plaintiff whilst a patient in the Melbourne Hospital. Donaldson was admitted into the Hospital with fracture of the patella, under the care of Dr. Barker, who resorted to the use of an iron ring in addition to the ordinary apparatus. From some constitutional condition the pressure was not well borne; inflammation, followed by gangrene, led to the amputation of the leg. For this alleged malpraxis the action was brought and tried. After much evidence, the judge summed up in favour of the defendant, and the jury gave a verdict accordingly.

Now, on the trial no want of skill and no carelessness were proved—on the contrary, it was shown that all that could be done had been done for the plaintiff.

The Professional brethren and friends of Dr. Barker in Melbourne subscribed to pay his law expenses, and to present him with a testimonial, which presentation took place on August 26 last. The testimonial consisted of a service of plate, accompanied by a purse of 240 sovereigns. The following inscription is engraved on the salver:—"This service of plate, with a purse of 240 sovereigns, was presented to Edward Barker, M.D., F.R.C.S., J.P., by some of his personal and Professional friends, to recompense him for the loss, and as a memento of their sympathy for the anxiety, which he suffered in consequence of the unjust action brought against him by a patient in the Melbourne Hospital.—July, 1869."

Dr. Barker, it seems, notwithstanding that a jury, after a full and patient inquiry, had given a verdict in his favour, has been subjected to most severe criticism by a portion of the daily press of Melbourne. The *Argus*, amongst the most influential of these, indulges in some very ill-natured and unjust remarks.

The writer sneers at Dr. Barker as one "whose fondness for experimental surgery is well known;" he calls him the "enterprising Surgeon," etc. The writer, however, is willing to admit that no special comment is called for by the fact of his friends subscribing to pay his law costs; but hear what he says with respect to the testimonial:—

"Not content with paying the law costs of their fellow-

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Professional, they must hold a semi-public meeting at Scott's Hotel and present him with a service of plate, in addition to the amount of his costs. With every possible desire to agree with an intelligent jury, and acquit Dr. Barker of intentional neglect—with every inclination to congratulate the Melbourne Medical Profession upon their *esprit de corps*—we cannot comprehend why a Surgeon who indirectly causes a patient to lose a leg should be presented with a service of plate. It may be that the Melbourne Medical Profession, viewing the matter with a severely Professional eye, considered that Dr. Barker's conduct was worthy of the highest praise, and that if the lamentably inappreciative Donaldson had undergone enforced amputation of both legs, the value of the testimonial would have been doubled, while imagination refuses to fix the sum increased enthusiasm would have subscribed had the experiment succeeded in killing him outright."

Now, it is difficult to conceive anything more illiberal and illogical than this. The promoters of the testimonial felt that the mere payment of the costs was no *recompense* for the anxiety, the risk, the possible ruin to which Dr. Barker had been exposed. They felt, moreover, that the most effectual mode by which unjust actions against Medical Practitioners could be prevented was to make the intended victim anything but a martyr.

Looking at the frequency of trials for alleged malpraxis, and at the antagonistic attitude assumed by some journals to the defendants, we regard the testimonial to Dr. Barker with peculiar satisfaction. The *Argus* sneers at what it calls our *esprit de corps* in such cases. Let it sneer! We are content, under the circumstances, to be sneered at. However we may differ on many questions and quarrel amongst ourselves, we are all but "at one" with respect to these actions. We repudiate them when they are unjust, and in ninety-nine cases out of a hundred they are so; we subscribe to defend our injured brother, and, as far as possible, exercise our influence in his behalf. It is honourable to our Profession that it so acts. From lords downwards, in public, in private, in after-dinner speeches, the members of our Profession are lauded and even "puffed;" but when we have a wrong to remedy, when we have a grievance to redress, when we ask for protection from knaves and impostors, we are compelled to depend upon ourselves. Let us act upon the principle, then, of union, and, whether it be that we have to defend ourselves or to assert our rights, assume for ours the Belgian national motto—*l'union fait la force*.

OFFICERS' HOSPITALS.

Our military contemporary, the *Broad Arrow*, which since its establishment has exhibited a friendly and liberal spirit towards our Professional brethren in the public services, contrasts in its issue of the 30th ult. the thoughtful care which the Admiralty displays towards sick naval officers, with the almost utter neglect on the part of the War Office of military officers requiring Medical attendance. It appears that, with the exception of a limited amount of accommodation for sick officers at the Royal Victoria Hospital, Netley, the arrangements made for the unhappy sufferers from mental diseases, a temporary Hospital at Hongkong during the last expedition to China, and the Officers' Hospital at Calcutta, which is described as being half Hospital, half boarding-house, and as having only a very languid existence, no attempt whatever has been made by the War-office authorities to provide for the requirements of sick officers of the Army; while on the other hand, at all the more important naval stations, whether in the United Kingdom or abroad, there is in each of the Naval Hospitals accommodation for a certain number of officers. There can be no doubt that similar arrangements would be highly prized by military officers, particularly those invalided from foreign stations, who from limited means or other causes cannot enjoy the advantages of skilled Medical treatment and nursing in their own homes or among their friends. We can, from our own experience, bear testimony to the discomfort and disadvantages with which invalided officers have frequently to struggle in London lodgings while undergoing Medical treatment. The rich of course can procure the most eminent Professional attendance, and can have every comfort, but the poor officer must put up with whatever he can get, and would gladly avail himself of the advantages of treatment, nursing, and attendance in the officers' wards of the military Hospitals. The establishment of such wards would be beneficial not only to officers as individuals, but in cases of infectious disease requiring isolation would tend to insure the general safety of their regiments. Our contemporary also hints at the advantage of having some special means of observation in the cases of "hard bargains" who prefer "reporting sick" and "doing the Doctor" to undertaking a disagreeable tour of duty; but it would appear to us that if the Doctor is to be "done" the process would be quite as easy and effectual in Hospital as in quarters. There would be considerable hardship in compelling all sick officers to go to Hospital because some may be "hard bargains," and we believe that Medical officers who possess the necessary tact and firmness can escape being "done" themselves, and at the same time protect the interests of the service and of the public.

FIELD SPORTS.

Something of the "old Adam" yet remains in us which civilisation has not purged away. "*Grattez le Russe*," etc. More or less savagery happily underlies the polish of modern society. Our pagan forefathers hunted to get food, and we may believe that the exercise of their faculties in tracking their game was a source of gratification which was enhanced by the prospect of food and clothing that lay beyond. A similar necessity rarely falls to the lot of the sportsman of the present day, but there are times and places where the omnipresent Englishman has to rely upon his savage instincts or starve. It is well, then, that they have not been entirely polished out of him, that he can still find pleasure in the chase, and that the excitement of pursuit renders him blind to danger and insensible to fatigue. Nor has the civilised world little to thank the sportsman pure and simple for: witness the additions made by his order of late years to our geographical and ethnological knowledge.

But it is not on this account that we uphold the propriety of field sports against the writer of a recent article in the *Fortnightly Review*. All the sermonisers and essayists that have ever abused field sports as a pastime have failed to convince us that they should be given up as improper and unchristian. We maintain that they are health-giving, perfectly proper, and not at variance with Christian morals. If, as argued by the writer referred to, they were based upon an inherent love of cruelty, even if we believed that they fostered an indifference to suffering or were opposed to the spirit of Christian civilisation, we would say that they should be given up forthwith, and some other method be discovered of procuring the healthy diversion and excitement with which they are associated, and on account of which they are followed so ardently by nearly all who have the means and physical capacity. As Medical journalists, we have a right to our say upon this subject.

The writer of the essay dwells chiefly upon the immorality of fox-hunting, which he designates as "revolting," as "wanton cruelty," and as "brutal," and which he puts into the same category with bear-baiting, cock-fighting, badger-baiting, and the gladiatorial contests of ancient Rome. We are astonished that any man capable of sober reasoning should be so far led away by the necessities even of a sentimental argument. To worry a poor beast to death for the sake of witnessing his sufferings, to derive a gratification from the sight of blood and the exhibition of brutal ferocity, is a sort of pastime which, under any name, is opposed to every good feeling of man's nature. The spirit of religion condemns it, and the law prohibits it. The sports referred to are on all hands admitted to be revolting, wantonly cruel, and brutal. But every one knows

that the fox is not hunted with similar motives. A true sportsman, whether he pursues the fish in the river, the bird in the air, or the fox upon the open country, makes it a point of honour to give his game fair play, to take no advantage of his intellectual inferiority, but to match instinct by instinct, and, where death is inevitable, to kill outright, and not to maim. The death and torture of his victim are not his object, nor is his success the chief source of his delight; the out-of-door associations of his sport are its chief inducements and the principal source of his diversion. He is a savage inasmuch as he is a man who for the time gives himself up to the pleasurable pursuit of game, but he is a moral and Christian savage for all that.

"But," says Mr. Freeman, "Is it right to inflict and to seek pleasure in inflicting needless suffering on any creature whatever?" We very much object to being entrapped in a syllogism. In the first place, we repeat that the sportsman does not seek pleasure in inflicting suffering; and in the next place, that he always strives to attain his object without inflicting suffering that can possibly be avoided. The terms "necessary" or "needless" are relative and not absolute terms, and, as applied to the case in point, the question is whether the suffering inflicted is out of due proportion to the advantage sought and obtained by man. For to man and his requirements must the comfort and quiet enjoyment of all other animal existence be ever subordinate—not to man's requirements of food, raiment, and security only, but to those which arise less directly out of the necessities of his various modes of existence. On the one side, we may place the healthy exercise and excitement of the chase partaken of by the whole field, the promotion of a manly contempt of trifling dangers, and of a habit of dauntlessness, both of which are worth cultivation, and, on the other, the inconvenience of one of the lower animals whose life and convenience are subjected to man's will and welfare. And as respects the cruelty of the form of death to which a coursed hare or hunted fox is subjected at the end, we doubt very much whether the instinct of the dog does not lead him to make a dispatch of his victim as speedy at all events, and probably as painless, as he would encounter at the hands of an indifferent shot.

THE WEEK.

TOPICS OF THE DAY.

We think it will be generally admitted that the Poor-law Board have arrived at a wise and just solution of the St. Pancras Infirmary problem. In the first place none except blinded partisians have ever disputed the fact that the present Infirmary is inadequate in space, and that its construction and arrangement are very defective from a sanitary point of view. There is no doubt that the wards are and have been overcrowded, that the drainage and water-closet arrangements are exceedingly bad, that fever has at times been prevalent, and that, unfortunately, the life of one Medical officer, at least, has been sacrificed to the unhealthy condition of the Infirmary. All this has been asserted again and again by credible persons, and we have never seen it denied on any good authority. We therefore acknowledge the necessity of a larger and more healthy accommodation for the sick poor of St. Pancras, admitting it as the first point on which the Poor-law Board were bound to see that action was taken. On the other hand, the present President of the Poor-law Board has frankly acknowledged that the new Infirmary now in course of erection at Highgate, and the schools at Leavesden, both of which were commenced by the former board of guardians under Mr. Hardy's Bill, are on a scale of unnecessary grandeur, and that thereby burders have been thrown upon the ratepayers of the parish which circumstances did not necessitate or warrant. It is too late now to say that the present Infirmary might have been enlarged and purified, and, at a saving of a large sum of money, been made sufficient for its purpose. This is possibly and, we may add, probably true. But the expenditure has been begun, and the new building is so far advanced that the Poor-law Board have been informed that it may be finished in two months. Under these circumstances the course which the Board now authoritatively enjoins seems the only one which meets the exigencies of the case. They have determined to annex the St. Pancras parish to the Central London Sick Asylum District, and to use the new Infirmary as a sick asylum for the whole district. By this means the Board will provide 500 beds for St. Pancras, they will relieve the ratepayers of the same parish from a large portion of the expense of the new building and from a large part of the annual expenditure entailed by it, and at the same time they will put an end to the party warfare which is raging over the dead and dying in St. Pancras Infirmary. With regard to the Leavesden schools, the Poor-law Board acknowledge that the building will hold 250 more children than the parish of St. Pancras can at present supply—a tolerably convincing proof of the lavish way in which the former board of guardians spent the money of the ratepayers. They therefore recommend the guardians of St. Pancras to secure accommodation for the children by annexation of the parish to the Central London School District, and if this arrangement be acceded to, the Poor-law Board hold out a hope that they will be able to take the Leavesden buildings off the hands of the guardians. By entering into this scheme a saving of £24,000 will at once be made. We think that the desire to act justly to all parties which the Poor-law Board have shown is highly creditable, and that their scheme of adjustment will find favour with all reasonable persons. As to the inquest which has been held upon a man who was removed to St. Pancras Workhouse Infirmary in an advanced stage of consumption, and who died next day, we would only say that the published report we have seen contains no account of the post-mortem examination, and therefore it is difficult to judge how far the verdict of the jury attributing acceleration of the man's death to the state of the ward in which he was placed is supported by the exact pathological conditions found after death. We have the evidence of Mr. Solly and Mr. Brudenell Carter that the ward was very crowded, ill-ventilated, and noisome, there being only 500 cubic feet of air to each patient. This state of things would undoubtedly depress the vital powers, and the oxygenation of the blood would be proportionately diminished; but the post-mortem examination alone could prove to what extent organic changes or the surrounding condition contributed to death.

At the above-mentioned inquest, the coroner, Dr. Lankester, made some remarks upon the manner in which certificates of death are given by the Medical Profession. He said in reference to a certificate of death signed by Mr. Barnes, a district Medical officer, who had attended the deceased man previously to his removal to the St. Pancras Infirmary:—

"Medical men were not sufficiently careful in giving their certificates, as the present case showed, for Mr. Barnes did not see the man die, and he had not seen the man dead even. The certificates were given in the loosest manner, and the wording of them was at fault, for nothing was given of what had occurred in the time between when the Medical man had seen the patient last, and when the patient died. In the certificate given by Mr. Barnes three days had elapsed, but it might have been June 1 that he saw patient in place of November 1, as in the three days since Mr. Barnes saw the man, that man might be murdered for all Mr. Barnes knew, or the man might be still alive; but there was the certificate of death in either case. Now, the fact was, it was believed the death was accelerated by something which occurred in the workhouse."

Now we are bound to admit that Dr. Lankester's charge against Medical men, especially Medical men engaged in public practice, has some foundation. Certificates of death are often signed by Medical officers to the out-patient departments of Hospitals and Dispensaries and by parochial

Medical officers without their either being present at the death of the patient or seeing the body. We cannot defend the practice. It is a bad one, and we recommend members of our Profession, when pressed to sign a certificate of the death of an out-patient who has been under their care and in whose case they can have no reasonable doubt of the cause of death, supposing it to have taken place, to introduce the words "I am told" before the words "that he died" in the ordinary certificate. The registrar is bound to have the testimony of an eye-witness of the death before he registers it. But, under any circumstances, the present machinery is very imperfect, and the registration of deaths must be open to frauds. The great fault is, that the public demand for their own benefit from the Profession of Medicine work for which they refuse to give them the smallest remuneration. Nay, in Scotland they go further. They not only demand the work, but enforce it by penalties. There are two ways open to the Legislature of improving the system of certifying deaths. One—we think the best—is, after the manner of the French, to employ a permanent paid Government Medical officer to certify in every district, who, on a death taking place, is bound to visit the house, view the corpse, inquire into the whole circumstances, if necessary see the Medical attendant, and, in cases of doubt, be present at a post-mortem examination. The other is to demand the like stringency from the ordinary Medical attendant, but to pay him adequately for his certificate. If in the public interest a Medical certificate of death is worth having, it is worth paying for, and if a satisfactory certificate cannot be given unless the Medical attendant has at least seen the corpse, the public are bound to remunerate him for his expenditure of time and trouble. We do not defend loose certifying. Medical men ought sternly to refuse to give certificates of facts of which they cannot be sure, or at least they ought to word their certificates in the manner which we have suggested—a solution of the difficulty, however, which would greatly detract from the ostensible value of the certificate. But, on the other hand, neither the public nor the Government have any right to find fault with the quality of an article for which they refuse to pay. Since writing the above, we notice that several other inquests are being held on persons who have died in St. Pancras Infirmary, and that Mr. Barnes has written to the *Times*, stating his opinion that the death of the man in whose case he gave the certificate was accelerated by exposure in removal to the Infirmary.

In connexion with certificates of death, we notice that recently a refusal to give one by a Medical man of Sheffield, Mr. John Taylor, Assistant-Surgeon to the public Hospital, has given rise to some local discussion. Mr. Taylor was attending a girl of 14 in typhoid fever, and had ordered her wine and beef. For a time these were supplied by the parish, but afterwards, in consequence of some blunder on the part, as it seems, of the parochial authorities, the supply was cut off. The girl died, and Mr. Taylor, under the impression that her death was partly referable to the want of wine and nourishment, refused a certificate, and recommended an inquest. This, however, was not acceded to by the coroner, and the matter was discussed by the Board of Guardians, who justified their refusal to give wine on the ground that the girl ought to have been supplied by the Hospital. The father of the girl was in receipt of 15s. a week, but was in debt and difficulties, it was said, in consequence of previous illness in his family. An investigation by a coroner's jury might perhaps have saved the discussions which have taken place; but we cannot help thinking, if our artisans earning fair wages were taught to rely upon prudence and saving rather than on the parish, in an emergency, it would be better for them and for the country.

As our advertisement pages have announced, there is a vacancy in the post of Physician-Accoucheur to the Charing-cross Hospital. We hear that there are likely to be two candidates—one Dr. J. W. Black, formerly an assistant of Sir J. Y. Simpson, and the other Dr. Wiltshire, who has recently sent in his resignation of the office of Medical Inspector to the Privy Council, and who, the Profession will remember, has put on record a unique case of ovariotomy successfully performed during acute peritonitis. We need hardly say that the post would be well filled by either of these gentlemen. The staff of Charing-cross Hospital and School has perhaps undergone as many changes as that of most of our Metropolitan Hospitals during the last few years. But there is one department which remains ever the same. We mean that which ought to be in the hands of an Assistant-Surgeon—did such officer exist.

We notice that the treasurer of St. Bartholomew's Hospital has published an appeal to the public and the governors to suspend their judgment on the charges recently brought against the management of the Hospital. He proposes to call a meeting of the governors at which he will make his defence.

The *Gazette* of Friday, Nov. 5, contains an announcement that the Queen has granted leave to accept and wear the insignia of the Order of the Medjidie of the Fifth Class to Dr. John Patterson. The order is conferred on Dr. Patterson by the Sultan in recognition of his services in the sanitary department of the Turkish Administration. Tuesday's *Gazette* contains the announcement that Dr. Hooker, Director of the Royal Botanical Gardens at Kew, is to be made a Companion of the Bath. On the death of his father, Sir William Hooker, Dr. Hooker, who had been Assistant-Director, succeeded to the Directorship of the Kew Gardens. He was formerly a Medical officer in the Navy.

Mr. Gordon, the Conservative candidate for the Universities of Glasgow and Aberdeen, has published a letter on Medical matters which can scarcely fail to be more satisfactory to the Medical constituency than his opponent's avowal of ignorance. In the first place he thinks that a new Medical Act, which should prevent the assumption of Medical titles by quacks, is required. In reference to the payment of Poor-law Medical men, he is of opinion that a scale of payment might be framed, founded upon the number of paupers and the extent of the district. He advocates the removal of the penalty by which the giving of certificates of death has been enforced in Scotland, and he thinks that the Scottish Poor-law Medical officers should not be removable by local Poor-law Boards without the sanction of the Board of Supervision. He promises to support measures to remedy the just complaints of the Medical Profession in these matters, and to secure greater attention to State Medicine and the laws of public health. He says that he is not ignorant of the grievances of naval and army Medical officers, and promises to give his best consideration with a view to their removal. He very wisely, as we think, postpones giving an opinion on the questions of the constitution of the Medical Council and the representation of the Profession. He thinks, however, that the Council should be constituted on a more popular basis. Mr. Gordon has at least endeavoured to inform himself on Medical politics, and by this alone, in the absence of a Medical competitor, he stands on a vantage-ground.

At a meeting of the guardians of the Portsea Union on Wednesday, the 3rd, Mr. Bayne, in moving that the children be supplied with socks, said that Dr. Page had made a recommendation on the subject last winter, but the board declined to grant it.

"Mr. Whitcomb seconded the resolution, which was opposed by the Vice-Chairman, who argued that chilblains had nothing to do with the absence of socks. His own children wore as good socks as could be obtained; but for three-fourths of the winter they had as bad chilblains as any children in the workhouse had, so that socks would not prevent them. So far as the infants were concerned, he had not the least objection to their having socks; but when the children of many ratepayers who were struggling so hard to pay the rates were without

socks, he objected to every boy and girl in the house being supplied with them. Could it be shown that socks were a preventive of chilblains, he would willingly support the resolution. Mr. Palmer asked what the cost would be. Mr. Bayne said each child would require two pairs, and the cost of these would be about 1s. 3d.; and the governor stated that he should require 500 pairs. Mr. Bayne admitted that socks were not a panacea for chilblains, but they were a great preventive. It was pitiable last year to see between 40 and 50 boys hobbling about, unable to get their shoes on; and if the guardians could prevent this, he thought it their duty to do so. The resolution was carried, the Vice-Chairman being the only dissentient."

We wish that some philosophical guardian would move that an experiment be made to contrast the effect of socks and of an improved dietary. Socks certainly keep the feet warm if warm already, but it is equally certain that cold damp feet are made all the colder by socks damp with perspiration. It is richer blood and a more vigorous circulation that is wanted; and we should like to know the result of giving socks to half the children, and half a pint of milk extra or an additional meal of bread and cheese and beer to the remainder.

A case of death from chloroform is reported from Oxford. Two drachms of chloroform were administered to a young man, a student of Lincoln College, of 19, in order to the performance of a slight Surgical operation. The chloroform was administered on wool in a handkerchief. The post-mortem revealed a dilated heart with thin walls. It seems probable from the results of post-mortem examinations, that weak and dilated hearts are sufficiently common, even amongst robust young men, to lead to distressing accidents with chloroform, and that the weakness is not detectible by ordinary examination. Under these circumstances it is worth considering whether the mixed vapour of ether and chloroform suggested by a committee of the Royal Medico-Chirurgical Society should not be substituted.

The very interesting despatches from Dr. Livingstone read at the meeting of the Geographical Society on Monday bring us news of the great explorer and his discoveries up to July, 1868. Dr. Kirk, however, as we mentioned last week, has received news of him as late as September, 1868. Our readers are aware that Livingstone's new discoveries go far to confirm Ptolemy's account of the ultimate sources of the Nile. To anthropologists, however, perhaps the most interesting *morceau* in Livingstone's despatch—like a lady's letter—is the postscript, which runs as follows:—

"P.S.—Always something new from Africa. A large tribe lives in underground houses in Rua. Some excavations are said to be thirty miles long, and have running rills in them—a whole district can stand a siege in them. The 'writings' therein, I have been told by some of the people, are drawings of animals, and not letters; otherwise I should have gone to see them. People very dark, well made, and outer angle of eyes slanting inwards."

The last weekly report of the Registrar-General announces that 241 persons, chiefly children, died from scarlatina in London last week, and that the deaths during the previous thirteen weeks that ended on October 30 amounted to 2347. Appended to the report is a very able "Memorandum" on the means necessary to arrest scarlatina, which has been forwarded to the Registrar-General from the Association of Medical Officers of Health. The plan of disinfection and precaution laid down in the memorandum, if faithfully carried out in the houses of the rich, where drainage and sanitary arrangements are good, would undoubtedly suffice to arrest scarlatina, but the Association confesses that in the houses of the poor it would practically fail. They write:—

"Provided there be no unsuspected drain, sewer, gulley, watercloset, pipe, or cistern, or other source whence the inmates receive fresh infection, scarlet fever can be and is daily arrested in private houses by the above means carried out in detail; but only by persons having space, wealth, intelligence, and the wish to save life. It is far otherwise in the crowded houses of the poor, where the healthy are mixed with the sick and even with the dead."

To fight the epidemic successfully amongst the poor, measures of public hygiene are necessary, but they only serve imperfectly to mitigate the consequences of neglect and poverty, and there are many impediments even now in the way of their adoption. These, with the measures recommended, are well summed up in the second section of the Health Officers' memorandum. The very limited power for the removal of the sick conferred on the Health Officer by the 26th section of the Sanitary Act of 1866 is one great obstacle in the way of checking the disease.

SUPERANNUATION OF POOR-LAW MEDICAL OFFICERS.

The following is a case which shows the expediency of obtaining for English Poor-law Medical officers a boon similar to that recently extended to their Irish brethren. The guardians of the Greenwich Union proposed to award a superannuation allowance to Dr. Hollingsworth, lately one of the Medical officers to that Union. It appears that for some time after his appointment by the guardians he had also followed private practice, but that, for several years before his resignation, he had devoted himself exclusively to his duties as district Medical officer. The Poor-law Board, when informed of the proposal, stated that it was doubtful whether, having regard to the terms of the statute, the guardians could legally grant the retiring allowance, seeing that Dr. Hollingsworth had not, during the whole period of his tenure of office, given his entire time to his duties as Medical officer. We understand that the Poor-law Board propose to take the opinion of the Attorney-General on the question.

THE UNIVERSITY OF GLASGOW AS A MEDICAL SCHOOL.

Dr. Cowan, Professor of Materia Medica in the University of Glasgow, this year delivered the introductory address. For his subject he selected the history of the Medical School connected with the University, and handled it both ably and pleasantly. No passage in it, however, struck us so forcibly as that having reference to the income of the Infirmary, wherein it is stated that in 1868 the working men of Glasgow contributed for its support no less a sum than £5226. This not only shows their appreciation of the value of the institution, but, as Dr. Cowan says, a high-minded independence, for, from the nature of their occupations, the greater part of them are liable to become its inmates at any moment. To no class of the community are Hospitals more valuable than to artisans accidentally injured. It is no degradation to go to a Hospital in case of severe Surgical injury or a fever, and it is right that they should make the institution self-supporting. Another matter of fact to which Dr. Cowan refers we strenuously endorse—that is, the insufficient acknowledgment of the labours in the Fever House whereby Dr. A. P. Stewart first distinctly and decidedly separated and defined typhus and typhoid fever. Honour to whom honour is due. In this instance the worker has not had his due meed of praise.

ARMY MEDICAL OFFICERS.

At the first meeting of the Portsmouth Army Medico-Chirurgical Society, on November 3, Dr. Gordon, C.B., the President, made some striking observations on the multiplicity and importance of the duties performed by military Medical officers. They have to see to the quality of the raw material by which the army is recruited. They are charged with the preservation of the health of troops in all climates, at home and abroad, during epidemics, in the midst of war, and during military occupation of unhealthy stations. To carry out these duties properly, some knowledge of geology and of meteorology is requisite, for it is obvious that a damp climate, with extremes of temperature and negative indications of the electrometer, would require measures unsuited for a dry equable climate with positive electricity. A knowledge of botany and chemistry is required, in order that they may judge of the wholesomeness

and purity of food. These are mere preliminaries to the fact that they have to treat the sick in every known disease and injury, from the awfully great to the elegantly little; they must be Physicians, Surgeons, Apothecaries, accoucheurs, and sick nurses; must do everything, from an amputation at the hip-joint, to managing the suckling of a new-born baby. The duties of the military Surgeon not only include all that may fall to the civil Practitioner, but much more of an entirely different order. They must treat their patients not in reference to their individual cases, but in reference to the general efficiency of the body to which they belong; instead of the patient discharging the doctor, the military doctor has to discharge his patients. In active service it is to the Medical officer that

"the general in command must look for an estimate of casualties by sickness, death, and invaliding, so that he may desire reinforcements from the mother country to fill the vacancies thus to be created; to them he has to refer for the quantity and nature of conveyance, accommodation, servants, medicines, and appliances for Hospital purposes which should attend an army; and to them he must refer in regard to the mode of travelling best suited to non-effectives when being finally disposed of as invalids. To the exertions and the knowledge of Army Medical Officers the soldier is indebted for almost every improvement in his condition that has from time to time been made. I have elsewhere dwelt upon some of the more important of the advances in hygiene for which the sole credit is due to the officers of our department. It was at the urgent representation of an Army Medical officer that suitable barracks for our soldiers were erected; that a definite proportion of cubic and superficial space per man was allotted; that in malarious districts upper-storied barracks were provided; that suitable rations in quality and variety were issued; that clothing has been issued with due regard to climate and nature of duties; that canteens were established with a view to check in some measure the terrible extent to which drunkenness prevailed; that suitable buildings as Hospitals were founded; that Hospital diets were instituted with due consideration for the requirements of the sick; that a restriction, as far as practicable, was placed upon the amount of night duty, drills, and exercises to which the troops were subjected; as well as many other improvements which I could enumerate. Nor must I omit to mention that many of the moral improvements which have of late years taken place in the condition of the soldier were first advocated by the Medical department—as, for example, recreation rooms, the gymnasium, temperance associations, savings-banks, schools, and others, while among the first advocates of the abolition of corporeal punishments we find the name of an army Surgeon. Considering the greater efficiency as soldiers of married as compared with unmarried men, it is not to be wondered at that Army Medical officers have ever advocated the extension of liberty to marry among them, or that they have been among the foremost advocates of increased consideration to their wives and children."

Dr. Gordon next dwelt on the multifarious and important duties of the administrative branch of the Army Medical Service, the inspection of Hospitals, the analysis of hygienic and statistical reports; the checking of the expenditure on medicine and "extras" in Hospitals, reporting on the construction and hygienic qualities of Hospitals, providing against the spread of epidemic disease, examining non-commissioned officers as dispensers, and the sitting on sick boards.

"He has to make arrangements in regard to the distribution of Medical officers in the district, to keep the roster of those in garrison, so that each shall serve in rotation, and no more, to verify and sign the bills submitted by Medical officers for travelling allowances, and to approve the pay bills of those who do not belong to regiments. He has to nominate Medical officers to accompany detachments, and to arrange, where occasion arises, for opening a Hospital for the treatment of their sick. He has, on occasions of garison field-days and public reviews, to make suitable arrangements for casualties that may occur. He has to check requisitions for medicines and instruments, and to superintend those sent in for the general supply of the district. He has to examine all instruments requiring to be repaired, previous to submitting an estimate for the purpose. He has to inspect regiments about to proceed on foreign service from the district, selecting men who are likely to be efficient in the country for which they are destined. He has to see that troop-ships are properly provided with all Medical requirements before leaving the port, and that the Medical officers proceeding in charge are provided with all necessary requirements for performing their duties."

FROM ABROAD. — CONGENITAL CATARACT SIMULATING SHORT-SIGHTEDNESS—ELECTRICITY IN PARTURITION—PHOSPHORESCENCE OF THE SEA.

Dr. Joy Jeffries, of the Boston Eye Infirmary, calls the attention of non-specialist Practitioners to an interesting subject—namely, "Congenital Cataract in Children simulating Near-sightedness." The real nature of the affection, he says, is apt to be overlooked until it has attained a much older date than it ought to have before being submitted to treatment. As in congenital cataract most of the rays of light are obstructed in their passage through the central portion of the lens, a certain degree of dilatation of the pupil facilitates their access through the lateral portions, and the child, while reading, seeking to avoid the stimulus of light in order to obtain this dilatation, turns its back to the window, contracts its brow, and partially closes its eyelids—that is, closely imitates the procedures of a person who is near-sighted. So, also, to obtain a larger picture on the retina, or get the light sideways, he holds the book close to the eyes, exactly simulating what a near-sighted person without glasses must do. The opacity of the lens may be of such a character, or so far back in the lens, that the pupil, to the inspection of an unaided eye, may offer nothing abnormal, and the child may be pronounced as simply near-sighted. The ophthalmic Surgeon is therefore not consulted until much too late; for, the earlier congenital cataracts are treated in children, the greater the chance of restoring and retaining useful vision. The cataract in the course of time becomes more difficult of removal, and the retina, deprived of its proper stimulus of light, does not undergo a degree of development proportionate to the rest of the eye. Consequently, if the pupil is successfully cleared by operation at a late period, and light thus freely admitted to the retina, the patient will not attain the same power of vision or appreciation of objects which he would have done had he been operated upon earlier.

"This the ophthalmic Surgeon too often sees, and he may even be blamed for not having accomplished what would have been a miracle. Again, I would repeat, the earlier they are done the better. The trustees of the Royal London Ophthalmic Hospital call the especial attention of the public to the necessity of bringing children for operation at an early period, instead of allowing their eyes to be damaged by delay. The average age of the last 500 cases brought there was *seven* years. To show the necessity of my directing Physicians' attention particularly to this point, I may say that the average age of the patients with congenital cataract brought during the last four years to the Massachusetts Eye Infirmary was *twelve and a half years*. Finally, I would again remind Physicians, when they notice the little ones shunning the light and holding the book near to the eye or sideways, and the parents complaining that they seem dull in learning their lessons, to remember that *cataract*, and not simply near-sightedness, may be the cause, although their eyes may look perfectly natural without ophthalmoscopic examination."

M. de St. Germain, at the last meeting of the Société de Chirurgie, communicated the results of some experiments he has recently made at the Maternité on the application of electricity in labour. Engaged to write an article for the "Dictionnaire de Médecine" on the Surgical and Obstetrical applications of electricity, and believing that little had been done in illustration of the latter, he undertook an investigation himself. Although this had been pursued in only twelve cases, he found the action of the electrical current was so marked as to lead to what he believed some novel conclusions. He was informed afterwards, however, of the researches of Barnes and Radford in this direction in 1854, and of the favourable opinion they entertained of the agent. His own conclusions are as follows:—"1. In no case have uterine contractions been induced where they have not already spontaneously com-

meneed. This explains the discredit into which the electrical current has fallen as a means of inducing premature labour. 2. Wherever labour pains have commenced, occurring at intervals of fifteen or twenty minutes, on the application of the conductors to the lateral parts of the abdomen, we have *constantly* found, and that in about ten minutes, a remarkable increase of the uterine contractions. 3. We have also found that contractions so induced are much more prolonged and more painful than others. 4. The dilatation of the os uteri has constantly taken place with rapidity. 5. A fact to be particularly insisted upon, especially as it is not noticed by Barnes and Radford, is that the expulsion of the placenta immediately follows that of the infant, being either spontaneously projected beyond the vulva or capable of removal without the slightest traction. 6. In two cases only the infant exhibited a slight bluish colour, but in these the cyanosis could be explained by constriction. 7. To sum up, without partaking of the enthusiasm exhibited by Barnes for the application of electricity in delivery at full term, we believe that this method deserves being submitted to a prolonged and severe investigation, and that, if new and numerous trials confirm the results thus far obtained, the application of electricity as an agent in the rapid expulsion of the placenta must be considered as a gain."

M. Duchenin presented, at the last meeting of the Académie des Sciences, a memoir on the "Phosphorescence of the Sea," in continuation of one presented in 1865. In the latter he had endeavoured to prove that there can be no doubt that this phenomenon is due to the presence of myriads of infusoria—the *Noctiluca miliaris*. Seen by the naked eye, they resemble very small ova of fishes, "and the more we disturb the water, the more these minute beings seem to be irritated, and during their rage they become phosphorescent." Taking some of the water with him to Paris, the author found that he could always produce phosphorescence by shaking the bottle containing it. Under the microscope, the infusorial characters of these animalcules become evident. We may always ascertain by their presence in the water during the day that there will be phosphorescence at night. The infusoria, indeed, may appear or disappear quite suddenly, and the luminosity of to-night may be quite absent to-morrow.

Additional experiments confirm the fact of the production of luminosity in the dark by shaking the vessel containing the sea water. If the tube containing it be plunged into warm water, the luminosity is increased up to a temperature of 39° C., but on raising this to 41° the animalcules die, and the phosphorescence ceases entirely to appear. When exposed to great cold, the luminosity becomes more intense. This is also the case when diluted acid or alcohol is added, but it does not continue. The addition of as much as 50 per cent. of fresh water does not diminish the luminous power; but if the infusoria are suddenly transported into fresh water, the phosphorescence permanently disappears. The luminous power is preserved after the infusoria have been kept in complete darkness for a fortnight. The electric spark does not kill these minute beings as alcohol or acids do, but induces the contractions of their organs which give rise to luminosity. A curious fact in relation to this subject is the circumstance that it is very rare, during the period in which the phosphorescence is present, that seawater baths do not cause, especially in young subjects and in those whose skins are delicate and susceptible, a kind of exanthem much resembling that caused by the sting of nettles. Several thousand of these infusoria were placed in a tube, and a few hours after some drops of the water containing them had been applied to the arm, an exanthem resembling that of the bathers was produced.

SMALL-POX has broken out with considerable virulence in the lower districts of Greenock.

REPORT ON THE TEACHING OF THE OUT-PATIENT DEPARTMENTS OF THE LONDON HOSPITALS.

THE following report has been undertaken entirely from an educational point of view. It has no reference to the vexed question of the general administration of the out-patient departments of our metropolitan Hospitals, or, at any rate, only so far as it aids or interferes with the usefulness of these departments as means of *teaching* practical Medicine. We have long been impressed with the belief that, in very many instances, the out-patient departments in connexion with our Medical schools in London have not been utilised as much as they should and may be for educational purposes. No doubt very many difficulties stand in the way of this, some arising from the nature of the general administration of our London Hospitals, and dependent on the indifference or obstructiveness of the governing bodies; but some also, and we think these are the chief ones, from want of system and organisation in the Medical schools themselves.

We propose, as briefly as possible, first to give an account of the attempts that are at present made in the various metropolitan schools to give efficiency to the out-patient department as an educational instrument, and secondly to point out what we think may be further accomplished in this direction. We have pursued our inquiries in each Medical school under the following heads:—

1. The number of Physicians and Surgeons in daily attendance on out-patients.
2. The hours and average length of time of each attendance.
3. What specialities are represented, and how frequently.
4. The average number of patients seen by each out-patient Physician and Surgeon at each visit.
5. The average number of students daily attending the practice of each out-patient Physician or Surgeon.
6. The amount and kind of help afforded the out-patient Physicians and Surgeons in seeing patients by senior or other pupils.
7. The amount of responsibility and independent action thrown on such assistants.
8. Opinions of the Medical officers as to the nature of the cases most commonly seen in out-patient practice, and their special fitness for teaching purposes.
9. Amount and kind of teaching attempted in the out-patient department of the school in question.
10. Opinions as to its success or want of success.
11. Subjects (possibly) taught.
    (*a*) General Medical and Surgical practice.
    (*b*) Diseases of women and children.
    (*c*) Skin diseases.
    (*d*) Dentistry.
    (*e*) Aural Surgery.
    (*f*) Ophthalmology and the use of the ophthalmoscope.
    (*g*) Laryngoscopy.
    (*h*) Surgical appliances and bandaging.
    (*i*) Pharmacy and therapeutics.
12. General suggestions.

Our first investigations were made at the

Middlesex Hospital,

and we are glad to bear witness, in this place, to the great amount of earnestness, ability, and activity which characterises the clinical teaching in this Medical school.

The following are the arrangements for seeing out-patients at the Middlesex Hospital:—

1. One Physician and one Surgeon attend daily for ordinary Medical and Surgical practice respectively. The Physician from 8.30 a.m. until about 1 p.m.; the Surgeon from 1 p.m. until about 3 p.m.

2. With regard to the different branches of Medical and Surgical practice represented—

(*a*) Laryngoscopic demonstrations are given by D Greenhow as opportunities present themselves.

(*b*) Ophthalmology and the ophthalmoscope, by Mr. Hulke, every Tuesday and Friday at 8.30 a.m.

(*c*) Diseases of the skin, every Thursday morning from 10 a.m., by Dr. R. Liveing.

(*d*) Diseases of women and children, every Wednesday and Saturday at 1.30 p.m., by Dr. Hall Davis.

(*e*) Special cancer department, every Thursday at 1.30, by Mr. Nunn.

(*f*) Dentistry, every morning at 9 a.m., by Mr. Tomes and Mr. Turner.

3. Each Assistant-Physician attends two days in the week. One of these days is a *heavy* day, when new cases are admitted; the other is a *light* day, when no new cases are taken (save emergencies), and is reserved especially for teaching purposes. The average of new cases on the heavy day is about fifty, and these are admitted by *governors' letters only*. Each Assistant-Surgeon attends twice a week, but the work is equally distributed between the two days. The patients are admitted into the consulting-room *one by one*, so that there is no crowding, and each case is carefully examined, and the important features are pointed out to the class of students in attendance. Quite recently Mr. Arnott has been appointed to give a systematic course of instruction in bandaging, etc., during the summer session, free of charge.

4. With regard to the attendance of students, certain branches of Medical and Surgical practice are more attractive than others.

About 10 per cent. of the students attend the general out-patient Medical practice, and about 20 or 25 per cent. the general out-patient Surgical practice.

The ophthalmic department attracts about 40 per cent., and about the same number attend the department for skin diseases.

5. Each Assistant-Physician has two clinical clerks, on whom no responsibility is thrown. They help the Assistant-Physician at his discretion. The same rule applies to the Surgical dressers.

6. The cases most commonly seen in the out-patient *Medical* department, and which are most useful for teaching purposes, are—a large number of cases of disease of the heart and lungs, diseases of the kidney, abdominal tumours, intestinal parasites, chronic poisoning by lead, mercury, etc., measles, scarlatina, small-pox, typhus fever.

In the Surgical out-patient department most of the cases are useful for clinical teaching—as, for example, the simpler kinds of fractures and dislocations, abscesses, ulcers, tumours, all forms of venereal disease, strictures, hernia, etc., etc.

7. Dr. Robert Liveing reports that the plan he has adopted for utilising the out-patient Medical department for teaching purposes is very simple, and is found to answer admirably. The same system is, we believe, adopted by his colleague, Dr. Greenhow. He selects all the interesting cases that present themselves in his ordinary out-patient practice (about 10 per cent. of all those seen), and directs them to come to the Hospital on a special day of the week, and at a fixed time, at which time he attends with his class. The patients are admitted one by one, and carefully examined. Each student has an opportunity of making an independent examination and diagnosis; and, lastly, the Physician points out any mistakes that may have been made. Dr. R. Liveing has adopted the same plan in the skin department with perfect success. The rooms appropriated to the out-patient department are, on the whole, pretty good. Each Assistant-Physician and Surgeon has the use of *two rooms*, in addition to the waiting-room. They are provided with a weighing apparatus and the usual means for testing urine, etc.

St. George's Hospital.

1. There are two Assistant-Physicians and two Assistant-Surgeons, each attending two days in the week from 12 to 2.30 or 3. Diseases of women and children are seen once a week (Thursdays, at 12) by Dr. J. Clarke. Ophthalmic cases are seen (by Mr. Power) twice a week, and demonstrations given with the ophthalmoscope. Aural cases are seen by one of the Assistant-Surgeons (Mr. Rouse) on Thursdays. Skin diseases are seen on a special day once a week in the summer by Dr. Barclay.

2. The average number of patients seen by each Assistant-Physician and Surgeon respectively on their days of attendance is about 150; on some days more than 200 cases are seen. The new cases admitted each day *are limited to twenty*, except in the case of emergencies. The Physicians have one day in each week appropriated to men, and one to women.

3. The average number of students attending the out-patient practice is not large—about four to each Physician or Surgeon.

4. The Assistant-Physicians are assisted in their work by an Assistant House-Physician, and the Assistant-Surgeons by an Assistant House-Surgeon. These are senior pupils who frequently have a legal qualification. These assistants, however, take *no new cases*, and treat no cases independently of the Assistant-Physician. There are neither clerks nor dressers to the out-patient Physicians or Surgeons.

5. The Medical officers consider that there is abundant material for teaching purposes to be found amongst the out-patients of this Hospital. Diseases of the heart and lungs and every kind of dropsy are mentioned as very common.

6. Students are encouraged to examine patients, and their diagnosis is watched, and, if necessary, corrected. They are also instructed in methods of physical examination, and to recognise the value and significance of physical signs of disease. Four patients only are admitted into the consulting-room at a time. Laryngoscopy is not taught in the out-patient room, but in the wards of the Hospital by the Resident Medical officers, and also by the Professor of Surgery in his regular course. The apartments provided for the accommodation of the out-patient department are large and commodious. There is a large, comfortable, well-lit, and well-warmed waiting-room, on one side of which are the consulting-rooms; these are well adapted to the purposes they are intended to serve. The room for ophthalmic and dental cases is exceedingly well arranged. Each out-patient's prescription, with a brief record of the case, is kept in the Hospital. The prescriptions are placed in numbered covers, and are kept in a rack placed in a convenient part of the out-patient department. The one thing to be desired in this as in many other Hospitals is a more systematic and organised method of teaching in connexion with the out-patient department.

MEDICAL REFORM MEETING.

On the evening of Thursday, the 4th inst., a number of gentlemen interested in Medical reform dined together at the Medical Club under the presidency of Dr. Bell Fletcher. The meeting had been hastily got up, but a considerable number of gentlemen assembled, not limited to those belonging to the club. After dinner,

The President addressed the meeting on the subject of Medical reform. He contended that in various ways the present Act was inoperative, and gave one instance of a qualified man in Birmingham, under whose cloak seven unqualified men practised. Another cause for dissatisfaction was the Council, which was imperfect, and in which the Profession ought to be more generally represented. Medical education ought to be improved, and one uniform qualification for practice ought to be introduced. He then referred to the memorial which had been so extensively signed, and which he was empowered to present to the Home Secretary. It only contained a statement of general principles, from which no one, he thought, could dissent. He wanted consolidation—to have one science, one art. Altered relations on the part of the corporations, too, were absolutely necessary.

Dr. Lory Marsh thought the next session likely to be an important one to Medical men, and meetings like the present were highly desirable, that all views might be ventilated. No resolutions were to be proposed, discussion alone being required. They desired to be neutral. It was proposed to have subsequent meetings and to have some member to introduce the subject, this to be followed by a discussion.

Dr. Prosser James acquiesced in the scheme. He thought it would do good.

Dr. Seaton thought education not a fair subject for legislation—examinations were, if one pleased. With regard to Medical matters and Medical education, a constant tinkering had been going on for years. For his part he thought it did not matter where the information came from, provided the student possessed it. The corporations ought, he thought, be united. There should not be two separate professions of Medicine and Surgery, but two grades in one—viz., Fellows and Members, the former alone (the seniors) to be consulting men.

Dr. Chapman thought this was a petition to ask Parliament to help the Profession to do what it could better do itself. An Institute of Medicine had been founded many years ago for the same purpose, but had failed. Much had been hoped for from the Council, but it had done nothing. The ten thousand who had signed the memorial would do better by forming themselves into a body of their own. Examinations ought to be very strict, and men who have a genius for teaching ought to be allowed to teach. Small Hospitals were quite as good as large ones for practical teaching, but this was opposed to existing monopolies. Many of those who now taught were no teachers, but they had a monopoly, and would not give it up.

In the Profession prosecutions had generally been used to put down rivals. The existing black list was no doubt deserved, but the same end might have been secured in a different way.

Dr. O'Connor said the object of the 1858 Bill, according to Mr. Couper, was to secure the representation of the body of the Profession.

Sir John Gray said he had a notice on the papers of the House of Commons with regard to Medical reform, and he had come there that night as he wished to hear what the Profession thought ought to be done. He imagined that what was requisite was unity of action, not sweeping changes; above all, sound examinations. It was the interest of the public to have sound Practitioners. The rivalries of the various corporations were for their own good, not for that of the public. The Profession as a body was at fault in not long ago having insisted on the institution of sound practical tests. These corporations stood in the way of this again, and it was now the policy to disable them from mischief and do away with their rivalry in granting degrees.

THE AMERICAN LAWS RELATING TO THE PROTECTION OF INCORRIGIBLE DRUNKARDS.

Our American cousins, with that practical good sense which distinguishes, at all events, their social legislation, have found no difficulty in dealing with a subject which seems to have sorely perplexed English Chancellors, and have wellnigh plunged into the abyss of absurdity that science which prides itself on being the perfection of human reason. According to the revised statutes of the State of New York (1831), "whenever the overseers of the poor of any city or town shall discover any person to be an habitual drunkard, they may, by writing under their hands, designate and describe such drunkard, and, by written notice signed by them, require every merchant, distiller, shopkeeper, grocer, tavernkeeper, and other person residing within the city or town where such drunkard shall reside, or in any other city or town near to or adjoining such city or town, not to give or sell, under any pretence, any spirituous liquors to such drunkard; and if, after personal service of such notice, any person shall knowingly give or sell in any manner whatever spirituous liquors to any such drunkard, except by the personal direction or on the written certificate of some duly qualified Physician, he shall forfeit for every offence the sum of ten dollars for the use of the poor of the town where such drunkard resides."

Any person so designated as a drunkard may, however, demand a jury to try and determine such fact. And if at any time the overseers shall be satisfied that such habitual drunkard has reformed and become temperate, they may revoke and annul any such notice given by them or their predecessors. But by far the most important Act is that entitled "Of the Custody and Disposition of the Estates of Idiots, Lunatics, Persons of Unsound Mind, and Drunkards." We cannot do less than set out verbatim the first section of that Act. It is as follows:—"The Chancellor shall have the care and custody of all idiots, lunatics, persons of unsound mind, and persons who shall be incapable of conducting their own affairs in consequence of habitual drunkenness, and of their real and personal estates, so that the same shall not be wasted or destroyed; and shall provide for their safe keeping and maintenance, and for the maintenance of their families and the education of their children, out of their personal estates, and the rents and profits of their real estates respectively."

The Act then proceeds to direct that, "whenever the overseers of the poor discover a person to be an habitual drunkard having property to the amount of 250 dollars, which may be endangered by means of such drunkenness, it shall be their duty to make application to the Court of Chancery for the exercise of its powers and jurisdiction." If such drunkard have property to an amount less than 250 dollars, such application to be made to the Court of Common Pleas of the county, otherwise the County Court. Permission is given to the party proceeded against to traverse the inquisition, and take the opinion of a jury upon the facts, and an appeal lies to the Court of Chancery itself. There are other provisions contained in the Act which it is not necessary to quote here. We should not, however, be doing justice were we to conclude the subject without quoting from the very luminous judgment of Chancellor Walworth. (*In re* Ann Lynch—5 Paige's Chancery Reports, p. 120.) "The Chancellor: The appeal in this case presents an important question as to the rights and duties of the committee of an habitual drunkard; and as to the power and control which this Court has over the persons of that unfortunate class of our fellow-citizens whose unnatural appetite for intoxicating liquors has rendered them incompetent to manage their property or to regulate their own conduct. . . . Previous to the revision statutes the Court had no control over the person of an habitual drunkard, but only over his estate, the power of the Chancellor, by the original Act of 1821, being confined in terms to the estate. But by the recent revision of the statutes the powers of this Court in relation to the *persons* as well as to the estates of habitual drunkards, are put precisely upon the same ground as the powers over the persons and estates of idiots and lunatics. This change in the statute was undoubtedly founded in wisdom, and in a spirit of kindness to this unfortunate portion of the community, as the protection of property is of but little consequence in comparison with the salvation of its deluded owners, who may properly be considered as morally deranged. It is therefore of the utmost importance to them that the powerful shield of this Court should be interposed, not only for the protection of their property against those who would knowingly destroy both soul and body for the purpose of rioting upon the spoils of the victims of their cupidity, but also to remove them, if possible, from the thousand temptations which others, either intentionally or thoughtlessly, may place in their way. That the statute gives to the Court a perfect control over the person of an habitual drunkard, which it can exercise through the medium of a committee, I think there is no reasonable ground to doubt. It declares in the first place that the Chancellor shall have the *care and custody* of all idiots, lunatics, persons of unsound mind, and persons who shall be incapable of conducting their own affairs in consequence of habitual drunkenness, and of their real and personal estates — thus putting the persons of the habitual drunkard and of the lunatic, both as to custody and safekeeping, upon the same footing in every respect. The control, therefore, which this Court may exercise over the person of an habitual drunkard is the same which it may exercise over an idiot or a lunatic. . . . Although the power of this Court over the person of habitual drunkards is thus complete, it ought not to be exercised in such a manner as to deprive them of their freedom unnecessarily. The power should be used only to protect them from injuring themselves or from being injured by others; to remove them from temptation, and from the society of vicious companians, and, if possible, effect a reformation; and to restore them to their friends, and to the possession and control of their property, as good and virtuous members of the community." This judgment, which was delivered on March 17, 1834, has remained unquestioned. Other States, such as Pennsylvania, New Hampshire, etc., had, previous to this period, adopted a like legislation on the subject, and we believe others have since followed in their course.

The United States are probably quite as jealous of the real liberty of their citizens as is England of the liberty of her subjects. The English sovereign is emphatically styled in the old law books "Pater patriæ," but in this respect the Government of the United States would appear to have outstripped even the paternal Government of the mother country, if we may be pardoned in thus perpetrating an Irish bull.

Surely it is not too late for our legislature to frame an act upon the model of that of America. It need be little more than a transcript of the latter. The courts of the different States (see Commonwealth *v.* Cox, in Ashmead's Pennsylvania Rep. vol. i., p. 71, in addition to the case of Lynch before quoted) have proved its practicability, and, having thus reduced theory into practice, we cannot help thinking that a leaf taken out of this book of our American cousins would supply a grievous defect in our own present legislation. A clause might be introduced saving the rights of all who are now privileged to sue out a commission, simply extending its operation to those who are incapable of managing their own affairs in consequence of habitual drunkenness, in addition to those other unfortunates to whom its protection has been hitherto confined.

We cannot leave this interesting subject without glancing for one moment at a most valuable institution which owes its birth to the system of legislation before recorded; we mean the New York State Inebriate Asylum, established by an Act of the legislature, dated March 27, 1857, amending two previous Acts passed in 1854 and 1855, the object being "the reformation of the poor and destitute inebriate." By this Act

the institution is incorporated, and thereby enabled to purchase and hold land in the State of New York, as well as every other description of property; and by sect. 9 the "said institution shall have power to receive and retain all inebriates who enter said asylum, either voluntarily or by order of the committee of any habitual drunkard. All poor and destitute inebriates who are received into the said asylum shall be employed in some useful occupation in or about the asylum; said inebriates shall have all moneys accruing from their labour, after the expenses of their support in said asylum shall have been paid, which shall be sent to their families monthly; if said inebriates have no families, it shall be paid to him or her at their discharge from said institution." And by sect. 10, "the committee of the person of any habitual drunkard, duly appointed under *existing laws*, may, in his or her discretion, commit such habitual drunkard to the custody of the trustees or other officers of said asylum, there to remain until he shall be discharged therefrom by such committee."

Such a piece of legislation requires no comment. It carries with it its own recommendation. Suffice it to say that this institution has been a success in every sense of word. In 1868 there were four such institutions in the United States: one in Boston, opened in 1857, called the Washingtonian Home; one in Media, near Philadelphia, opened in 1867, called the Sanatorium; one at Chicago, opened in 1868; and one at Binghampton, New York, to which we have just called attention. It is somewhat consolatory to find a redeeming feature in the law of at least one portion of the United Kingdom. We find by the law of Scotland that "a man who from *drunkenness*, facility of temper, or *any other cause*, is liable to be stripped of his property by the necessitous or designing, has the power of putting *himself* under trustees, without whose sanction no act of his can be valid. This is technically termed *inhibiting himself*." (Dunlop.) We would point to the spirit of American legislation on this subject as a fitting model for imitation. W.

PROVINCIAL CORRESPONDENCE.

SCOTLAND.

(*From a Contributor.*)

EDINBURGH.

I PROMISED to send you something about the use of carbolic acid in the Glasgow Infirmary, and I shall now try to give you a plain and unvarnished account of what I saw. I am familiar with all the large Hospitals in England and Scotland, and have seen the various modes of treatment adopted in them. What I have seen in them I have seen in Glasgow—that is to say, wounds present very much the same appearance all over, whether they are treated with carbolic acid or not. I had at one time occasion to inquire into the estimate set on carbolic acid by our principal London Surgeons. They seemed to think it useful used as a disinfecting lotion, but did not find it possess any very remarkable qualities beyond this. What I saw in Glasgow confirms this opinion. Whatever may be said about it, injuries there look very much as they do elsewhere. I remember we were told in London that to give carbolic acid a fair trial it should be used exactly as recommended by Professor Lister—that is to say, in the form of putty or paste—and that our bad results were due to this not being properly used. In Glasgow I saw no such paste, and was told that it was never used; also that the carbolic oil was but seldom employed. Instead, a preparation of shellac containing carbolic acid, either applied to cloth or separately like a sheet of gutta-percha tissue, is made use of. The watery solution is the chief agent, and it is used in the ordinary proportions.

The Surgical wards are apart from the Medical, and are built so as so constitute two sides of a square. The number of beds available for Surgical purposes varies; when there is an epidemic of fever—not a rare occurrence—an additional number of beds are devoted to Medical cases, those for Surgical being proportionately diminished. I carefully examined the cases in Dr. Macleod's wards. Every kind of injury was represented; some were being treated with carbolic acid, some were not. The watery solution was used, and the wounds with it looked much like those without it. On the whole, I am inclined to think that the chief cause of the improvement said to exist in the Surgical wards depends on the great care with which the wounds are dressed. The dressings are removed by forceps, thrown into a basket for the purpose, and carried away. The wounds are not washed with a sponge—they are syringed with carbolic acid and water, so that there is scarcely any risk of carrying contagion from one wound to another. Elsewhere I have seen the same plan adopted with similar success.

In Mr. Lister's wards my time precluded me from seeing more than one case. I watched the Surgeon from the beginning to the end of the dressing. A lad, apparently aged 16 or 18, had that morning been carrying some picks, such as are used in mining and quarrying, to the mouth of a coal pit in the neighbourhood of Glasgow. His foot had slipped, and one of the sharp picks had penetrated his left side in a line with the nipple, but some distance outwards, and had passed apparently outwards and backwards. He had been brought to the Infirmary, and when I saw him he was much collapsed, and was hiccupping violently. Mr. Lister examined the side carefully, declared that there was but little effusion into the pleura, that there was some emphysema, but not much. There was very little or no bleeding from the wound. Mr. Lister introduced his finger, "protected by the watery solution," to ascertain whether or not the lung was injured. On withdrawal of the finger the wound was covered with a piece of cloth steeped in the carbolic acid lotion. Mr. Lister then said he did not see why the man should not recover, if the wound did not putrefy, and it was therefore important to know whether it was likely that any germs had entered with the pick, and consequently also whether the pick had been used before or not. He called for the young man's father and ascertained, much apparently to his relief, that the pick was newly sharpened. There was thus, said he, less chance of germs having been introduced along with the pick into the wound. He next debated the propriety of injecting carbolic acid into the pleural sac. The conclusion he arrived at apparently was that there was a risk of germs having entered, for his finger was again introduced, and into the wound and round about his finger he injected a large quantity of carbolic acid and water, so that it could not fail to enter the pleural cavity. While removing his finger he called upon a student to close the orifice after it with a piece of cloth soaked in the watery solution. The wound was finally covered with a piece of gum copal with carbolic acid, not very strong, lest it should irritate the wound, I was told. Over this was a larger piece of the shellac and carbolic acid already alluded to, and this was bound down, except at one side, from which the blood and water was trickling, with ordinary adhesive plaster.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

TUESDAY, NOVEMBER 2, 1869.

RICHARD QUAIN, M.D., President, in the Chair.

MR. FAIRLIE CLARKE brought a boy who had met with an accident last August, receiving a severe blow on the right side of the head, whereby the skull was comminuted, two loose pieces of bone being removed at the time. The dura mater was exposed, and the brain protruded. The boy was collapsed, but rallied. The protrusion of the brain was ultimately reduced, and the wound healed over, having now cicatrised. His senses are perfect, and his faculties unimpaired.

Dr. ROBINSON said such cases were not uncommon in military Surgery, cases being on record of recovery after injuries of even greater extent.

Mr. HULKE said Mr. Lawson had a somewhat similar case in Middlesex Hospital. The wound healed; afterwards a swelling formed over the spot, whence watery fluid escaped on puncture. Another somewhat similar case he had himself seen at Lewes.

Dr. ANDREW exhibited a Malignant Tumour of the Cerebellum taken from a woman aged 45. The left breast had been removed three months before death. She complained of violent sickness and headache. She was fed for a time by enemata, but ultimately died. Several small tumours were found in the brain, two in the cerebellum.

Dr. ANDREW also exhibited a Cysticercus of the Brain removed from a man aged 32. On September 13 he was seized with sudden vomiting and pain in the back of the neck. His head was bent forwards, and there was slight intolerance of light. He had a discharge from his ear up to the time of the attack, when it ceased. He died on October 5. There was no change in the brain, but projecting by the side of the medulla

from the fourth ventricle was a bladder-like body which he assumed to be some kind of cystic worm.

Dr. Andrew also exhibited a Tumour of the Pons Varolii removed from a boy. The symptoms began with retching and sickness. There was wasting, especially of the left side. The faculties were unchanged; the pupils fixed.

In reply to Dr. Dickinson, Dr. Andrew stated that the eyes had been examined by the ophthalmoscope, and the veins found distended.

Mr. Marsh showed a Polypus removed from the Pharynx of a child 9 years old, such being rare at that age. The central mass, as big as the finger, grew and depended from the pharynx; two side masses projected into the nostrils. Part had been pulled away. When the child was placed in the position for operating, no polypus could be seen in the nose, it having all dropped into the pharynx. It was torn away, and the structure found to be gelatinous.

Mr. Couper exhibited a specimen illustrative of Stricture of the Rectum, for which colotomy had been performed. The woman had suffered from the disease for five years, and when examined it was found that the rectum, for three or four inches from the anus, was totally disorganised; beyond this was the stricture. She died from the effects of chloroform, vomiting after the operation, when it was found that the disease was due to the after-effects of ovarian abscess. One of the ovaries contained much pus, and communicated with a sinus between the rectum and the uterus, where the pin was confined, but it had thence escaped by two passages, one extending into the rectum just below the stricture, which it had caused, and the other into the vagina.

Dr. Payne showed a specimen of the Vermiform Appendix containing an ordinary black pin. This was removed from a woman aged 37, who had been under the care of Dr. Handfield Jones. One end of the pin was surrounded by a concretion in the vermiform appendix; the other, the sharp end, projected freely into the gut. There was not much change round the appendix, but its serous coat was thick and adherent to the cæcum. There was a large abscess of the liver, surrounded by several smaller ones, as in pyæmia. The portal vein was free, but there was a small abscess in the lung. In life there had been no very marked symptoms—some pain in the right side of the abdomen, with fever and rapid pulse, but no peritonitis. Another somewhat similar case had occurred under the care of Dr. Handfield Jones. An abscess in the liver was connected with the portal system, and the portal vein, as well as the superior mesenteric, was filled with soft coagula. The vermiform appendix was dark-coloured, adherent, and inflamed towards its extremity. There was a sloughy cavity behind the head of the pancreas. Rigors had occurred on the second day of illness.

Mr. De Morgan had a case where a man complained of pain low down on his right side. He had rigors, and an abscess formed. This, when opened, was found to contain air, and a pin also escaped. The man did well.

Dr. Dickinson thought that, as a rule, foreign bodies passed more readily than was imagined. He thought the masses most frequently discovered were fæcal concretions rather than cherry-stones. Experience in Switzerland showed how readily cherry-stones pass through the gut. A child was brought to him which was said to have swallowed a pin. He ordered it to be fed with bulky food. The mother afterwards brought the pin, which was said to have been passed.

Mr. Hulke said a man came to him complaining of pain in the rectum. On examination a needle and thread were found and removed.

Mr. Cooper Rose said a patient of his swallowed accidentally four artificial front teeth. Three or four days afterwards they were passed none the worse.

Dr. Murchison thought foreign bodies had more to do with inflammation of the appendix than Dr. Dickinson would have us believe. In a great majority of instances foreign bodies acted as a nucleus.

Dr. Dickinson had found in them minute bodies, as hairs; nothing more.

Mr. Nunn said that in Middlesex Hospital a pin had been found in the omentum.

Mr. Jabez Hogg said that in one case Mr. Hancock had cut down over the cæcum and found a cherry-stone. There were no signs of abscess externally beyond tenderness.

Mr. Arnott had seen in University College a woman in whose cæcum were some dozens of cherry-stones, so that when tapped they rattled on one another. After death dozens were found, many of which were now preserved in the museum.

Mr. Maunder exhibited the lower extremity of a woman, aged 28, removed at the hip-joint. She had experienced discomfort in her knee for five years. Two years ago it began to get much larger. The whole extremity weighed 23 lbs. The patient was doing well. He would procure a section, and exhibit that to the Society.

Mr. Couper had twice removed tumours like this at the hip-joint, but their growth had been much more rapid. They occurred in young people after six or eight months' growth. Both recovered from the operation, but the man died a year after from cancer of the lung. In the girl the disease recurred in the stump, and she died six weeks after.

Mr. Thomas Smith exhibited a fatty tumour, resembling a spina bifida, removed from a child aged 4 months. The mass was small at first, but grew to the size of a child's head. An ulcer formed on its apex. It was tapped and found solid, whereupon it was removed.

Mr. Smith also exhibited an unusual form of Spina Bifida from a child aged six months. It was healthy, but presented a large lumbar swelling. There were no marks of cleft spine; the sac seemed rather a hygroma. It was tapped, whereupon its nature was discovered; but a portion still remained distended. The child fell into bad health, and died of spinal meningitis, when it was discovered that the swelling had consisted of two sacs, one within the other. The posterior and larger had been tapped, the anterior and smaller was entire. The larger he considered to be arachnoid, the smaller the distended canal of the axis. It was rather a specimen of two spinæ bifidæ than a compound one. The two forms ordinarily seen, here co-existed.

Dr. Cayley showed a Larynx blocked up with excessively viscid mucus. The man had been suffering from bronchitis, and went out for a walk. He died quite suddenly. A small quantity of tobacco was found in the middle of the mucus. The two together had caused death.

BIRMINGHAM AND MIDLAND MEDICAL INSTITUTE.

Wednesday, November 3.

BINDLEY ON THE MODERN DOCTRINE OF THERAPEUTICS.

At a meeting of the Midland Medical Society held in the council-room of the Birmingham and Midland Institute on Wednesday, November 3, the following pathological specimens were exhibited:—

Dr. Jolly showed a Testicle affected with Encephaloid Disease removed from a man 34 years of age. The patient had been submitted to a mild mercurial course, but without any amelioration of the symptoms.

Mr. Wilders then showed a case of Excision of the Elbow. The operation had been performed about three months, and the patient has an excellent arm, and is now following his trade as a harness plater.

Mr. Jordan exhibited a case of Encephaloid Disease of the Head of the Tibia. The limb had been removed at the junction of the middle and upper third of the thigh by Teale's method. He also brought before the Society an Intra-uterine Polypus, the size of an orange, which he had removed with the écraseur. The patient was very anæmic from frequent hæmorrhages. Nevertheless, she went on very well for some days after the operation, when symptoms of peritonitis set in, which gradually increased, and the patient died. There were no signs of inflammation about the uterus itself, but there was pus in the broad and lateral ligaments.

Mr. West showed a Bursa Patellæ which he had removed for chronic enlargement. The subject of this affection was 30 years of age, and the disease had existed for ten years. It was carefully dissected out; no skin was removed, and the patient did well. Its weight was eight ounces; it measured twelve inches in circumference, eight inches transversely, and seven inches vertically. It was full of a yellow fibrinous material, soft and jelly-like, and contained very little fluid. It is, with one exception, the largest hygroma on record.

Mr. Bindley read a paper in support of "The Modern Doctrine that the Therapeutic Action of Drugs depends upon their Physical and Chemical Properties." He first described the three phases through which modern therapeutics have passed—first, that of blind and unlimited faith in drugs; then that of utter scepticism; and, lastly, the present stage, in which they are gradually obtaining those clear and connected ideas in which all sound knowledge consists. After a graphic sketch of the first and second, he said—"Happily there were some

strong and sound men among us who were not carried away by the ebb and flow of this tide of error, whose minds, conversant with the exact and experimental sciences, had caught the true spirit of inquiry, and longed to impart something of the accuracy and exactness of these to their own favourite study of therapeutics. They saw, or thought they saw, that this could only be accomplished through the application of physics and chemistry. They were assured that, whatever else the human body might be, it was a living machine wherein physical and chemical processes were continually going on, that some diseases obviously arose from easily recognised errors in the chemistry of the body, and that it was very probable that remedies administered for the alleviation and cure of disease operated in this way solely by virtue of their physical and chemical properties. If this could be worked out, and proof found that it was actually so, a foundation for a system of scientific therapeutics would be laid, and in process of time, and by the united efforts of many minds, a superstructure raised that would be sound, reliable, and enduring." After explaining the modern doctrine, and showing that it had its origin in the rapid expansion, within a few years, of physical and chemical science, he proceeded: "And if it be a fact that the changes and processes continually going on within us, both in health and disease, are the products of physical and chemical forces acting on the material constituents of our frame—and this is held to be so, with one or two exceptions, by our greatest physiologists—then it will follow that therapeutic action, if it be therapeutic, must be so because of its power to modify and control these same forces that have wrought the evils we seek to remove." Then followed an account of the physical qualities of medicinal agents, which come greatly in aid of their chemistry, their solubility in water, and their power of diffusion in the body, and he said—"It is to Dr. Bence Jones that we owe the discovery and complete exposition of a circulation in our bodies of equal, if not greater, importance than that of the mechanical or Harveian circulation of the blood. The experiments of Dupré and Jones demonstrated the existence beyond the blood circulation of a chemical circulation, by which the liquor sanguinis and diffusible substances dissolved in it pass through the walls of the capillaries into the textures of every part of the body; that, in this way, the nutrition of the tissues is maintained, crystalloid medicinal substances are diffused into every particle, and take part in the changes of matter and force that are proceeding there." Until the disclosures made by these experiments, we possessed no definite knowledge of the diffusion of medicines after they entered the blood. We now know that crystalloid food or medicine passes through the walls of the capillaries, and through the membranes of the textures, and through cell-walls, as readily as though no membrane intervened between the blood and the parenchymatous or intracellular fluid; that by dialysis all crystalloid medicines act as directly on the textures as on the blood, and that no crystalloid medicine can be limited in its action to the blood alone." Medicines do not lose their chemical properties by being brought into contact with the proximate principles of the body—with the albumen, blood-corpuscles, fibrine, fat, and gelatine they meet with in its blood and tissues. Chemical affinity, we are taught, is, like every other form of force, indestructible; it must either remain unsatisfied or be lost in the production of chemical change, or of some new form of force. Many of the metals have a powerful affinity for albumen, and the salts of lead especially form ready compounds with it in the tissues, producing insoluble albuminates. To this property is due the action of acetate of lead as an astringent and hæmostatic, and the mechanism of the process would appear to consist in its power of condensing the textures and constricting the blood-vessels in the parts affected. It is a mechanico-chemical process. This may be seen outside the body when lead lotion is applied to the eye in cases where there is an ulcer of the cornea. Other examples were adduced, and then another class of substances were spoken of, the chemistry of which is different, and, though not so demonstrable, is no less certain. Alcohol has the property of lessening the excretion of carbonic acid by the lungs, of urea by the kidneys, and of lowering the temperature of the body; and it has been shown that it does so by diminishing the natural process of oxidation going on in the system. The anæsthetic effects of nitrous oxide gas are caused by its preventing the oxidation of the nervous centres, and this chiefly by its depriving the blood of its supply of free oxygen. We have recently seen in the beautiful experiments of Dr. Richardson before the members of this Society that chloral is decomposed by the soda it meets with in the blood, and that chloroform is evolved—a very decisive proof that a given chemical substance is decomposed in the living body by virtue of pure chemical change, and that its therapeutic action is due to one of the products of that decomposition. The very curious and interesting fact, that in the alcoholic series the anæsthetic effects are in proportion to the amount of carbon contained, must not be omitted. The anæsthesia rose with the rise in the number of atoms of carbon. Thus ethylic alcohol, with a formula of C_2H_6O, is stimulant and anæsthetic only in large doses, while amylic alcohol, represented by a formula of $C_5H_{12}O$—fousel oil and the hashish of the Russians—is overpowering and anæsthetic in a much higher degree. The part played by carbon in these organic compounds is a noticeable and important fact in the chemistry of therapeutics. Mr. Bindley then spoke of the work that is being done, and of the workers in this new field, and pointed out that to Dr. Bence Jones particularly, and also to Dr. Broadbent, is special honour due, for it is to their efforts mainly that therapeutics are now being removed from the thraldom of tradition and empiricism, and placed under the reign of law. In the rapid advances of physics and chemistry, and especially in the discovery of the law of the conservation of energy, they saw new methods of inquiry opened up, that might lead to the solution of some of the most difficult problems in Medicine, and, as more particularly relating to our present subject, that of the mode of action, and uses of drugs in the treatment of disease. The physical forces that rule in the inorganic world are the same that are in operation in organised beings, both in health and in disease; in health their action is unvarying, but in disease they undergo certain changes, either of increase, or of diminution, or of qualitative modification, which by our remedies we attempt to control and to restore to the normal condition of health. Dr. Bence Jones is the great pioneer in this work in this country. He was not only the first to apply the new doctrines, but he has also contributed most largely in working them out. His lectures on "Some of the Applications of Chemistry and Mechanics to Pathology and Therapeutics" are most instructive and fascinating, and contain, especially in the chapter on "The Therapeutic Actions of Mechanical and Chemical Forces," a vast store of facts and suggestions of the greatest value and interest. The great charm of the doctrines he teaches is, that they offer something positive and definite in place of the vagueness and uncertainty that have hitherto characterised most of our curative efforts. It is the influence that remedies exercise over the great processes of oxidation and nutrition that gives the leading character to his system, and upon this he bases his arrangement of medicines. After an exposition of his eight classes of remedies, Dr. Broadbent was next spoken of as having the promise of a triumph to come by the very boldness of his attempts, and the strength of the claims he puts forth to place the foundations of therapeutics deep in the firm and durable structure of chemical science. With a keen philosophic insight, and a breadth of view hitherto unattempted, he traces relations between chemical groups of the elementary bodies and their therapeutic effects when administered in disease, and affirms that similarity of chemical properties implies, as a rule, similarity of physiological and therapeutical action—in other words, that chemical groups ought to form therapeutical groups. That in these views are embodied the fundamental principles of scientific therapeutics—the therapeutics of the future—will scarcely be doubted by any who have estimated the advance already made (although, indeed, it is but small) in the knowledge of the chemical action of drugs. Mr. Bindley concluded by an earnest appeal to the members of the Society to form from among themselves a therapeutical section for the special prosecution of these studies.

Unwholesome Fish, weighing altogether twenty-one tons fifteen cwt., was seized during the last month at or near Billingsgate market, by the officials appointed by the Fishmongers' Company.

Great attention has been paid by the Chinese to the cultivation of all kinds of vegetable food. They have a greater variety, and a better succession, or rotation, of garden crops than almost any country in the world. There may be little flavour, but there is plenty of succulent nourishment in the tithe which the Chinese gardener gathers from all the orders of botany. Scurvy and purpurar have never been met with. The vegetable character of their diet gives a prominence to special disorders of the digestive organs, but its nutritive properties are increased by the quantity of leguminous substances with which, by a happy instinct, the Chinese have so highly charged their diet of rice and greens.—*Report of the Hankow Medical Mission Hospital* 1868.

NEW BOOKS, WITH SHORT CRITIQUES.

A Practical Manual of the Diseases of Children, with a Formulary. By Edward Ellis, M.D., Physician to the Victoria Hospital for Sick Children, etc. London: Churchill and Sons. Pp. 279.

*** It has been Dr. Ellis's aim to give in these few pages an outline of those diseases to which children are liable. It is somewhat difficult to say how far he has succeeded. He has certainly enumerated most of children's diseases, and he has contrived to say something of them all, but the knowledge conveyed is neither deep nor wide. Nevertheless, the author gives some hints, worthy of attention, as to the diet of children. Certainly, as to remedies, Dr. Ellis's armamentarium is a full one—scores for each form of disease; and he has further appended to the volume a short treatise on drugs and their actions, with illustrative formulæ.

Phthisis and the Stethoscope; or, the Physical Signs of Consumption. By Richard Payne Cotton, M.D., F.R.C.P., Senior Physician to the Hospital for Consumption and Diseases of the Chest, Brompton. Fourth edition. London: Churchill and Sons. Pp. 112.

*** At this time of day there is not much to be said of Dr. Cotton's work, except that experience has proved that it well fulfils its purpose—a concise and simple guide to the physical diagnosis of phthisis. The difficulty of diagnosing phthisis in its earlier stages is considerable, and this difficulty has been still further enhanced by a multifarious and complicated terminology. Were it only in clearing this up, Dr. Cotton has done good service.

Natural Philosophy Popularly Explained. By the Rev. S. Haughton, M.D., F.R.S., Fellow of Trinity College, Dublin. London: Cassell, Petter, and Galpin. Pp. 271.

*** Most educated men feel, in spite of themselves, a contempt for what is commonly called popular science, and instinctively shun books having reference to such a subject. Should any such be induced to take up this manual by Professor Haughton, they cannot fail to be agreeably disappointed. Professor Haughton's knowledge is something to be admired, and his mode of communicating it to others still more so, for here, in the few pages allowed to him, he contrives to give the student (something more is required than a mere reader) a wonderfully good idea of the most important facts relating to statics, hydrostatics, pneumatics, dynamics, hydrodynamics, acoustics, light, and heat. All those departments of physics which do not imply a knowledge of chemistry are, in point of fact, considered. The work is also illustrated with diagrams other than those conventionally employed, and with which one is bored *ad nauseam*. The work is on a numerical basis, but the mathematics required to understand it are neither very high nor very deep. Another peculiar feature of the book is the amusing scraps of learning (to use the word in its old sense) with which it is interspersed. Altogether, we know no introduction to natural philosophy to be compared with it.

MEDICAL NEWS.

University of London.—The following is a list of the candidates who have passed the recent Second M.B. Examination:—

PASS EXAMINATION.

First Division.

Baxter, Evan Buchanan, King's College.
Buck, Thomas Alpheus, Guy's Hospital.
Dessé, Ethelrid, University College.
Dukes, Clement, St. Thomas's Hospital.
Gowers, William Richard, University College.
Hall, Francis De Havilland, St. Bartholomew's Hospital.
Marshall, Henry Flamank, Birmingham General Hospital and Univ. Coll.
Rayner, Edwin, B.A., Paris, and University College.
Snow, Herbert Lumley, Queen's College, Birmingham.
Stocker, James Reginald, Guy's Hospital.
Thomas, John Davies, University College.
Willoughby, Edward Francis, University College.

Second Division.

Black, John Gordon, College of Medicine, Newcastle-upon-Tyne.
Blackley, John Galley, Royal Manchester School of Medicine.
James, John, University College.
Seccombe, Edward Hepburne, King's College.
Smith, Charles James Hardy, University College.

Royal College of Surgeons of England.—The following gentlemen passed their Primary Examinations in Anatomy and Physiology at a meeting of the Court of Examiners on the 9th inst., and when eligible will be admitted to the Pass Examination:—

Bell, William, student of the Edinburgh School.
Brooks, J. E., Birmingham School.
Cory, Robert, Cambridge and St. Thomas's Hospital.
Deacon, H. P., St. Bartholomew's Hospital.
Girdharlal Ratanlal Daphtary, Bombay.
How, G. H., King's College.
Kiddle, Nelson, Guy's Hospital.
Macan, J. J., Cambridge and St. Bartholomew's Hospital.
Mason, Richard, St. Thomas's Hospital.
Mayer, W. L., London Hospital.
Renton, William, Leeds School.
Shaw, B. J., St. Bartholomew's Hospital.
Sheaf, C. A. E., Edinburgh School.
Skinner, Edward, Sheffield and University College.
Tait, R. L., Edinburgh School.
Thompson, Joseph, Charing-cross Hospital.
Whitaker, G. H., Glasgow and University College.
Whitington, C. E., Guy's Hospital.
Williams, Henry, St. Thomas's Hospital.

Apothecaries' Hall.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, November 4, 1869:—

Bennett, Fredk. Charles, The Close, Salisbury.
Leigh, John Thomas, St. Ives, Hunts.
Robinson, Charles Augustus, Kingston, Jamaica.

As an Assistant in compounding and dispensing medicines:—

Barnes, Henry Foster, North Mace Rectory, Cork.

The following gentlemen also, on the same day, passed their First Professional Examination:—

Birt, George Corney, Guy's Hospital.
Pugh, Edgar Joseph, University College.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Buaton, J. E., L.R.C.P. Lond.—Honorary Assistant Medical Officer to the Ladies' Charity and Lying-in Hospital, Liverpool.

Scobell, T. E.—House-Surgeon to the Royal Isle of Wight Infirmary, Ryde.

NAVAL AND MILITARY APPOINTMENTS.

Admiralty, November 1.—Henry Loney has this day been promoted to the rank of Staff Surgeon in her Majesty's Fleet, with seniority of October 21, 1869.

Medical Department.—Staff Assistant-Surgeon George Thomas Bourke to be Staff Surgeon, *vice* Daniel O'Donovan, M.D., placed upon half-pay. For Staff Surgeon Thomas Knox Birnie to be Surgeon, *vice* Edward M'Gill, M.D., deceased, as stated in the *Gazette* of October 19, 1869, read Staff Surgeon Robert Wyatt Meadows to be Surgeon, *vice* Edward M'Gill, M.D., deceased. For Staff Assistant-Surgeon Thomas Stawell Barry to be Staff Surgeon, *vice* Thomas Knox Birnie, appointed to the 68th Foot, as stated in the *Gazette* of October 19, 1869, read Staff Assistant-Surgeon Thomas Stawell Barry to be Staff Surgeon, *vice* Robert Wyatt Meadows, appointed to the 68th Foot.

BIRTHS.

Eastes.—On November 5, at Albion-place, Hyde-park-square, the wife of George Eastes, M.B., of a son.

Griffiths.—On October 24, at Swansea, the wife of T. D. Griffiths, M.B. Lond., of a daughter.

McNab.—On November 1, at 29, Wineldey-square, Preston, the wife of R. McNab, M.D., Staff Surgeon, of a daughter.

Murray.—On November 9, at Tenbury Wells, Worcestershire, the wife of W. Berkeley Murray, M.D., of a daughter.

Russell.—On November 10, at Oakfield House, Accrington, the wife of W. S. Russell, M.R.C.S., of a daughter.

Salter.—On November 4, at Malmesbury, Wilts, the wife of Dr. Salter, of a son.

MARRIAGES.

Addison—Bartlett.—On November 3, at St. John's Church, Notting-hill, Richard, second son of George Addison, Esq., 15, Cumberland-terrace, Regent's-park, to Ellen, eldest daughter of William Bartlett, F.R.C.S., Ladbroke Lodge, Notting-hill.

Deas—Macpherson.—On November 5, at Duncairn Church, Belfast, P. Maury Deas, M.B., M.S. Lond., Medical Superintendent of the New Cheshire County Asylum, to Margaret Ann Bowman, daughter of Colonel Macpherson, Staff Officer, Belfast, and granddaughter of the late Hon. Roger Rollo.

Ogilvy—White.—On August 12, at St. Peter's, Fort William, Calcutta, John Francis, second son of Thomas Ogilvy, Esq., of Corrimony, Glen Urquhart, Inverness-shire, to Annie Louise, eldest daughter of John White, M.D., Civil Surgeon, of Moorshedabad, Bengal.

Wetherell—Newson.—On November 3, at St. Andrew's, Hasketon, Suffolk, James De Caulier Wetherell, youngest son of N. T. Wetherell, M.R.C.S., of Highgate, Middlesex, to Hannah Amelia, only daughter of William Newson, of Hasketon, Norfolk.

DEATHS.

Ashwin, Charles Manley, M.R.C.S., L.S.A., at Abergavenny, on November 3, aged 81.

CHIPPENDALE, WALTER, M.D., the youngest son of William Chippendale, of Quarry-hill, Tunbridge, at the residence of his father, on November 6, aged 37.

FOSTER, GEORGINA GREGORY, wife of Michael Foster, M.D., at Page-heath, Bickley, Kent, on November 3, aged 28.

MILLER. CATHERINE HARRIETT, the beloved wife of J. W. M. Miller, M.D., J.P., late of Calcutta, at Gloucester House, Southsea, after a protracted illness, on November 5, aged 40.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

BLACKBURN INFIRMARY. — House-Surgeon; must be legally qualified. Applications and testimonials to the Secretary.

BRIGHTON AND HOVE DISPENSARY.—Resident House-Surgeon; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Chairman of the Committee of Management on or before November 29. Election on December 7.

CHARING-CROSS HOSPITAL.—Physician-Accoucheur; must have a degree from one of the universities recognised by the General Medical Council, and be F. or M.R.C.P. Lond. Applications and testimonials to the Secretary on or before the 30th inst. at 2 o'clock.

CHOLSEY NEW PAUPER LUNATIC ASYLUM.—Medical Superintendent. Applications and testimonials to J. T. Morland, Esq., Clerk to the Committee of Visitors, at the Asylum, Cholsey, near Abingdon, Berks, on or before December 16.

EAST WARD UNION.—Medical Officer and Public Vaccinator for the Workhouse at Kirkby Stephen. Candidates must be registered, and possess the qualifications prescribed by the Poor-law Board. Applications and testimonials to Mr. John Whitehead, Clerk to the Guardians, Appleby, on or before December 4. Election on the 6th.

HOSPITAL FOR SICK CHILDREN, 49, GREAT ORMOND-STREET, W.C.—House-Surgeon; must have one qualification, and be unmarried. Applications and testimonials to the Secretary on or before November 16. Election the next day at 4.30 p.m., when personal attendance will be required.

LEEDS DISPENSARY.—Senior Resident Surgeon; must have both Medical and Surgical qualifications, and be unmarried, and above 30 years of age. Applications and testimonials to Dr. Eddison, 19, Park-square, Leeds, on or before November 17.

LINCOLN COUNTY HOSPITAL.—Physician; must possess a Medical qualification. Applications and testimonials to Mr. J. W. Danby, Lincoln, on or before November 20. Election on the 22nd.

LIVERPOOL ROYAL LUNATIC ASYLUM.—Medical Superintendent. Applications and testimonials to E. Gibbon, Esq., Royal Infirmary, Liverpool, from whom further information may be obtained.

ST. GEORGE'S AND ST. JAMES'S DISPENSARY.—Physician; must be F. or M.R.C.P. Lond. Applications and testimonials to the Secretary, 69, King-street, Regent-street, W., on or before the 13th inst.

ST. PANCRAS AND NORTHERN DISPENSARY.—Resident Medical Officer; must have both Medical and Surgical qualifications. Applications and testimonials to S. S. Wigg, Esq., 33, Gordon-street, Gordon-square, W.C., from whom further information may be obtained.

SUSSEX COUNTY HOSPITAL.—House-Surgeon. Applications and testimonials to A. Veysey, Esq., Sec., Brighton, on or before November 24.

SUSSEX COUNTY HOSPITAL.—Dispenser. Applications and testimonials to the Drug Committee on or before November 15.

SWANSEA NEW HOSPITAL.—House-Surgeon; must be legally qualified. Applications and testimonials to the Secretary, 23, Gower-street, Swansea, on or before November 24. Election December 1.

WESTBOURNE DISPENSARY AND MATERNITY, 165, QUEEN'S-ROAD, BAYSWATER.—Resident Dispenser; must be legally qualified and duly registered. Applications and testimonials to the Secretary on or before the 15th inst.

WESTMINSTER GENERAL DISPENSARY.—Surgeon; must be M.R.C.S., not practising midwifery or pharmacy, and be registered. Applications and testimonials to the Secretary on or before November 22.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Hoxne Union.—Mr. C. W. Payne has resigned the Hoxne District; area 6986; population 1857; salary £42 12s. per annum.

Nottingham Union.—Dr. Hatherley has resigned the Second District; area 960; population 41,886; salary £120 per annum; no fees.

APPOINTMENTS.

Machynlleth Union.—David R. Pughe, M.R.C.S.E., L.S.A., to the Llanwrin District.

Stoke Damerel Parish.—William J. Anniss, L.F.P. and S. Glas., L.S.A., to the Clowance District.

SIR WATKIN AND LADY WYNN intend building a Cottage Infirmary at Rhabon.

THE corner-stone of the Oswestry and Ellesmere Cottage Infirmary was laid on Monday by Sir W. W. Wynn, Bart.

A MEDICAL officer of the Dudley Union has certified in the case of a pauper, that he is suffering from "hypocrisy and delusion."

THE Leeds Board of Guardians have caused 10,000 copies of Dr. Lankester's directions for arresting the spread of scarlet-fever to be circulated by the relieving officers.

ST. THOMAS'S HOSPITAL.—It is not intended to appoint a successor to Dr. J. Risdon Bennett at present, or, in fact, to make any new permanent appointment until the Hospital is removed to Stangate.

WE regret to observe, in the last Bombay mail, the announcement of the death from cholera at Peshawur of Surgeon Arthur Bell, of the 36th Regiment. Mr. Bell is the third victim among Medical officers of the present epidemic of cholera in India.

THE ROYAL ACADEMY.—Professor Partridge, F.R.S., commenced his annual course of lectures on anatomy at Burlington-house on Monday last, and will lecture every Monday up to December 13 inclusive.

LONDON UNION SOCIETY.—The next meeting of this Society will be held on Wednesday, November 17, at half-past seven p.m., in the Medical Library, University College. Subject for debate, "Ought bishops to have seats in the House of Lords?" Coffee will be provided at seven o'clock.

THE SUNDERLAND MEDICO-CHIRUGICAL SOCIETY has been dissolved and a new society formed under the same name, but with a different constitution. The officers are—*President:* John Davis, M.R.C.S. Eng. *Vice-Presidents:* George B. Morgan, L.R.C.S.I.; Charles Mattrass, M.D.; and Henry J. Yeld, M.D. *Secretary and Treasurer:* George S. Brady, M.R.C.S. Eng.

SMALL-POX IN AMERICA.—It is stated that small-pox is raging among the Indians at Montano and Idaho. Five hundred deaths have occurred among the Grosventre tribe. The yellow fever has appeared at Puerto Principe.

PRESENTATION.—Mr. T. H. Colley, House-Surgeon to the Yarmouth Hospital, having resigned that appointment after fourteen years' zealous services, was invited to a meeting in the Town-hall, where the Mayor, surrounded by a large number of the governors of the Hospital, in eloquent terms presented Mr. Colley with a handsome gold watch and appendages, together with a purse of 250 guineas.

THE MELKSHAM COTTAGE HOSPITAL.—This little institution is progressing favourably. It is in some respects a model Hospital. The expenses are as follows:—The house has been well fitted up and furnished at an expense of £62 17s. 5d., which has been raised chiefly by donations. The annual expenditure has amounted to £84 18s. 10d. It is remarkable what an amount of good has been effected by this very moderate outlay.

A KNOTTY QUESTION. — The Conseil d'Etat, on November 6, 1673, was engaged in deliberating upon a grave question. It was desired to know whether Surgeons, their widows, or apprentices had any right to engage in the purchase of hair and the sale of perukes. A decree was issued denying such right, it being enough for them to concern themselves in shaving the beard and in drawing teeth.—*Union Méd.* November 6.

THE FAMINE FEVER IN WHITECHAPEL.—A conference has just been held between a committee of the Whitechapel Board of Works and the Medical officers and guardians of the union on the subject of relapsing or famine fever, reported to be spreading in the parish, and to which the attention of the board was directed a short time back by Mr. Simon, of the Privy Council. The decision came to was that at present additional accommodation for the reception of fever patients is unnecessary, but, at the same time, authority was given to all the Medical officers to furnish extra nourishment to patients when they considered it requisite. It was also decided that, in the event of the disease spreading to any great extent, a suitable building shall be provided. The Medical officer of the parish, Dr. Liddle, reports thirty-nine deaths from typhus, typhoid, and relapsing fevers during the last three weeks.

THE Chesham Infirmary was opened a few days since for the reception of patients. The Bishop of Oxford preached a sermon upon the occasion at Christ Church, Waterside, after which he proceeded to the Infirmary, and formally opened it in the presence of several of the nobility, clergy, and gentry of the neighbourhood. The cost of the building (£850) was raised by subscription, towards which Lord Chesham gave £200, in addition to the site; £26 was collected after the sermon.

THE Chicago Medical Society have been discussing the fitness of women to be Physicians. As might be supposed, there was not much novelty in the discussion; but one Dr. Blake covered himself with glory by an appropriate illustration. Some other Doctor had been arguing that nature evidently intended woman to be a mother, whereupon Dr. Blake retorts that an assemblage of women might reasonably take "the high *priori* road," and declare that nature did not fit man for the practice of Medicine, but created him to be a father.

COLLEGIATE EXAMINATIONS.—At the last primary or anatomical and physiological examination at the Royal College of Surgeons, when thirty candidates presented themselves, it is stated that more than one-third failed to reach the standard, and were consequently referred to their studies for three months. That there was nothing very severe in the questions for the written examination, may be judged from the following submitted to the candidates on Saturday last—viz., 1. Describe the position, connexions, and structure of the Auriculo-ventricular valves, and explain the mechanical function which they exercise in the circulation of the blood through the heart. 2. Describe the sounds of the heart, and state the causes to which they are attributed. 3. Describe the diaphragm. 4. State the means by which animal heat is produced and maintained in the human body. 5. Describe the course of the external carotid artery, and name its branches. Describe the course and distribution of the facial branch of the carotid; and mention the arteries with which it anastomoses. 6. Name the constituents of normal urine, and state their relative proportions. The candidates were required to answer at least four of these questions.

NATURAL SCIENCE SCHOLARSHIPS AT CAMBRIDGE.—Christ College offers scholarships and exhibitions (in number from one to four, and in value from £30 to £70 a year, according to the number and merits of the candidates) for natural science. The examination will be on April 5, 1870, and will be open to any one, whether a member of Christ College or not, provided his name is not on the books of any other College in Cambridge, and provided he is not of sufficient standing for B.A.; it will be open, therefore, to all undergraduates of Oxford, and to non-collegiate students of Cambridge, as well as to all students who are not members of either University. The candidate may select for himself the subjects of examination, and must send his name, etc., in to the master before March 29. Further information may be obtained from the Rev. W. Gunson, Tutor of the College.

MEMS. FROM AUSTRALIA.—Dr. Matt, who was lately found guilty of manslaughter by a coroner's jury, has been well supported by his Medical friends. The case in question was one of flooding; the woman succumbed. The Crown has very properly declined to institute proceedings against Dr. Matt. —The Odd Fellows of Melbourne are subscribing a fund for founding a scholarship in the Melbourne University in compliment to Dr. Greeves, *a "Past Noble Grand."*—A subscription has been set on foot to make amends to Miss Evans (daughter of Dr. Evans, of Kilda) for her heroic conduct in remaining with Mr. Glover during an attack of small-pox. She is herself now slowly recovering from a most severe attack of that disease. —A case is recorded of the death of a child, twenty-one months old, resulting from the administration of the strong liquid ammonia in mistake for antimonial wine.—*Abridged from the Australian Medical Gazette.*

SCARLET FEVER.—The Registrar-General has published a most important memorandum and table on scarlet fever in London in the Weekly Return dated November 8. During the *ten* years 1851-60, and during the *eight* years 1861-68 the deaths from scarlet fever annually to every 100,000 persons living in London were 94. During the forty-three weeks ending October 30, 1869, the yearly rate of mortality per 100,000 was 152. When it is borne in mind that the scarlet-fever figures up to 1859 included cynanche maligna and diphtheria, it is evident that the disease had been slowly increasing for twenty years before the present fatal epidemic. During the thirteen weeks ending October 30 the number of deaths from scarlet fever was 2347. The distribution of the disease has been very unequal; it has spared the west, and fallen with all its violence on the east. Even in Westminster, Chelsea, and St. Martin's, the deaths have been below the average from this disease, whilst in Bethnal-green the deaths on 100,000 of the population were at the annual rate of 328, Stepney 291, St. George-in-the-East 289, Poplar 258, and Whitechapel 247. The south districts generally experienced a high rate of mortality; thus, the mortality was at the rate of 283 in St. Olave, 282 in Bermondsey, and 268 in Rotherhithe. The mortality in Greenwich was at the rate of 93, Lambeth 82, Lewisham 35, which is only a little lower than the favoured district of St. George, Hanover-square, in the west.

THE Luton Board of Guardians recently decided to take no further legal proceedings against persons who had neglected to have their children vaccinated. In consequence of this decision, Dr. Stevens, Inspector of Vaccination under the Privy Council, attended the last meeting of the Board of Guardians, urged upon them the necessity of vaccination, and advised them to reconsider their previous determination. It was eventually determined to take the subject into consideration at the next meeting, and that every member of the board should have special notice.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.—The half-yearly general meeting was held on October 27 at the rooms of the Society, Berners-street. The chair was taken by the President, Dr. Burrows. A short statement was read by the secretary, from which it appeared ten members had been elected since the last general meeting; five additional widows and twenty-one children had made applications for relief. The actual receipts from January 1 to June 30 had been £1608, the expenditure £1379 10s. The grants made to the widows and children amounted to £1250 10s. for the half-year, the expenses £129. There are at present fifty-six widows and forty-three children receiving assistance in sums varying up to £50 per annum for each widow, according to her need, and up to £25 per annum for each of the children. The President, after acknowledging a vote of thanks to himself and the court of directors, expressed his regret at the small attendance of members at the general meetings. Although it was in itself a proof of the confidence placed in the officers, still he much wished the members would show more interest in the affairs of the Society by appearing in greater numbers at the half-yearly meetings.

BELFAST BRANCH OF THE ROYAL MEDICAL BENEVOLENT FUND SOCIETY OF IRELAND.—On Wednesday, November 3, the usual quarterly meeting of the local committee of this branch of the above excellent Society was held in No. 33, High-street, and at which were present Dr. Drennan (in the chair), Dr. James Moore, Dr. Wilberforce Arnold, Dr. Whitaker, and the honorary secretary, Dr. Stewart. A sum of £830, it appeared, was distributed this year—the total number of applicants being 89, which exceeded any former year of those seeking the Society's necessarily limited aid. Eleven of the applicants were Medical men, sixty-seven widows of members of the Profession, and eleven the children of those who had been Practitioners. The largest grant enabled to be given was £25; and are going down to the small sum of £5, and yet gladly and thankfully received. An elaborate and most satisfactory tabular statement of the distribution of the above-mentioned sum of £830 is embodied in the report, thus affording the fullest evidence, from the minute details it contains, of the great pains taken by the central committee in Dublin, and the indefatigable honorary general secretaries at head-quarters, Drs. Wharton, M'Clintock, and Marks, that the funds placed at their disposal are administered in the most careful manner, and with a devotion of time to the working of the Society which redounds so largely to their true philanthropy and disinterestedness.

ANECDOTE OF LOUIS.—M. Guardia, in an interesting series of articles in the *Gazette Médicale* on "Surgical Manners of the 18th Century," publishes a letter of Louis, the celebrated Secretary of the Académie de Chirurgie, in answer to one of M. Lemercier, who had asked his opinion as to whether a charge he made for attending a patient suffering from gunshot wound was a proper one. "To speak frankly, I do not like this mode of payment, and never have resorted to it, and when any one asks me what they owe me, I reply that I am not a shopkeeper. I leave every one to recompense the attention which he has received as he chooses, according to his generosity and his means; and it has only happened to me on one occasion to have cause to complain of the honorarium that has been given me. A very rich man, whom I had cured of a paralysis of the bladder consequent upon retention, and in charge of whom I had left a pupil during two months, after twelve or fifteen days of assiduous care on my part, left a paper on my chimney-piece. After seeing him out, I was desirous to see whether his gratitude really corresponded to the compliments he had not spared, as words do not go for much with me. I was surprised to find only fifteen louis in place of the forty or fifty which I had expected, seeing the wealth of my patient. I made no direct complaint, but, mutual friends having questioned me about the payment, I did not conceal from them my surprise and discontent. This transpired, and his lady called upon me one morning to tell me that she had learned with pain that I had not appeared satisfied. 'Madam,' I replied, 'that is of no consequence to me; every one in such a matter does as he chooses, and happily my position raises me above ingratitude. Your husband places too little value on his life, since he estimates it at so low a price, and in case of accident he will have to seek other help than mine. My consolation in all this is that, had his operations (in

finance) been as badly remunerated as he has paid mine, he would not have been in a condition to give me more than four louis.' His vanity being piqued, he resorted to a pretext, saying that he had made a mistake with respect to the packet he had left, which was intended for my pupil, etc., etc."

HEALTH OF SCOTLAND.—The deaths of 2188 persons were registered in the eight principal towns, of whom 1091 were males and 1097 females. Allowance being made for increase of population, this number is fifty-four above the average of the month during the last ten years, but is 110 below the number recorded in October last year. Four males and four females had reached the 90th year of life, the two eldest of whom were males, both married, the one a railway contractor, and the other a carter, and both aged 98 years. During the third quarter of the present year in the whole of Scotland 16,532 deaths were registered, being in the annual proportion of 206 deaths in every ten thousand persons, or 2·06 per cent. The average death-rate of the quarter during the ten previous years was 192 deaths in every ten thousand persons, or 1·92 per cent., so that the mortality has been very high during the quarter, though not so high as last year, when the proportion of deaths was 209 per ten thousand persons. The English death-rate during the quarter was also slightly above its own average, being 207 deaths in every ten thousand persons, or 2·07 per cent., the ten years' average of the quarter being 206 deaths in every ten thousand persons. The death-rate in the groups of town and rural districts closely corresponded to the birth-rate in each, being highest where the greatest number of human beings were massed together, and lowest in the sparsely inhabited rural districts. Thus for every thousand persons in each district, the annual death-rate during the quarter was 27·9 deaths in the principal towns, 22·9 deaths in the large towns, 19·9 deaths in the small towns, and only 15·4 deaths in the rural districts.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Urban asks the whole of the members of the Profession to write to "Tribune," Royal United Service Institution, Whitehall, London, S.W., stating in each case the age and the number of days the writer was confined to the house in 1868 from sickness or accident. This is with the view of getting trustworthy data for insurance against sickness.

St. Bartholomew's Hospital.—The *City Press* criticises an article which has lately appeared in the *Times* relating to the expenditure of St. Bartholomew's Hospital, wherein it is asserted that £2000 per annum is spent on the patients at the London Hospital above what is spent at St. Bartholomew's, whereas the *City Press* affirms that £3500 more is spent at St. Bartholomew's than at the London. We need not go into these figures, but we may point to the miserable boxes in which the nurses live, about which there can be no mistake, although the *City Press* tries to make it appear that the account given of them is exaggerated.

Dr. Marion Sims has drawn down on himself the wrath of some of his New York brethren, through having written to a public paper to say what he knew of the case of Miss Cushman, and the probabilities of her death as reported. We have before now ventured to criticise Dr. Marion Sims, but we think that, in the present case, criticism is misplaced. It is not unbecoming in Physicians to communicate information which may tend to allay a groundless panic as to the health of a popular personage, and certainly Dr. Marion Sims has no need to advertise himself. His letter perhaps went more into detail than a fastidious taste would have dictated; but that is all.

M.R.C.S., L.A.C.—Dr. Francis Hawkins, 32, Leicester-square.

Ana.—Undoubtedly.

Studens.—There is no fee for registration. Apply to the secretary.

A Poor Patient.—No letter of recommendation is required; if the case be a fitting one for a Hospital, it will be admitted. Patients are received daily.

Anxious should consult some respectable Surgeon. There is no just cause for alarm.

A Non-Professional Reader.—We were aware that the character of Dr. Mortimer was not original to the *Turn of the Tide;* but it is not on that account less creditable to Mr. Burnand.

B. Z.—Mr. Wardrop was "Surgeon to the King," not Sergeant-Surgeon. We believe he was the only person who ever held such an appointment. It was quite distinct from Surgeon-Extraordinary. He met with opposition from all quarters; but he was so great a favourite with the monarch that he asked for him in the last hour of his illness. But Wardrop was kept away by some frivolous excuse on the part of one of the persons immediately about the King.

St. Thomas.—Yes; Mr. B. Travers, jun., was for some time Resident Surgeon at the Hospital. He subsequently went to Capetown, resided there a few years, returned to London, and practised in Dover-street.

Thefts at Guy's.—A Guy's man, who gives his name, writes that

"Umbrellas, books, coats, dissecting-cases, etc., the property of students, are daily stolen from the Hospital—in fact, to such an extent has this practice arrived, that anything of value left out of sight or forgotten for a very short time is, if not invariably, at least very often and generally, appropriated and lost for ever to the owner. I may just be permitted to mention a fact or two in outline, which I can at any time give in detail and substantiate, and which have occurred recently. 1. A copy of 'Heath's Practical Anatomy' was left in the Museum of the Hospital by a student on the same day he purchased it. He had occasion to leave the museum for a few minutes, and, having omitted to write his name on the title-page, he found it was gone on his return. 2. Another gentleman locked up a copy of 'Ellis's Demonstrations' in a leather bag, which he left, during his absence at lecture, in the museum lobby, and on his return his surprise may be imagined when he found that the bag had been opened, relocked, and the book abstracted. 3. Several coats, umbrellas, and minor articles have already been lost this session; and as it can be proved that such acts are committed by students in contradistinction to the porters and petty officials, I think it behoves me to free that class from any participation in the matter."

*** Unfortunately there is no club, school, or institution in which there is not a thief, or to which some thief may not get access. The only thing is to lock things up and keep a sharp look-out. It will sometimes happen unfortunately that a student steals; but professional thieves abound; they haunt all quasi-public places to which they can get access, and there sweep up unconsidered trifles.

"Magdalen" and the "Lancet."—There appeared last week in the pages of our contemporary, the *Lancet*, a letter which, in the present state of public agitation concerning St. Bartholomew's Hospital, we cannot allow to pass without some words of comment. The communication to which we allude purports to be from "An Unfortunate," at present an inmate of the Magdalen Ward of St. Bartholomew's Hospital. She complains of the mode of examination to which she is subjected by the attending Surgeon — even the means adopted for holding the candle, whose rays are necessary to throw light upon her ailments, meets with her disapprobation; but the presence of the class of students during the visit of the Surgeon, the "suppressed titter" which strikes her oversensitive ear, and the greater attention paid to the better-looking patients, form the gravamen of her charge. We assume, of course, that the editor of our contemporary had thoroughly satisfied himself of the authenticity of the letter, but we are far from agreeing with him as to the propriety of admitting it to his columns. By so doing he has become the channel of utterance of a very serious charge against the Professional *morale* of the Surgical staff of St. Bartholomew's. Virtuous maids, wives, and mothers have occasionally to submit, in the presence of students, to Surgical examination and treatment very similar to that which the Magdalen correspondent of the *Lancet* finds so distasteful; and our contemporary, by publishing her letter, has apparently enlisted himself on the side of those who would exclude students from such parts of the practice of the Hospitals which they attend. We cannot think that such was his intention, but it is much to be regretted that the letter should have appeared. If it be true that there are "suppressed titters" or any other unseemly conduct among the students of St. Bartholomew's while in the wards, we are firmly convinced that the slightest hint to them on the subject from the Surgeons would effectually prevent the continuance or repetition of such conduct.

William Cheselden.—The old military burial-ground attached to Chelsea Hospital, which has long been in a most neglected condition, is about to have the numerous monuments properly restored and the ground put in order as a garden. The tomb of Cheselden, the great anatomist and Surgeon, who did so much and worked so long for the Hospital, is among those which most need attention. This Surgeon's memory, adds the *Athenæum*, deserves more respect than has for some years past been vouchsafed to it.

A Private Practitioner is bound by the statute, under a penalty for non-observance of its provisions, to sign the certificate of successful vaccination. He is not required either to obtain from, or send to, the Registrar the certificate in question. This is not the case with a "public Vaccinator" appointed by the guardians. The parents of a child vaccinated by a private Practitioner are compelled to produce a form of a certificate and to forward it to the Registrar.

A Collector.—There is not, we believe, a portrait or effigy of any kind extant of Hewson, whose researches on the composition of the blood are so worthy of remembrance. A bust of this distinguished member of our Profession was, until a few years since, placed at the summit of one of the bookshelves of the Medical Society of London. The shelf and the bust disappeared when the Society left its house in Bolt-court to seek a more congenial locality. But our correspondent may still see in Medley's picture of the members of this celebrated Society, at their rooms in George-street, Hanover-square, the effigy of Hewson. It is a fact worth mentioning that Medley, who was one of the most successful portrait painters of his day, was the grandfather, on the maternal side, of the distinguished Surgeon Sir Henry Thompson. He lived to a very advanced age, and died some years since at Chatham, full of honours. It is a remarkable fact that he outlived all those he has so faithfully portrayed by nearly twenty years. The youngest member of the Profession,

for whose likeness we are indebted to Medley's easel, in the picture now in George-street, is Dr. Babington, who died many years before him, whose faultless pencil so accurately portrayed the "Apothecary" and, afterwards, the distinguished Physician of Guy's Hospital. A print of this remarkable picture can still be obtained at a very moderate price.

Parochial Vaccination.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In reply to your correspondent "Alpha" on the above subject in your number of October 23, I beg to say that every parent is entitled to gratuitous vaccination by the public vaccinator if he desires it. The reference to the two farmers in my previous letter was in reply to your correspondent who accused us of "touting" for cases, and no doubt, if Mr. —— and I had not been on friendly terms with one another, such a charge would have been laid at my door. The reason of my being asked to vaccinate these children was evidently economy, and the desire to have lymph from a neighbour's child.

In reference to "Alpha's" "suggestion" to me, I may say that it frequently occurs that there are children whose parents I know, and who wish their own Medical man to vaccinate; in this case I invariably inform him of the day when I shall be at my station, and give him full permission to select from my list the healthiest infant there, and let him take it to the patient's residence, and of course charge her for the operation. This amounts to about the same thing as "Alpha's" suggestion, and gives me less trouble. I cannot understand the idea of "private vaccinators" being "in two cases out of three unpaid," and it seems to be only fair that I should receive the fee which he is unable to get. Your correspondent seems desirous to do away with "public vaccinators" entirely, and I should like to ask him how he proposes to keep up the supply of lymph if such were to be the case; in my neighbourhood it is very common for neighbouring Medical men to apply to us for lymph, and they are not often disappointed. I believe firmly that if the present system of "public vaccinators" were abolished there would be great difficulty in keeping up a supply of lymph.

I am, &c.

A Public Vaccinator of Twenty-three Years' Standing.

COMMUNICATIONS have been received from—

Mr. C. M. Ashwin; Dr. G. Whyte; Dr. T. D. Griffiths; Mr. J. St. S. Wilders; Mr. J. L. Emary; Dr. J. E. Burton; A Public Vaccinator of Twenty-three Years' Standing; Mr. Simson; Dr. Eddison; Messrs. Coxeter and Son; Mr. H. N. Martin; Mr. F. Smith; Mr. Nathaniel Alcock; Dr. P. Campbell; A Guy's Man; Dr. Stokes; Dr. Angus Smith; Dr. Fairbank; Mr. Weightman; Dr. Yeo; Mr. F. R. Wilson; Dr. J. M. Duncan; Mr. J. Chatto; Dr. B. W. Richardson; Dr. F. Hulke; Dr. Sedgwick; Urban; Mr. J. F. Collingwood; Mr. A. H. Safford; Dr. Philipson; Dr. M. J. MacCormack; Mr. J. B. Blackett; Mr. S. Russell.

BOOKS RECEIVED—

New York Medical Gazette—Cases in Surgery illustrating a New Method of Applying the Wire Ligature in Compound Fractures of the Lower Jaw, by H. O. Thomas, M.R.C.S.L.—Transactions of the Clinical Society, vol. ii.—Halford on the New Treatment of Snake Bite—The Indian Medical Gazette, November—Child's Essays on Physiological Subjects—Les Eaux Minérales Lithinées. By Dr. Buez—Cowan's Introductory Address at the Opening of the Medical Session 1869-70 in the University of Glasgow—Philipsen on the Health and Meteorology of Newcastle and Gateshead, 1869.

NEWSPAPERS RECEIVED—

Melbourne Argus—The Sheffield Daily Telegraph—The Melbourne Daily Telegraph—The Australian Medical Gazette—Medical Press and Circular.

VITAL STATISTICS OF LONDON.

Week ending Saturday, November 6, 1869.

BIRTHS.

Births of Boys, 1177; Girls, 1116; Total, 2293.
Average of 10 corresponding weeks, 1859-68, 2009·5.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	890	882	1772
Average of the ten years 1858-67	655·9	620·2	1276·1
Average corrected to increased population	...	...	1404
Deaths of people above 90	...	...	...

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-cough.	Fever.	Diarrhœa.	Cholera.
West	463388	...	3	11	...	6	5	5	...
North	618210	2	10	51	2	21	9	7	...
Central	378058	...	2	27	...	10	3	...	...
East	571158	4	17	78	4	17	9	10	...
South	773175	3	14	74	2	20	15	7	...
Total	2803989	9	46	241	8	74	41	29	...

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·751 in.
Mean temperature	46·6
Highest point of thermometer	56·6
Lowest point of thermometer	35·7
Mean dew-point temperature	40·7
General direction of wind	W.S.W. & W.N.W.
Whole amount of rain in the week	0·27

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, November 6, 1869, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the year 1869.	Persons to an Acre. (1869.)	Births Registered during the week ending Nov. 6.	Deaths. Corrected Average Weekly Number.	Deaths. Registered during the week ending Nov. 6.	Temperatur of Air (Fabr. Highest during the Week.	Temperatur of Air (Fabr. Lowest during the Week.	Temperatur of Air (Fabr. Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3170754	40·7	2203	1462	1772	56·6	35·7	46·6	0·27	27
Bristol (City)	169423	26·1	125	76	*97	57·8	38·1	48·9	0·11	11
Birmingham (Boro')	360846	46·1	220	175	150	56·2	40·3	47·9	0·48	48
Liverpool (Boro')	509052	99·7	363	295	252	53·5	38·9	46·8	0·96	96
Manchester (City)	370892	82·7	261	210	*192	54·0	35·0	46·8	1·56	158
Salford (Borough)	119350	23·1	87	60	66	54·5	38·2	47·1	1·61	163
Sheffield (Borough)	239752	10·5	208	126	136	56·0	38·0	47·3	0·73	74
Bradford (Borough)	138522	21·0	99	71	68	54·3	37·1	47·2	0·43	43
Leeds (Borough)	253110	11·7	159	129	138	56·0	38·0	47·9	0·38	38
Hull (Borough)	126682	35·6	85	59	60	56·0	35·0	43·8	0·56	57
Newcastl-on-Tyne, do.	130503	21·5	104	69	75	...	...	...	...	...
Edinburgh (City)	178002	40·2	134	86	82	55·7	32·0	45·8	0·50	51
Glasgow (City)	458937	90·6	338	268	258	54·8	33·8	45·2	1·47	148
Dublin (City, etc.†)	320762	32·9	148	158	122	55·5	35·5	47·8	0·60	61
Total of 14 large Towns	6546587	35·5	4624	3244	3468	57·8	32·0	46·9	0·74	75
Paris (City)	1889842	...	...	...	921 Week ending Oct. 30.	...	...	...	...	...
Vienna (City)	605200	...	...	...	...	Week ending Oct. 30. ...	...	...	...	...

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·751 in. The barometrical reading decreased from 30·16 in. on Monday, Nov. 1, to 29·28 in. on Friday, Nov. 5.

The general direction of the wind was W.S.W. and W.N.W.

Note.—The population of Cities and Boroughs in 1869 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous.

* The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

† Inclusive of some suburbs.

APPOINTMENTS FOR THE WEEK.

November 13. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m. King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 1½ p.m.

15. Monday.

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 1½ p.m.; St. Peter's Hospital for Stone, 2½ p.m.

Medical Society of London, 8 p.m. Mr. Marshall, "On a Case of Vesicular Mole, with Specimen." Dr. H. Dick, "On a New Knife for Surgical Operations." Dr. Hawksley, "On the Stetho-sphygmograph for Aiding the Physiological and Pathological Investigation of the Functions of Respiration and Circulation." Mr. Teevan, "A Case of Lithotomy."

16. Tuesday.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.

Anthropological Society, 8 p.m. Mr. J. Campbell, "On Polygamy." Mr. C. Hamilton, "Customs of Kafirs."

Pathological Society, 8 p.m. Mr. J. D. Hill, "Diaphragmatic Hernia." Mr. Barwell, "Ventral Hernia." Mr. Nunn, "Dislocative Rheumatism" and "Fibrous Tumour over Tibia and Olecranon." Dr. Cayley, "Fibrous Tumour of Ovary." Dr. Legg, "Cherrystones retained in Ileum."

17. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.

18. Thursday.

Operations at St. George's, 1 p.m. Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

Harveian Society, 8 p.m. Mr. F. J. Gant, "On the Treatment of Fracture of the Patella, with Four Cases."

19. Friday.

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

MEAT WITH FRUIT.—GUICHON'S MUSCULINE.

The pulp of Raw Meat combined with Fruit, in the form of Sugared Tablets, manufactured at the Monastery of Notre Dame des Dombes, France.

Dr. C. M. Tidy, Joint-Lecturer on Chemistry at the College of the London Hospital, having made an analysis of GUICHON'S MUSCULINE, reports that it contains about 51 per cent. of animal matter, the remainder being for the most part Sugar. Each Lozenge weighs on an average about 28 grains—a little more than half of which, therefore, is MEAT.

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,, Herrings & Co.
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,, Hodgkinsons, Stead, & Treacher
,, Langtons, Scott, & Edden.
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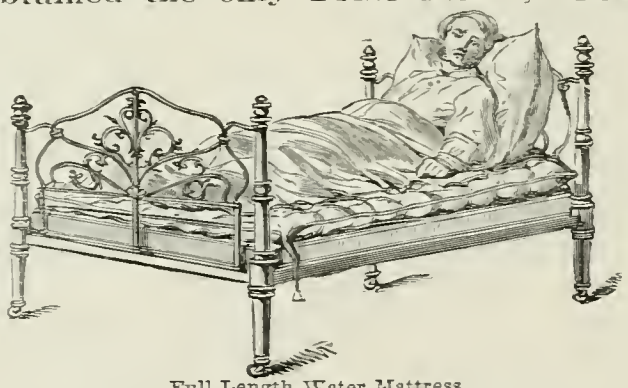

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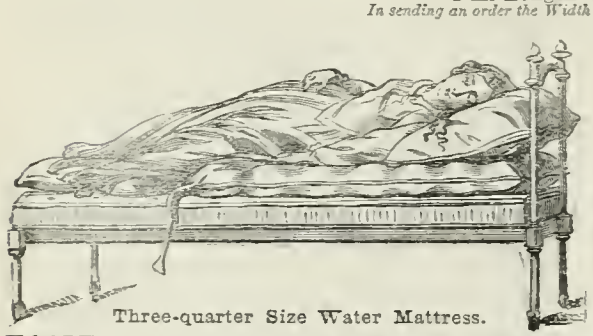

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ORIGINAL LECTURES.

CLINICAL LECTURE
ON SYPHILIS, ITS TREATMENT, AND ITS INFLUENCE IN THE PRODUCTION OF TUBERCLE.

By Dr. HERMANN LEBERT,
Professor of Clinical Medicine in the University of Breslau.

I.

GENTLEMEN,—We have just now a case under observation which possesses many points of very great interest. It is that of a girl, eight years of age, intelligent, but taciturn and remarkably reserved for her age; the girl's mother also at first gives no sufficient account of her daughter's disease. We find in the patient's neck some rather large masses—enlarged, chronically inflamed, tubercular glands—and if we examine the glands of the whole cervical region we find two kinds of glands, which are distinguished from each other by their appearance as well as by their position. Taking the two sterno-cleido-mastoidei muscles as the lateral boundaries, we have in the enclosed space, particularly in the entire submaxillary region, but more scattered down towards the clavicles, single as well as groups of glands, which are hard, of the size of a bean or larger, are for the most part glued together by indurated connective tissue, and are swollen, which glands we at once recognise as those of chronic tubercular lymph-adenitis (scrofulosis). Of quite a different nature are the glands behind the two above-mentioned muscles: these are numerous, small, not exceeding five to six mm. in length, movable, rounded or oval, and elastic: they remind us of the enlarged glands found in syphilis. Now, in examining the mouth, our suspicions are at once confirmed, for at the left angle of the mouth we find deep rhagades, with a white fatty-looking base and yellowish-red edges; a small fissured condyloma may be seen on the left edge of the tongue; both tonsils and the parts adjoining the arches of the palate are the seat of moderately deep extended ulcers of unquestionable syphilitic characters. On having the child undressed, we find on her body only a very few roseolous spots, and some very small spots of commencing psoriasis. In the glands of both inguinal regions we meet with the same two types as in the neck, with this difference, however, that there exists no marked dissimilarity in size; the principal diagnostic feature being that those of the one set are movable and have the elastic consistence of syphilitic glands the more marked, whilst those of the other set are inseparable from the connective tissue, and exhibit the characters of hard tubercular infiltrated glands.

An examination of the generative organs shows the hymen to be ruptured, the labia intensely red and swollen, the posterior commissure of the vulva to have a peculiar sore with a depression in its centre, a lardaceous base with red circumference, indurated, like a hard chancre which is becoming transformed into a condyloma. On the outer surface of the labia majora may be seen several condylomata, and around the arms are some particularly large ones.

The general condition of the patient, her appearance and contour point to some commencing disturbance of the health; appetite is tolerable; bowels act regularly; the patient coughs, and at the posterior part of the right apex prolonged expiration and an occasional rhonchus may be heard.

We now acquaint the mother with the fact that a crime must have been committed on the child some time within a few months, at the outside within half a year. The mother says that nothing can be elicited from the child, but that a woman in the same house has taken the child several times to some gentleman who gave her something to eat; this man is said to have shot himself and to have been found to be syphilitic. It is not difficult to look upon this story as a fabricated or at least a falsified one, the intention no doubt being to lead us astray on a wrong tack concerning the origin of the disease.

We might without difficulty at once ascertain the true origin of the mischief by putting the whole case into the hands of the public prosecutor—a thing which I did in one case at Zurich ten years ago, when the perpetrator was discovered and severely punished; but I will not enter into the circumstances which at that time induced me to take such severe measures.

Every one who examines closely the case under consideration is so shocked with its atrocity that it ought without doubt to be the subject of a prosecution, but yet to my mind this does not seem to be the best plan to pursue—for this reason, that the parents would have instigated a law-suit, and have spared no pains to gain the highest damages if anything were to be discovered by that means. Besides this, if we take the patient under our care as an out-patient—for her mother objects to her becoming an in-patient of the Hospital—she will be cured in a relatively short time. But if we give publicity to the case by means of the public prosecutor, a perturbance would be created in the life of the whole family; the parents would be branded and possibly damaged in their business; the child would remain the subject of an undesirable attention from all who knew her; she could not be sent to school, would be shunned by everybody, and, being acquainted by an unfortunate accident with vice, she would at a later period be driven to prostitution. Furthermore, we have to do with the case simply as Medical men, and other considerations should not concern us.

Now the question arises how we are to treat this disease. The student who is to attend the patient at her home proposes a course of inunction, to which in this case I give my approval. We shall during several weeks rub in sixteen grains of blue ointment, at first once daily, but later on morning and evening. In order that the ointment may be made to penetrate the skin of the child, the inunction will be performed in this way:—A piece of bladder is to be moistened, and then allowed to dry only so far that it may still remain soft; this bladder, when filled with cotton-wool, constitutes a tampon on which the ointment is to be placed, and by means of which it is to be rubbed in during about fifteen or twenty minutes at a time. The inunctions must be made at different places alternately, so as not to cause an eruption at any of the places. The child may be well fed, and may leave the room when the weather is fine.

I now apply courses of inunction for constitutional syphilis much more frequently, and use with relatively less frequency the courses with pills containing sublimate or protiodide of mercury, which act very slowly, disturb digestion, and after long continuance produce in the mouth disagreeable after-effects, no longer of a syphilitic nature, which molest the patient, and in spite of all assurances make him uneasy. In former times, when, during a course of inunction, the patient was restricted to the temperature of a conservatory, and when the Physician not only did not prevent, but favoured salivation, and nearly starved the patient, inunction was, reasonably enough, an exceptional and a despised mode of treatment; such a deal of nonsense and irrationality was attached to it that the better class of Physicians avoided it whenever possible. As the result of my experience in this branch of practice, I give you the following principles:—Salivation is injurious by any mode of inunction; it is therefore to be avoided. The syphilitic patient is anæmic in consequence of his disease, and his nutrition is impaired; low diet and hunger, therefore, do not act beneficially, but have an injurious effect on the course of syphilis; the particles of mercury which evaporate from the inuncted spots into the air are particularly injurious, and cause salivation; long seclusion in a small room at a high temperature adds to the disease the sickening effects of confinement. It is also a great moral as well as material disadvantage to the patient to be placed under a course of treatment which every layman recognises at once as anti-syphilitic.

From this the following conclusions for the management of inunction may be gathered, the correctness of which I can guarantee from experience.

1. The application of mercury for constitutional syphilis in the form of inunction is by far preferable to the internal administration by the mouth or by hypodermic injections. The average quantity of blue ointment to be used daily is 32 grains (2 grammes).

2. In combination with treatment by inunction a nourishing invigorating diet must be ordered, avoiding everything which would disturb digestion: the patient may leave his room and be active, guarding himself against cold, getting wet, etc.

3. Ptyalism is always to be avoided; this is most conveniently effected by washing the mouth with common water, by frequent bathing, and by the use of chlorate of potash internally, and in the form of gargle, as soon as the first signs of salivation become noticeable.

4. By avoiding unnecessary fasting and perspiration, the patient can pursue his course without attracting notice, can continue it as long as possible or as is desirable, and repeat it on any recurrence of the disease.

5. In inveterate cases of constitutional syphilis, I often obtain a very good effect from a combination of the internal use of potassii iodidum with inunction.

6. Tubercular affections of the glands and lungs are as little contra-indications for the use of inunction as is visceral syphilis.

ORIGINAL COMMUNICATIONS.

CLINICAL SURGERY.—No. V.

ON DISEASES OF THE KNEE JOINT.

By THOMAS BRYANT, F.R.C.S.,
Assistant-Surgeon to Guy's Hospital.

(*Continued from page* 540.)

PART I.

ON DISEASES OF THE KNEE-JOINT IN WHICH RECOVERY TOOK PLACE WITH A MOVABLE ARTICULATION.

CASES OF SYNOVITIS THE RESULT OF WOUND OR OTHER INJURY.

Case 1.—*Subacute Synovitis of Knee following an Injury—Rapid Subsidence of Symptoms and Recovery.*

Robert H., aged 30, a cachectic patient, came under my care on May 23, 1860, for an enlargement of the right knee-joint. It had come on rapidly after a kick upon the part received six weeks previously. Swelling was the earliest symptom, with pain and fever, and, as these symptoms did not lessen, my advice was sought. When I saw the man the knee-joint was distended to an extreme degree; the synovial cavity was filled with fluid, and bulged in all directions; it was so tense as to feel solid. Manipulation caused pain. The skin was hot, and pulse 100. A splint was at once applied to the limb posteriorly, and a blister applied on either side of the joint. A little Dover's powder was given at night, and quinine. In one week great improvement had taken place. The fluid in the joint had disappeared as if by magic, and all feverish symptoms and pain had gone. In another week strapping was applied, and by June 20 convalescence was declared.

Case 2.—*Subacute Synovitis of Knee-joint after Injury—Rapid Recovery.*

William W., aged 42, came under my care at Guy's Hospital on March 8, 1866, with a knee-joint as tense as could well be from effusion of two weeks' standing; it had come on directly from an injury. The articulation was much enlarged, and as hard as possible from effusion. There was some constitutional disturbance and local heat, but the latter was not severe. Two blisters were ordered, and iodide of potassium prescribed. In one week the symptoms had subsided, and in two the joint was flaccid. In the fourth week all signs of synovitis had disappeared. The joint was, however, strapped up to hasten the recovery in the parts about, and the man was soon declared to be able to return to his work.

Case 3.—*Chronic Synovitis after Injury—Recovery.*

George W., aged 9, came under my care on January 15, 1866, for effusion into his right knee-joint of two months' standing. It had been coming on gradually after a blow, pain and swelling appearing together. A blister was ordered, and one grain of the iodide of potassium in gentian three times a day. In three weeks the effusion had disappeared. The joint was then strapped up. By March 5 he was cured.

Case 4.—*Synovitis of Knee-joint after Punctured Wound with a Needle—Recovery with a Sound Joint.*

James J., aged 4½, came under my care at Guy's Hospital on February 15, 1866, for a subacute synovitis of the right knee-joint. It had come on three weeks previously, the day following a punctured wound of the joint by a needle. A piece of the needle was said to have been left behind, the puncture having taken place on the inner side of the patella. When seen the joint was hot and swollen; it was also painful. No needle could be felt. The joint measured one inch more than its fellow. The limb was placed on a splint, and ice was ordered to be applied. In one week the symptoms had improved. In three all severe ones had subsided, and by March 20 the knee was pronounced cured. The splint was removed, careful use of the limb being enjoined. On August 15 the child was quite well, the movements of the joint being perfect.

Case 5.—*Synovitis of the Knee-joint following a Punctured Wound—Recovery with a Movable Joint.*

(Reported by Dr. P. H. PYE-SMITH.)

Patrick F., aged 32, a flabby-looking shoemaker of temperate habits, ran an awl into his right knee when at work on March 8, 1862. The wound was above the patella to the outside of the median line, piercing the vastus externus muscle near its insertion, and less than one inch deep. The accident happened at 11 a.m., and he continued to work without any inconvenience till the evening, though he had noticed the escape of a little "oily stuff" on withdrawing the awl. During the night, the joint became very painful, and continued so for about ten days. He kept in bed during this time, and a Doctor ordered him fomentations and poultices from the third day. About the middle of the second week the pain subsided, but the knee became very stiff, and on March 30 (three weeks after the injury) he was admitted into Guy's Hospital under Mr. Bryant's care.

On admission, the right knee was much enlarged, clearly from effusion into the joint and about it of a fluid and semi-solid nature. It was not painful even on firm pressure, nor hot to the hand. It was in a semi-bent position, neither complete extension nor flexion being allowed. It was raised on a pillow, and fomentations ordered, quinine mixture being given.

On April 12, all signs of inflammatory symptoms having subsided, strapping was applied with a mercurial ointment; and when this was removed after two weeks the swelling and induration had much subsided. It was then fixed upon a splint, and firm pressure employed with a good result. In another fortnight, the man wishing to leave the Hospital for family reasons, the knee was put up in a starch bandage, and he attended as an out-patient. In another month he was declared to be convalescent, fair mobility existing in the articulation.

Remarks.—It will be noticed that in this case mercurial ointment was employed with strapping. I have now for some time given up the former part of this practice, and have had no reason to regret it, believing that the success which attends the employment of strapping and mercurial ointment is due to the pressure exerted by the former, and has nothing to do with the mercurial application.

Case 6.—*Lacerated Wound of the Knee-joint—Recovery with perfect Movement.*

Henry C., aged 23, a carman, was admitted into Guy's Hospital in August, 1858, under my care. He had, prior to his admission, received an injury to his right knee-joint from a cartwheel which had passed over it obliquely, and produced a lacerated wound three inches long on the outside of the patella. Synovial fluid escaped from the wound. The leg was placed upon a splint and ice applied, some Dover's powder and a grain of calomel being given twice a day. The edges of the wound, having been cleansed, were brought together, and water dressing was applied.

On the sixth day, the joint being much distended, and severe pain being experienced, leeches were applied, and a sixth of a grain of antimony given every three hours. After this the symptoms speedily subsided, a good recovery taking place, the man walking out of the Hospital with a sound and perfectly movable limb.

Remarks.—In the case I have just related, which I treated eleven years ago, it may be remarked that calomel was given. This was doubtless done in obedience to the advice I had received from my teachers, or rather before I had thrown off the prejudices of my Professional education. I have long abandoned the practice, having no faith in its efficacy in checking acute inflammatory action. It may also be observed that antimony was administered in a later stage of the disease, and the result of the case is certainly a strong argument in its favour; nevertheless it is not a practice which can be strongly recommended in all cases of inflammation of a joint the result of injury. It is to be employed only in acute cases occurring in strong subjects. Ice locally and opium internally are the best means for subduing local traumatic inflammations of joints not passing on to suppuration. Such cases, I venture to say, never require calomel, and rarely antimony. A splint should almost always be employed. When the acute symptoms have subsided and the chronic persist, the use of blisters in hastening the absorption of fluid is very great, and the value of iodide of potassium is also well seen. At a later stage, when the fluid has been absorbed and the synovial capsule is loose and baggy, the value of pressure is very great, two layers of strapping well applied being of much value.

I will now proceed to illustrate the subject of synovitis attacking the knee without any assignable cause. In the former series a wound or injury was the direct cause in every instance; in the present no such history could be obtained, the disease coming on by itself.

CASES OF SYNOVITIS COMING ON WITHOUT ANY KNOWN CAUSE.

Case 7.—*Simple Synovitis in a Child—Recovery.*

George H., aged 5, came under my care at Guy's, on June 7, 1866, for some effusion into the left knee-joint. It had existed for two weeks, and had come on without any known cause. Manipulation of the part caused pain. The enlargement of the joint was clearly due to effusion into the synovial capsule, the general bulging of the sac on either side, above and below the patella, indicating this very positively. Fomentations and rest in bed were ordered, and tonics given. In one week the symptoms had improved, and in two more they had disappeared. The joint was then strapped up, and a good recovery followed.

Case 8.—*Chronic Synovitis of Knee-joint—Enormous Distension of Joint—Recovery.*

Ellen G., a dressmaker, aged 26, came under my care at Guy's Hospital, on May 1, 1865, with a chronic inflammation of the right knee-joint of eight years' standing. The disease had been accompanied with very little pain. The articulation was enormously distended with fluid, and was very tense; the soft parts and bones appeared to be uninvolved. The joint measured in circumference eighteen inches, or six more than the sound knee. Two blisters were applied, and quinine with the iodide of potassium given. In six weeks the patient was nearly well. Strapping was applied, and on July 6 she was discharged cured.

Case 9.—*Synovitis of Knee—Extreme Tension of the Joint—Recovery with Sound Joint.*

Horatio N., aged 3, was admitted into Guy's Hospital under my care on March 5, 1859, for inflammation of the left knee-joint. It had been coming on for three weeks without any recognised cause, and for one week had been associated with severe constitutional and local disturbance. When seen the joint was extremely swollen from fluid within the synovial capsule. The sac was so tense that it appeared as if it would burst or ulcerate—indeed, this symptom was so severe as to make me think of puncturing the joint and drawing off some of the fluid. The operation was, however, fortunately postponed. Hyd. c. cret. gr. j., pulv. Doveri gr. iij., were ordered three times a day, and a linseed-meal poultice was applied, the limb resting on a splint. In a few days the fluid was absorbed, and the joint strapped up, a complete recovery taking place, the child leaving the Hospital in a month well.

Case 10.—*Subacute Synovitis of Knee-joint—Extreme Tension of Capsule—Rapid Absorption of Fluid.*

Mary W., aged 40, a healthy woman, came under my care at Guy's Hospital on December 2, 1867, for an enlargement of her left knee-joint. It had been coming on for one month without any assigned cause. Swelling was the earliest symptom, accompanied with pain. When seen the knee-joint was distended to an extreme degree, the capsule being so tense as to render it almost impossible to make any external impression upon it. The patella was floated well forwards. Two blisters were ordered, and iodide of potassium (gr. v.) in bark, and in one week the fluid had nearly gone, the synovial sac was quite loose, and all pain had disappeared. In another week the patient was convalescent. The knee was strapped up.

Remarks.—In this case, as in the last, the tension of the synovial capsule was so great as to make me fear a bad result, and to entertain the idea of tapping the joint. The rapid absorption of the fluid in both instances was very remarkable, and the ultimate result satisfactory. This practice of tapping a distended joint is one in which I have had no personal experience. I have seen it practised in a few cases with advantage, but have never had any under care which required it. The two I have quoted are the only examples in which the practice was entertained, and in both it was well that it was postponed.

In the treatment of all these cases simple measures were employed.

In the subacute cases fomentations to the part, with the limb kept quiet in a splint or on a pillow, with the iodide of potassium, combined with tonics when the patient's powers were feeble, were the chief means.

In the chronic, the application of blisters, one on either side of the joint, with the iodide of potassium, are generally sufficient to effect a cure, the subsequent strapping up of the joint hastening its perfect restoration. Mercury in any of its forms is never needed.

PULPY DISEASE OF THE KNEE-JOINT.

The cases of synovitis, traumatic or otherwise, that we have given may all be described as examples of simple synovitis, for they were all characterised by effusion into the joint, and not by any permanent change of structure in the synovial membrane.

In the gelatiniform or pulpy disease which we are now about to illustrate, this change of structure is the main pathological feature of the affection, the effusion into the joint being only secondary in importance. This pathological condition consequently gives rise to distinct clinical symptoms, making the affection a very definite one, and unfortunately a very difficult one to cure; for it is a truth which all Surgeons will admit that patients who suffer from this affection are, for the most part, of feeble power, and that, although the disease is a curable one in a large number of cases, it is so only when the patient is in a position to obtain good food, good air, and good treatment, while amongst the poor it too often goes on, although slowly, to suppuration and disorganisation of the joint.

I propose to quote two cases to illustrate this disease, both being good examples of the affection.

Case 11.—*Pulpy Disease of Knee-joint.—Recovery with sound Joint.*

Eliza C., aged 3, came under my care on February 5, 1866, for disease of her right knee-joint. It had been coming on for one month without any known cause. Pain and limping were the first symptoms, but, after three days a swelling was observed, and this had steadily increased. The joint became hot at times.

On examination the part was much enlarged, measuring one inch more than the sound joint. It was hot to the hand, and painful on manipulation. The bones appeared to be natural, but between the different points and around the patella there was clearly a great thickening of the synovial membrane. There was no fluctuation in the joint, and the movements were natural. Rest was ordered, with fomentations and tonics.

In two months all signs of existing inflammation had subsided, the remains of such alone showing themselves. Strapping was then employed, and, in another three months, the joint was sound.

Case 12.—*Pulpy Disease of Synovial Membrane of the Knee-joint—Recovery with a Sound Joint.*

Mary T., aged 14, came under my care at Guy's Hospital on February 13, 1865, with the pulpy disease of the right knee-joint of six months' standing. It had come on without any injury, with pain and swelling, and a gradual enlargement had taken place. When seen it was clear that the synovial cavity was expanded, and the membrane considerably thickened. There was not much increase of heat in the part, although the patient stated that, at times, the joint felt very hot. Neither was there much pain. The cartilages moved smoothly together.

Fomentations were ordered, with rest and tonics, as quinine, and by March 23 all signs of inflammation had disappeared, the products of such an action alone remaining. The joint was ordered to be strapped up.

By April 24 the thickening of the synovial membrane covering in the points of bone had much subsided, and by July 10 all this thickening had disappeared. On August 30 convalescence was declared, and on December 20 the report states that the girl was still well, with a good movable articulation.

Remarks.—In both of these cases the clinical symptoms which characterised the disease were of a typical nature—a gradual enlargement of the joint, with more or less pain, and periodical flushing of the joint with heat, being generally present. To the eye the affected articulation has likewise a special outline, a smooth uniform enlargement of the part being the most prominent feature, the points of bone which are generally to be recognised by the eye being covered in with an inflammatory exudation. To the hand likewise the special nature of the disease is as clearly manifested, for there is little, if any, fluctuation in the joint, but the soft parts beneath the skin and between it and the joint are evidently thickened; they feel semi-elastic or doughy on manipulation, and the articular margins of all the bones are more or less covered in with this thickened tissue. The bones themselves will always be found, in uncomplicated cases, the same as in the sound limb. The old authors doubtless had this disease in their minds when they described the white swelling of a joint; for before the pathology of joint disease was understood the most prominent feature of any affection was, as a rule, taken as a guide for its name, and a white swelling of a knee-joint not inaptly describes the general aspect of the pulpy disease.

What it is that determines the infiltration and organisation of inflammatory matter in the synovial membrane and subsynovial cellular tissue of these cases is a question of difficulty. We certainly find the disease, as a rule, in the cachectic, often in the strumous, and frequently in the syphilitic, subject; for what was described by Colles, sen., as the syphilitic disease of the joint, was doubtless this affection in a syphilitic subject.

It is very frequently the direct result of a sprain, the synovial thickening appearing gradually after the accident. When diagnosed, it cannot be too carefully treated; for although the local symptoms at the first are not severe, they are very insidious, and when allowed to get ahead they are most obstinate to deal with, and too often destructive in their results. A sprain of a joint followed by thickening, attended with but little pain, is a clinical condition of a joint which too often means mischief. In the same way, as we have already shown in the hip, and will shortly show in the knee, a chronic aching of a joint without enlargement too often means chronic ostitis. Both conditions are generally remediable if recognised betimes and treated on scientific principles. Both are likewise the beginning of serious joint mischief, which will end under neglect in the loss of a joint, if not of a limb or life.

One word, then, as to treatment. In this form of synovial disease absolute rest of the joint, with the limb raised, is a necessity. A splint is, as a rule, required, although in the very early stage it is not essential; fomentations and strips of wet bandage to the joint should always be applied as long as any excess of heat or flushing of the joint with heat is ever felt, and when this local sign of chronic inflammation has subsided, there is no treatment equal to local pressure by means of strapping. When suppuration appears other questions of treatment will have to be answered. They will meet with due consideration when we come to diagnose the cases of suppurating joints.

At all periods of the disease the general condition of the patient must be considered. Tonics are always needed, and in children cod-liver oil, alone or combined, is priceless in value. Good food and air are of essential importance, and sea air, when it can be obtained, of great value. Mercurials are to be condemned; they depress power and do not hasten recovery.

Amongst the poor—indeed, amongst all classes where iodine by inhalation is a want, and sea air is unattainable—in joint cases such as I have been describing, glandular affections, bronchocele, etc., I have for some years been in the habit of ordering, with striking advantage, solid iodine to be placed in a perforated box which is to be left on the mantel-piece of the sitting-room and bedroom of the patient, the iodine slowly evaporating being in this way gradually inhaled, and the atmosphere purified and iodised.

NOTES ON

ACUTE RHEUMATISM WITH MILIARIA,

AND ON

SCARLATINA MILIARIS WITH ACUTE RHEUMATISM.

By F. ROYSTON FAIRBANK, M.D.

A.B. was recently under my care for an attack of acute rheumatism, with the following history:—

Age 28, married. Had scarlatina sharply fourteen years ago, has since had an attack of acute gastritis and also an attack of herpes zoster thoracis. Has for some months been the subject of great anxiety and annoyance; at the same time the general health has been impaired by over-work. The present attack was brought on by exposure, for some hours, to unusually severe weather. He came home suffering severe pain in the left wrist and feeling generally very ill. A sharp attack of acute rheumatism followed. The acute stage lasted ten days, when, after twenty-four hours of great constitutional disturbance, a patch of scarlet rash, in every respect similar to that of scarlatina, made its appearance on the abdomen, during the day spreading over the trunk, neck, and upper extremities. The following morning the rash was covered with vesicles as thickly as they could be packed. About the neck, axillæ, and groins, many of them were as large as a threepenny piece. After three or four days, the vesicles were either broken down or beginning to dry up. At that time—the fifteenth day of the illness—emaciation and prostration were complete, so much so that I could nearly encircle the thigh with my finger and thumb, and he could not move his hand to his mouth; the urine could not be retained, and the bowels were confined. The back of the neck was so extremely tender that a swan's-down pillow felt hard. The pulsation of the carotids caused pain in the ears. The pulse was 120 and irregularly intermittent, the first sound of the heart being accompanied by a "bruit" loudest at the apex. There was extreme restlessness during the day, and delirium and alarm on waking. The perspiration was throughout unusually copious and offensive. The urine was loaded with lithates, at first red, afterwards pale. Under careful nursing he rapidly improved and made a good recovery, being able to walk ten miles in one day before a month was over. The systolic bruit disappeared during convalescence.

The treatment during the acute stage consisted of Vichy water (Célestine) *ad libitum*, opium to relieve pain, and simple diet. After the appearance of the rash, it was changed to compound infusion of gentian with ammonia, and wine and good food were given in small quantities every ten minutes night and day while awake.

Remarks.—This case was one of unusual severity; he had a very narrow escape indeed. Miliaria occurring during the course of any specific fever is usually not a matter of importance, but when it is coincident with an aggravation of the patient's condition, particularly if there is an unfavourable previous history as in this case, it will, I believe, usually be found to indicate a speedy dissolution. But what I wish to call attention to in this case is the question of diagnosis. That a similar combination of general symptoms may occur in a case of undoubted scarlatina, the following case will show.

Scarlatina Miliaris with Rheumatic Inflammation of the Joints.

Mary P., aged 11, began to be ill on Thursday, October 7, 1869. The next day the rash of scarlatina was out all over the body. The day following there was also a thick crop of vesicles over the back, the upper part of the front of the chest, and on the legs, and in a less degree over the rest of the body. On the fifth day of the eruption there was severe pain and much swelling about the ankles and knees. The vesicles were either broken or opaque and white. The tongue was clean and red. Pulse 126; temperature 103·6° Fahr. Urine copious, clear, sp. gr. 1·015; heat threw down a deposit of albumen to one-tenth. The throat was not ulcerated.

Remarks.—Now, if we compare this case with the former one, we find in both a scarlet rash, copious miliaria, and rheumatic inflammation of the joints, and a person, seeing them side by side, might well be excused for supposing at first sight that they were suffering from the same disease. But in the latter case there was a distinct history of scarlatina, while in the former there was a history of acute rheumatism for ten days *before* the appearance of the eruption, there was no sore throat, there was no epidemic about at the time, and the wife of the patient, who was in constant attendance upon him, was confined during his convalescence without a bad symptom. The importance of a correct diagnosis in such a case can hardly be overestimated.

Lynton, North Devon.

POLYPUS OF THE VENTRICLE OF THE LARYNX.

REMOVAL AFTER SECTION OF THE THYROID CARTILAGE—CURE WITH COMPLETE PRESERVATION OF THE VOICE.(a)

By Dr. M. KRISHABER.

The diagnosis of the existence of a laryngeal polypus in itself is far from sufficient; it is necessary to know how these polypi differ one from another as to their structure and as to their external characters. It is a want of such precise distinctions which causes the destruction of a polypus of the larynx through the natural passages to be considered by some one of the easiest things in the world, whilst others make a clean contrary assertion. This divergence of opinion is brought about by Surgeons looking on the polypus as merely a foreign body which they have to extract; they forget that it is an organised body, whose treatment depends above all on its organisation. The polypus can reproduce itself, grow, multiply, and change its consistence, form, and site; it may inflame or bleed; it may soften, become spontaneously detached, and undergo many other modifications. Hence it follows that the mere removal of a polypus by the air-passages does not necessarily imply immediate cessation of symptoms. More than three-fourths of laryngeal polypi are papillary tumours which speedily die when seized, and may be readily extracted by the natural passages, as is indeed universally the case when their tissue is soft, but this is more difficult when they are dense, and quite impossible when the tumour is situated in the ventricle of Morgagni. In the present instance both the latter difficulties had to be encountered.

(a) Abstract of a communication made to the Surgical Society of Paris.

On December 2, 1868, M. Charles B., aged 38, came to my house. His voice was hoarse and his respiration noisy. He said he was often seized with a convulsive cough and a sensation of great uneasiness. His tint was pale and his body thin. During M. B.'s story I noticed that his speech was interrupted at the end of each phrase by a long inspiration, which could be heard some way off. By a laryngoscopic examination an isolated polypus could be seen, situated at the anterior attachment of the true vocal cord so as to conceal a portion of that on the right side. The first examination was made during the strongest inspiration the patient could make. (Fig. 1.) But the tumour presented divers aspects according to the movements of the rima glottidis. During profound inspiration it seemed to disappear, and it could only be seen about the size of a pea, with an irregular ovoid outline, its large extremity being directed backwards towards the arytenoid cartilages. If the patient attempted to emit a normal voice-sound, the tumour became enlarged, and then concealed two-thirds of the right vocal cord and about a fourth of that on the opposite side. (Fig. 3.) If then the patient tried to send forth a high note (the sound could not be produced, but if attempted so as to approximate to the utmost the vocal cords and to elevate the larynx) the tumour stretched out, so as to cover the greater part of the

Fig 1.

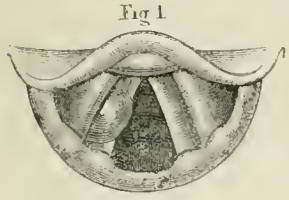


Fig 2

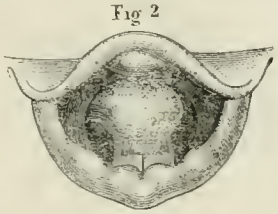


Fig 3

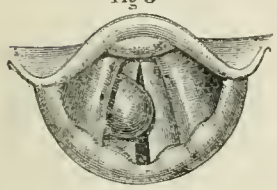
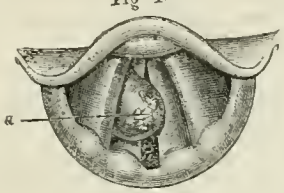


Fig 4



E.BEAUMONT DEL BLANDET.SC

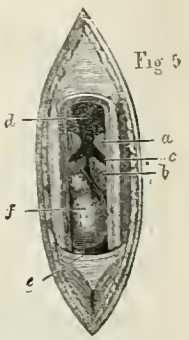
chink of the glottis, its shape resembling a club slightly constricted below its enlarged extremity. (Fig. 2.) The sound produced was very hoarse, and the inspiration immediately following on this mode of examination was louder and more oppressed than usual. Examining the larynx subsequently, so as to throw the light into the trachea, I distinctly perceived that the tumour, when it disappeared during profound inspirations, did not fall, as one would have supposed, below the level of the vocal cords; but, on an attentive examination of the mechanism of its disappearance and reappearance, I saw that most frequently, and to its greatest extent, it was placed on the right side of the ventricle of Morgagni, whence it issued when high notes were attempted. I could not make out its mode of implantation, but judged, from the mobility of the tumour, that it was implanted by a short pedicle in the bottom of the ventricle. Its colour was greyish in parts, white in others. Its shape was not quite regular, but exactly enough defined to show that its texture was compact. The diagnosis was a fibrous polypus, with a short pedicle inserted into the right side of the ventricle of the larynx.

The following are some of the particulars of the case:—Eight years ago the patient began to cough, at first slightly, afterwards more violently. He was better during the warm season of the year than in winter, when the cough became very frequent and convulsive. In the month of September, 1868, the symptoms, without any determinate cause, became aggravated, and M. B. applied to Dr. Jules Ruffey. Under energetic antiphlogistic medication the symptoms improved somewhat, but the amelioration proved of short duration, and it was then Dr. Ruffey did me the honour of consulting me. I pointed out that there was only one mode of cure possible, and that it consisted in the extirpation or destruction in its place of the polypus. The patient consented to submit to whatever I should judge necessary. I at first attempted the destruction of the polypus by the natural passages, trying first to crush it, afterwards to remove it, and, joined to these attempts, its cauterisation by means of nitrate of silver. But, although easily seized by the forceps, the polypus resisted all these trials, on account of its extreme density. In several of these operations, ending in removal of small portions (Fig. 4), such were the efforts I made that the forceps slipped, and violently struck the roof of the mouth. Inflammation of the organ followed, the voice was extinguished, the cough became more and more frequent, alarming attacks of suffocation supervened at closer intervals.

It still remained to attempt galvano-cautery, but I did not forget that the tumour was implanted in the ventricle of the larynx, and that I could only reach that portion which protruded during phonation. One can easily conceive the difficulty and danger of the galvano-cautery applied to a mobile tumour which tended to disappear with each inspiratory movement. Under these circumstances, a direct operation on the larynx or trachea was indicated. I put aside the idea of tracheotomy, as being only a palliative operation, and determined on laryngotomy, so as to be able to remove directly the polypus which had resisted my reiterated attempts.

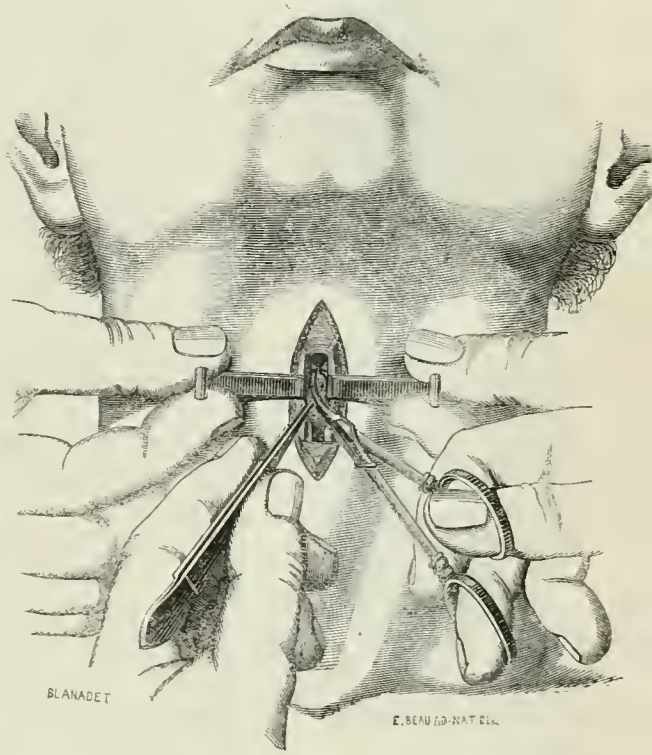
M. B. was allowed some days for repose, but on February 9 I proceeded, with the help of Drs. Ruffey and Planchon, to perform the operation. The patient was placed in bed as for the operation of tracheotomy, and an incision made from the hyoid bone to the inferior border of the cricoid. The thyroid cartilage was then divided from above downwards, exactly in the mesian line, by means of scissors. The upper two thirds were easily divided, but the lower third was ossified, so that I failed to open the larynx with ordinary scissors, and stronger ones had to be employed, wherewith the cartilage was literally fractured. This appears to me to be of importance with regard to the subsequent perfect cure of the wound without any damage to the vocal cords. The thyro-hyoid and crico-thyroid membranes were not injured.

Fig 5



The larynx thus opened, one assistant separated the edges of the wound, the other holding the lamp behind me so as to throw the rays of light into the cavity of the larynx. (Figs. 5, 6.)

Fig. 6.

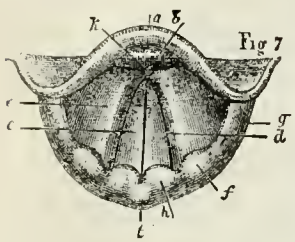


The opening was about four millimetres wide, and was too narrow to allow me to see the interior without a strong artificial light, especially as the cavity was filled with blood. I

rapidly plunged into the right ventricle a small forceps, seized the tumour, and, with a pair of curved scissors, cut it exactly at its root. (Fig. 8.) Immediately the breathing became normal, and, what is more remarkable, the cough instantaneously ceased. To assure myself of the integrity of the vocal cords, I requested the patient to sing over the scale. The notes were vibrating and sonorous, as if his larynx was in an absolutely normal state. I tried to approximate the edges of the wound by means of fine sutures, but was soon obliged to renounce that and other attempts, as violent paroxysms of cough, in spite of every obstacle, separated the edges of the wound. By degrees, however, reunion took place from above downwards, and on the thirty-ninth day after the operation the edges of the wound were completely united. On March 23, forty-one days after the operation, M. B —— came to see me. He had all the appearances of perfect health. The cough was gone, his voice perfectly normal, and his breathing perfectly free. A laryngoscopic examination showed me the vocal cords free in all their extent, freely separating during inspiration, and freely approximating during phonation. (Fig. 7.)

Fig 8

Fig 7

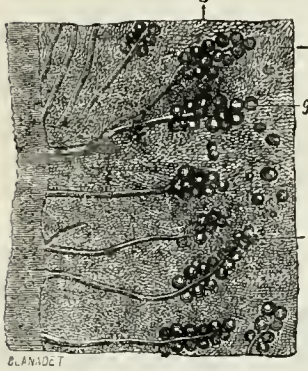


Conclusions.

1. There are cases of laryngeal polypi in which destruction or ablation by the natural passages becomes impossible. In such we may open the larynx directly, and obtain complete cicatrisation along with the cure of the disease.

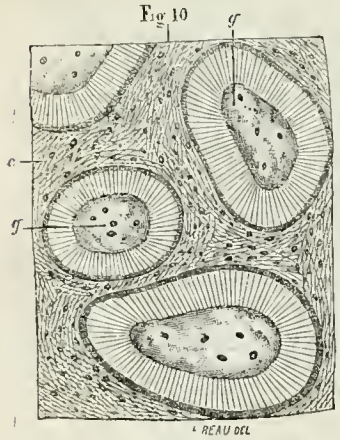
2. The mode of operation depends on the seat of the tumour and on its structure. The larynx may be opened by its membranes or by its cartilages.

Fig 9



3. In those cases where the polypus is seated in the ventricle of Morgagni, the section ought to be made through the thyroid cartilage, the opening thus obtained being sufficient for the removal of even a large polypus without section of the thyro-hyoid and crico-thyroid membranes. Section may be made without injuring the vocal cords, so that the voice remains intact. Suspected ossification of the cartilage does not contraindicate the operation, although it retards cicatrisation.

Fig 10



4. Laryngotomy, consisting of cutting through all the structures of the larynx, membranes, and cartilages, such as has been sometimes performed, ought to be rejected. When the laryngoscope has demonstrated the exact site of the tumour, it is enough to open the larynx at the exact spot.

5. Of all the modes of procedure hitherto employed for the extraction of polypi, the operation I have narrated is that in which the incision into the larynx was least extensive. It is to this procedure I attribute the complete cure of the patient.

The microscopic examination made by M. Ranvier gave the characters of a fibrous tumour, containing a considerable number of glands. (Figs. 9 and 10.)

CASE OF ABDOMINAL HERNIA—OPERATION—RECOVERY.

By JOHN WOODMAN.
Hon. Surgeon to the Exeter Dispensary.

Mrs. W., aged 50, wife of an hotel waiter, a very stout woman, has repeatedly had attacks of acute pain in the bowels, which generally yielded to purgative medicine; the abdomen was very large, and she always wore a bandage to support it.

October 9, 1867.—Was called to see her, and found her suffering from, as I thought, one of her usual attacks. I administered an aperient which gave her slight relief.

12th.—On examining abdomen, I found a swelling above the umbilicus, apparently between the recti muscles, which was soft and yielding, but which could not be quite got back by pressure; still it did not feel like a strangulated hernia.

13th.—The patient getting rapidly worse, and stercoraceous vomiting having set in, I asked Mr. Kempe, Surgeon to the Devon and Exeter Hospital, to see her, and he agreed with me in thinking an operation the only chance of saving her life. She willingly consented to our doing what we thought best; so, with his assistance and that of my neighbours Mr. S. Perkins and his son, the latter of whom kindly gave chloroform, I made an incision in the abdomen over the swelling of about six inches in length, in the direction of the linea alba, dividing the different layers on a director. On introducing my finger into the cavity of the abdomen, I could find no definite stricture, but several bands of lymph, which appeared to have drawn the intestine and the wall of abdomen together; these I broke down with my hand until I had freed the intestine. On further examination a portion of the ileum appeared full of hard knobs, which being felt through the omentum resembled scirrhus of that structure, and made us fear that might exist; but from the sequelæ they could only have been scybala. I brought the edges of the wound together with harelip pins, passed deep, and twisted sutures. The operation relieved her completely of pain and vomiting. The bowels were opened on the third day; there was no peritonitis, and the only difficulty in the after-treatment was that the great weight of the abdomen tended to tear open the wound. A twelvemonth after the operation she said she was better than she had been for years, and that it had entirely relieved her from the attacks of pain she had suffered from before.

St. Sidwell's, Exeter.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

LONDON FEVER HOSPITAL.

RELAPSING FEVER.

Relapsing fever has been for so many years absent from our shores that it is not surprising that considerable alarm has been excited by the present epidemic. It is a disorder, however, which is attended with but a small mortality, and it shows a state of want among the poor which it is necessary to alleviate, nor need it excite fears in the minds of the people generally.

Many fevers carry off great numbers of those whom they attack, and the anxiety of a community is ever great when no one knows how soon he in turn may become a victim of pestilence. Relapsing fever at present has been attended with fewer deaths than usual, for, with one doubtful exception, which has been registered as "famine fever," not a single death has occurred as yet among those attacked.

The present state of poverty in the poorer parts of the metropolis, consequent upon the stagnation of business and the want of employment, associated with an overcrowded and squalid population, afford conditions highly favourable for the occurrence of an epidemic like that which now prevails.

The first case of this fever was admitted into the London Fever Hospital on July 4, 1868, and in a few days six more cases were admitted from the same locality; they all came from Whitechapel, from a very poor and overcrowded neighbourhood; most of the patients were Polish Jews, and Dr. Murchison (in the report from which we have quoted the above facts) thinks that the disease had been contracted from Polish immigrants.

This seems the more probable, as last year several cases occurred in East Prussia and also in Berlin.

From July, 1868, up to May of this year no fresh cases were admitted at the Fever Hospital; but seven Polish Jews suffering from this disease were in the German Hospital at Dalston between September and December of last year. As far as we are aware, no cases have been met with in other parts of Great Britain or Ireland.

In May last a few persons fell ill, and since that time the epidemic has rapidly increased, more especially during the last few weeks.

For the number of cases admitted into the Fever Hospital up to the present time, we are indebted to the kindness of Dr. Barber, the Resident Medical Officer, who most kindly gave us an opportunity of seeing the wards, and showed us many points of great interest.

The following are the admissions for each month:—

	Cases.
May	4
June	3
July	7
August	15
September	34
October	127
November (first fortnight only)	104

It is clear, therefore, that the epidemic is rapidly increasing, as the admissions for only the first half of this month are nearly as numerous as those for the whole of October.

Besides those suffering from this disorder, there are upwards of 130 persons in the Hospital who have scarlet, typhus, or typhoid fever, and a few also who have no fever at all, but remain there because they are too ill to be removed.

The following is a list of the cases in the wards on November 15:—

	Cases.
Relapsing fever	160
Scarlet fever	63
Typhoid fever	40
Typhus fever	27
Total	290

The accommodation not being sufficient for the numerous patients who are daily coming in, arrangements have been made for the construction of a light iron Hospital, which will be capable of holding nearly a hundred fresh cases.

At present most of the patients who have relapsing fever are placed in two separate blocks of buildings on the western side of the Hospital. These wards are the same as those which were used in the cholera epidemic of 1866. Each block is one story high, and divided into two wards by a vertical partition, which extends to about half the height of the room, so that there is free communication between each ward, and also, by means of windows and ventilators, with the external air. The male ward is heated by hot water-pipes, which are affixed to the wall all round; the female ward is in a more finished state, and is heated by two stoves in the centre of the floor. Each ward is capable of holding about thirty patients, so that the two blocks can now accommodate about 120 fever cases; the rest are scattered about the main building.

All ages seem to be pretty equally represented; one man was 72 years of age, and a woman aged 68 years had passed through the relapse and appeared quite convalescent. The youngest patient was an infant only five months old; the mother was in for the same disease, and the child seems to have taken it from the parent, as it was suckled until the day before admission. The child did not seem very ill, although its temperature was above 103° F. The temperature may very often be high, although the pulse beat slowly. Dr. Barber pointed out one case in which the temperature was over 102° F., while the pulse was only 60 per minute.

The most prominent symptoms appear to be headache, jaundice, epistaxis, and a moist buttery tongue. In most the skin and conjunctivæ have been of a sallow tint, if not decidedly yellow, but the urine has not been of a markedly high colour. A rash has been observed also, but not very constantly; some had a kind of subcuticular mottling not unlike that met with in typhus, others a few rose-coloured spots, while many had small hæmorrhagic dots about the size of a pin's point; true petechiæ have not been met with.

Very few cases have had more than one relapse, and none more than two at present. The defervescence after the first pyrexial period has been generally associated with sweating; that following the relapse is less marked than the former. The relapse has generally taken place about the fourteenth or fifteenth day, and is much less severe, as a rule, than the first attack; the second relapse is much shorter, and may only last a few hours.

Complications have not been at all frequent. Diarrhœa and constipation are both found. Some seem to have had bronchitis, but in none was it a symptom of any extreme importance.

The treatment of all the cases has been very simple. In the pyrexial stage merely a saline, consisting chiefly of nitre, is given, and during the convalescence steel and quinine are prescribed; at the same time they are placed on a light and nourishing diet.

The patients have come from various parts of London. At first they were chiefly found in Bethnal-green and Whitechapel, but since then a great many have come from Lambeth and St. Giles.

In the neighbourhood of Drury-lane, in courts inhabited by a low Irish population, as Granby-court, and also in Great Wyld-street, numerous cases have occurred. From one house no less than thirteen cases have been sent to the Fever Hospital. Many of them seem to have lived very badly, and spent the little money they had in drink instead of buying wholesome food; many also seem to have caught the fever while working at hop-picking in Kent.

Thus, while the disease is increasing around us, there is no cause for panic; but rather our efforts should be directed towards alleviating or altering those conditions of life which are such prolific sources of disease. Nor need we too rashly conclude that, from the analogy of preceding epidemics, it must necessarily follow that typhus will be prevalent. At present very few cases have occurred, and now that our officers of health are so vigilant, it is less likely than heretofore that any case will be allowed to remain in a crowded alley to serve as a nucleus for a hotbed of disease. Yet it must be borne in mind that those who have been impoverished by previous bad living and debilitated by a recent attack of relapsing fever, typhus fever is more prone to attack than others; but in these cases an early removal and the use of preventive sanitary measures will probably do much in preventing any serious spread of the disease. At King's College, St. Bartholomew's, St. Mary's, Middlesex, and Westminster Hospitals, a few cases of relapsing fever are also to be found.

A certain number of cases have also been treated by the parochial Medical officers.

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Medical Times and Gazette.

SATURDAY, NOVEMBER 20, 1869.

PROFESSOR LEBERT'S LECTURES.

In bringing before our readers a series of clinical lectures by the foremost Continental Professors, we commence with Lebert, a man whose name is well known to all those English Practitioners who have kept themselves acquainted with the progress of pathology. Dr. Lebert has occupied a chair of Clinical Medicine both in Zürich and in Paris, and now he is Professor of Clinical Medicine in the University of Breslau. This explains why some of his most important works have been written

in the French and others in the German language. His *chef d'œuvre*, "Physiologic Pathologique," two volumes, with an atlas in one volume, has been crowned by the prize of the Academy of Paris, and it forms one of the foundations of modern pathology. In 1847 Dr. Lebert's researches on the analogy and differences between scrofulous and tuberculous diseases gained Portal's Prize from the Academy of Medicine. His work on cancer was published in 1851; it contains an analysis of 467 cases observed by the author, and to his description of cancer in every organ he adds a thorough account of all the non-cancerous affections that may be mistaken for it. In his work on dermoid tumours, published in 1852, Lebert showed that the hair, teeth, bones, glands, etc., found in such tumours are not remnants of a fœtus, but are neoplasms. Concerning the formation of these neoplasmata, he has laid down what he calls the law of "plastic hétérotopie," by which any tissue or compound part of the body may become abnormally developed in places where they are not normally found.

A too extensive paper would result if we were to touch on all the works and essays published by Lebert: they amount to over one hundred, and extend over various important branches of Medicine, as well as of natural philosophy, including botany and zoology. But we cannot conclude these remarks without alluding to the prominent part Professor Lebert has recently taken in the question of the inoculation of tubercle.

The characteristic features of everything which emanates from Lebert's pen are profound learning, accurate observation, extensive experience, and a thorough acquaintance with the literature of the subject on which he writes. His style is at once graceful and forcible, and the clearness and distinctness with which he gives expression to his thoughts scarcely leave a doubt in the reader's mind on any point he discusses. Lebert is a philosophical writer, borrowing conciseness from his thorough knowledge of logic, elegance from his acquaintance with literature, and building up all his propositions on a solid basis of well-observed fact derived from a very extensive experience. The deep erudition of the German, the admirable style of the French, and the practical weight of the English are united in his person.

THE AIR WE BREATHE.

Under the title "Town Air and Country Air" we had occasion to refer to the fact that the inhabitants of unhealthy towns and the occupants of ill-ventilated dwellings do not suffer from deficiency of oxygen in the air they breathe or from accumulation of carbonic acid, but from the presence of minute traces of impurities in the atmosphere by which they are surrounded. This fact (although a most fundamental one, and although obvious enough to chemists who have turned their attention to the chemistry of the atmosphere) bears an appearance of novelty, and requires to have a little light thrown upon it. Many persons will regard it, at first sight, as opposed to the plainest and most elementary facts of chemical science. After the great discovery towards the end of the last century that the atmosphere consists almost entirely of nitrogen and oxygen gases, and that, by combustion and respiration, oxygen is taken from the air and carbonic acid added to it, nothing could be more natural than to suppose that the atmosphere in favoured localities would be found to be rich in oxygen and comparatively destitute of carbonic acid. Many of the earliest analyses of air taken from different parts of the country were, curiously enough, made by a fallacious process, and did actually lead scientific men to believe in the occurrence of great differences in the constitution of the atmosphere in different localities. The method adopted by Priestley for the analysis of the air was the absorption of the oxygen by means of binoxide of nitrogen and water—a process which is indeed capable of yielding tolerably accurate results when carried out properly, but which is liable to sources of error which were very imperfectly understood in Priestley's time. Accordingly, some sixty years ago it did actually seem to be a fact, vouched for by experiment and by theory, that a close and unhealthy atmosphere, such as was often met with, was an atmosphere very deficient in oxygen, and very much contaminated by carbonic acid. Although the experimental bases upon which this conclusion rested have been long ago destroyed, yet nevertheless the belief survives even to this day in the form of a popular error, and not only as a popular error, but as an error shared by very many well-informed persons. For many years past it has been universally accepted by chemists as a thoroughly well-established fact that, whether a specimen of air be taken at the top of a high mountain or down in a valley, or whether it be taken from the middle of a continent or from the surface of the sea in the middle of the ocean, there is hardly any variation in the relative quantities of oxygen and nitrogen contained by it. The percentage of carbonic acid occurring naturally in the atmospheric air in these so vastly different localities is also recognised to be never more than a mere trace. All this is at the present day known and admitted by every chemist. But the investigation has been pushed further, and chemists are in possession of experimental data—ample in quantity and of unquestioned authority, although strangely rather lost sight of—proving that in like manner there is no great difference in the relative proportions of oxygen and nitrogen, and that the carbonic acid is never more than a trace in atmospheric air, whether it be taken in the street of a town or in the open country, or whether it be taken from the interior of a crowded theatre, or from an ill-ventilated dwelling, or from out of doors. In order to convey an adequate idea of the constancy of the atmosphere under these conditions, we will cite the published analyses of Dr. Angus Smith, premising merely that they are corroborated by other and independent observers, as, for instance, by Dr. Roscoe, who has made examinations of the carbonic acid contained in the air of close places.

The amount of oxygen contained by 100 parts of air obtained from the undermentioned places is as follows:—

From the sea-shore (Scotland) . . .	20·999
,, summit of the hills	20·98
,, suburbs of Manchester (wet weather) .	20·98
do. do. .	20·96
,, Manchester (fog and mist) . . .	20·91
,, sitting-room which felt rather close .	20·89
,, pit of a theatre 11.30 p.m. . . .	20·74
,, gallery of a theatre 10.30 p.m. . .	20·86
,, backs of houses and closets . . .	20·70

The amounts of carbonic acid contained in 100 parts of were as under:—

From the hills in Scotland	0·0332
,, plain ,, ...	0·0341
,, surface of Thames in London . .	0·0343
,, parks and open places in London . .	0·0301
,, London (average)	0·0341
,, streets of Manchester	0·0403
,, neighbourhood of privies . . .	0·0774
,, worst parts of theatres	0·320

These figures are eloquent. According to them the atmosphere of London does not contain more carbonic acid than the atmosphere of the country in Scotland. Sometimes even the air in the London parks contains a trifle less carbonic acid than the air in Scotland. The air from a Manchester street contains only a trifle more carbonic acid than the air in the country—just about as much more as air in a London park contains less. Even the worst part of the pit of a theatre contains only three parts of carbonic acid in 1000 parts of air. Unless, therefore, carbonic acid be very actively poisonous, we cannot look upon the degree of its accumulation even in the pit of an ill-ventilated theatre as the cause of the closeness of the atmosphere. On a future occasion we propose to give some explanation of this constancy of composition, and of the kind of deductions to be drawn from minute alterations in the atmosphere.

THE HOSPITALS AND THE POOR.

We understand that the Poor-law Board have addressed the governors of some of the larger of the London Hospitals with the view of ascertaining whether they are prepared to receive and treat pauper patients. Some such arrangement appears necessary in order to secure proper accommodation for the sick poor in the metropolis during the coming winter. The authority for the proposal is to be found in section 16 of the Metropolitan Poor Amendment Act, 1869 (32 and 33 Vict., cap. 63), which enacts that "it shall be lawful for any board of guardians, with the consent of the Poor-law Board, to enter into arrangements with any public general Hospital or Dispensary situate within the limits of the parish or union for which the said board act, to receive and treat pauper patients on terms to be arranged between the board of guardians, with the sanction of the Poor-law Board, and the authorities of the Hospital or Dispensary, as the case may be." The authorities of the Hospitals communicated with have been requested to inform the Poor-law Board whether there is in the institution under their control any spare accommodation which they would be willing to appropriate for the reception of pauper patients, and, if so, what classes of cases would be suitable. It further appears that, on learning particulars of the number who could be thus accommodated, and of the terms on which their maintenance and treatment could be arranged, the Board will endeavour to effect satisfactory arrangements between the Hospital authorities and the guardians of those places in which additional provision for the sick poor is required.

THE WEEK.

TOPICS OF THE DAY.

Mr. Gladstone, sitting aloft, the Jupiter Pluvius of the hour, has been raining a drenching shower of peerages, baronetcies, and knighthoods upon unwilling as well as willing heads. Only the edge of the gracious cloud, however, has overshadowed the Profession of Medicine. In the person of the President of the Royal College of Physicians, Dr. Alderson, the Profession have been honoured with a knighthood. We congratulate Sir James Alderson—whose courtesy and conduct in the presidential chair have won him golden opinions from his College—on his new style, *eques auratus*.

It is understood that the Royal College of Physicians will return an answer to the recent educational missive of the General Medical Council in favour of a conjoint examination board for each of the three divisions of the United Kingdom. We never doubted the character of the reply that would be given by the College in Pall-mall East, for, as it has been said, it has everything to gain by the change. Farseeing men, however, are beginning to talk of the difficulties which are in the way of joint action, even if the corporations can agree amongst themselves. Will the universities tamely submit to give up the right of licensing to practise Medicine throughout the United Kingdom, which was practically conferred on them by the Act of 1858? To say nothing of the immense difficulties which are sure to arise in Ireland and Scotland, especially in the former country, where incongruous elements like the Queen's University, the King and Queen's College of Physicians, and the Dublin Apothecaries' Company must be amalgamated or neutralised, and to come nearer home, is it likely that the University of London, for instance, will readily consent that its graduates should only receive their licence to practise from a board composed of representatives from the three corporations? We must confess that we are not certain whether such a change as it affects the University would be of practical benefit to the public. No doubt that the one board system would produce a level in the Profession, but before it is adopted it is well to be sure that the process by which the level is produced will be one of levelling up rather than of levelling down. The only reason for change is that a high level should be obtained, not a dead mediocre one. In reference to the idea that Fellowships and University degrees should be only ornamental and no longer useful, and that the sole licence giving the right to practise should be for every member of the Profession one and the same, it may fairly be urged that what is merely ornamental will only be obtained or prized by the few, and that the character of our higher Medical examinations must suffer if the candidates are reduced to the rich and dilettante classes of students. We would have it clearly understood that we are not expressing an opinion against the plan of a conjoint board; on the contrary, we have always advocated a scheme of the kind. But it is only wise to estimate difficulties and to provide against the possible drawbacks of even the most promising project.

At the time of our writing the election for the Universities of Glasgow and Aberdeen is virtually decided in favour of Mr. Gordon. When the poll was adjourned on Wednesday Mr. Gordon had polled 1025 at Glasgow and 1055 at Aberdeen, Mr. Smith 936 at Glasgow and 605 at Aberdeen. As the voting-papers on both sides were exhausted, Mr. Gordon's majority of 539 could not be materially diminished. The poll was to close on Friday. There can be no doubt that Mr. Smith's avowed ignorance of the political subjects in which the Medical graduates are specially interested has been one of the chief causes of the defeat of the Liberals.

The Marquis of Salisbury has been elected Chancellor of the University of Oxford.

A special meeting of the Governors of St. Bartholomew's Hospital is convened for Monday next, when the Treasurer, Mr. Foster White, will make his defence of the management of the Hospital. The Prince of Wales will preside. The meeting takes place in the great hall of the Hospital at 12 o'clock. Until the defence is made public, common fairness requires that comment shall be abstained from. The most serious charge that has been suggested is that of excessive expenditure, and in particular of excessive expenditure in repairs. It is intimated in reply that the repairs charged refer not only to the Hospital, but to all the buildings upon the St. Bartholomew's estates. Be this as it may, a clear statement is requisite to restore the public confidence. The other things complained of are matters of detail, of want of judgment, or of retention of old customs in the face of modern wants and ideas. Such are the admission of the enormous number of out-patients and the paucity of the staff to see to them, the misplaced economy in drugs, the bad accommodation for the nurses, and the like. And, in reference to these last-named matters, it is to be hoped that the Medical staff will come forward and show themselves to be not guilty of acquiescence in old and imperfect arrangements, and to be provided with a scheme for the reform of any abuses which lapse of time may have brought upon this venerable establishment.

A Chair of Hygiene has been established at King's College, and Dr. Guy has been appointed the first Professor. He will give his first course of lectures in January, February, and March, 1870.

Mr. Bell Pettigrew, whose beautiful anatomical preparations attracted so much notice during his connexion with the Hunterian Museum, is a candidate for the offices of Pathologist to the Edinburgh Royal Infirmary and Conservator of the Museum of the College of Surgeons of Edinburgh. In consideration of the pre-eminent claims which Mr. Bell Pettigrew has upon these appointments, Mr. Lawson Tait, who was also a candidate, has retired in his favour.

The following regulations for the admission of women to the study of Medicine in the University of Edinburgh have been issued by the University Court:—

"1. Women shall be admitted to the study of Medicine in the University.

"2. The instruction of women for the Profession of Medicine shall be conducted in separate classes confined entirely to women.

"3. The Professors of the Faculty of Medicine shall for this purpose be permitted to have separate classes for women.

"4. Women not intending to study Medicine professionally may be admitted to such of these classes, or to such part of the courses of instruction given in such classes, as the University Court may from time to time think fit and approve.

"5. The fee for the full course of instruction in such classes shall be four guineas; but in the event of the number of students proposing to attend any such class being too small to provide a reasonable remuneration at that rate, it shall be in the power of the professor to make arrangements for a higher fee, subject to the usual sanction of the University Court.

"6. All women attending such classes shall be subject to all the regulations now, or at any future time, in force in the University as to the matriculation of students, their attendance on classes, examination, or otherwise.

"7. The above regulations shall take effect as from the commencement of session 1869-70."

It will be seen that these regulations attempt to reduce the evils which must arise from the admixture of the sexes in Medical study in one and the same school to a minimum, and we shrewdly suspect that the fifth regulation is intended to make the whole scheme inoperative if it be found to militate against the interests of the Medical Faculty in the University. But, whatever regulations are passed, we hold that it is unwise to educate the youth of both sexes in the arcana of an art and science like that of Medicine under the same roof. If women are determined to be doctors, no one wishes to hinder them; only let them have their separate schools and examining boards. We are firmly persuaded that the steps the University of Edinburgh has taken in this matter are not in accordance with the wishes of the Medical graduates of the University, and that either the whole scheme will prove a failure and be abandoned, or the attendance of male candidates for degrees on the Medical classes of the University will be seriously diminished.

The St. Pancras Board of Guardians have accepted the solution of their difficulties proposed by the Poor-law Board. They only suggest that the Highgate Infirmary should be used for convalescents, instead of for the acutely sick; and they urge as a reason the injury which would be done to patients in acute disease by a removal of three miles. And thus the squabble which has occupied so much of our own and our contemporaries' space seems to be coming to an end. Meanwhile, however, the Poor-law Board have undertaken an inquiry into the conduct of Dr. Ellis, the resident Medical officer, whom the present board of guardians are desirous of dismissing, and coroners' juries have found that the deaths of several persons have been accelerated by breathing the foul air of the wards of the present Infirmary.

A recent *Pall-mall Gazette* contains an article on the life of a Dorsetshire labourer and his family, the particulars of which are culled from a Blue-book that has just been issued. There is no doubt that the wages and consequent condition of farm labourers in the south-west of England have not risen with the general improvement in the pay of the labourer and the artisan elsewhere. Nine shillings a week was the ordinary rate of wages for an able farm labourer in Devonshire and Dorsetshire thirty years ago, and the Blue-book informs us that in some parts of Dorsetshire it remains the rate now. The peasants can get no butchers' meat, and, according to the evidence of a shepherd's wife, with the exception of pork and mutton at 3d. a pound, "when a giddy sheep is killed on the farm it is good when sticked in time," they taste no animal food. They make a broth of bread, hot water, pepper, and salt. Now, all this in print seems deplorable enough, but we know that it has been the condition of the peasantry in that district for a long period of years. Butchers' meat is a luxury unknown, and the above recipe is the same as that of the Devonshire "teakettle broth," with the exception that the latter has a bit of butter and a little parsley. With all this, the West-country peasantry are a healthy and long-lived race. Some of the assertions in the Blue-book must, however, we think, be taken *cum grano salis*. A woman whose husband gets 9s. a week says that she had to pay a Doctor's bill of £7 1s. for a fortnight's attendance. On behalf of our Profession, we must say that this story wants confirmation. According to the statement of the clergyman of Sturminster Marshall, a labourer without a family cannot get work because the children who are able to work are hired with the father, and "two boys can do as much work as a man, but their combined wages do not amount to so much." We doubt the truth of this; no boy or pair of boys can do the work of a skilled labourer. No doubt that the people are badly paid, considering the present value of money, but they are healthier and happier than the ship-building population on the banks of the Thames.

The earth treatment of obstinate wounds, which our readers may recollect has been spoken highly of in America, has also been tried in Melbourne, and it is said with success. The treatment consists in the application of virgin soil to the surface of the wound.

RELAPSING FEVER.

A SECOND report has been sent by the Medical Officer of the Privy Council to the London vestries with respect to the re-appearance of relapsing fever. Dr. Buchanan, one of the Inspectors of the Medical Department of the Privy Council, has been charged with the duty of reporting on the progress of this disease in the different districts of London. From this report we find that since the year 1855 no cases of this fever were admitted into the London Fever Hospital until last year, although 30,000 patients were treated there. The history of the present epidemic is given in our Hospital Reports this week, and from that it will be seen that since May the fever "has steadily increased both in amount and in area of distribution. In May cases occurred in Lambeth, Southwark, Kensington, and Whitechapel. In June three cases were sent to the London Fever Hospital, one from the West London Workhouse, one from a street in St. George's-in-the East, and one from Camberwell Workhouse. The following month some cases were admitted from Chelsea Workhouse, Bethnal-green, and Islington Workhouse. In August the fever seems to have spread more rapidly; St. Giles's, Bethnal-green, and Whitechapel were all attacked, and many patients were sent to the different Hospitals.

Thirty cases were admitted into the London Fever Hospital during September, and five, all from one house in Great Wyld-street, into King's College Hospital. In October 123 fresh cases were received into the Fever Hospital, 3 into King's College Hospital, 1 into the German Hospital, 2 into Middlesex Hospital, and 1 into Bartholomew's. In the first nine days of the present month 73 cases have been admitted into the London Fever Hospital, and a few into King's College and other Hospitals. On the 10th inst. there were no fewer than 138 cases of the disease in the Fever Hospital, and on the 16th inst. the number had increased to 153.

Up to November 9, 280 cases had been admitted into the various metropolitan Hospitals, and to these must be added 4 attendants on the sick at the Fever Hospital who have been attacked by the complaint. Very few nurses or inmates appear to have contracted the disease in the Workhouses or general Hospitals. At the present time (November 17) 308 persons have been attacked; but this estimate does not include those who have remained during the fever at their own homes. Up to August 31, 26 houses had been attacked, and 39 patients suffered; in September, cases were sent from 20 fresh houses, including 7 houses in districts not previously attacked; and 39 fresh cases were admitted. In October the disease was met with in 76 houses, and 18 of them were in districts in which the fever had not appeared before; 131 persons fell ill during

this month. Up to November 9, 34 fresh houses were attacked, but only 2 houses in districts which before had escaped the epidemic. Up to that time 73 people were attacked; since then the number has increased.

DR. STOKES'S ADDRESS.

From more than one quarter we have testimony to the value and importance of Dr. Stokes's address at the Meath Hospital, published in our last number. With this opinion of its merits we most cordially agree, and we trust that the address will be widely read and the precepts inculcated in it deeply impressed on the minds of our Professional brethren, and especially of all who are entrusted with the regulation of Medical education. Of Dr. Stokes himself we need say nothing, nor need we, let us trust, bespeak consideration for anything he says. Still we would venture to enforce the principles he lays down. The Medical Practitioner should be a gentleman of education. He places amongst Medical qualifications morals first. A good Physician must be a good man. "Charity, self-abnegation, courage, caution, reflection, patience, modesty"—these are things that must be learned, though found in no curricula. Medical ethics are the principles that make our Profession a fit one for the gentleman and the Christian. Professor Stokes follows in the wake of Hippocrates, Sydenham, and all the fathers of our art. He venerates experience; he looks upon the Physician of the present day as a man of high ancestry, and rebukes that irreverence which neglects the mighty teachers of the past. The younger Practitioner will be instructed by Dr. Stokes, the elder delighted.

THE LATE MR. PEABODY.

The Medical Profession fully shares in the public regret at the decease of this great benefactor of the poor. It is generally understood that his health had been giving way for many months. A journey to the mineral waters of Virginia failed to do good. On his return he seemed much prostrated, and exhibited a little gout in one hand. The gout disappeared, but with no general relief; appetite was lost; no food could be taken but milk; and then there was a gradual *strike* of the vital organs; the mind became clouded, the breathing slow; till at last he fell into a sleep—tranquil as an infant's—from which he never woke. The body was embalmed under the special personal care of Dr. Pavy, and, having received honourable funeral rites in Westminster Abbey, will be conveyed in the best ship of the British Navy to its final resting-place at Danvers, Massachussets. Heaven rest his soul, and send us many like him!

THE CAUSE OF THE RECENT TYPHOID FEVER IN BRUSSELS ACCORDING TO THE VIEWS OF M. VAN DEN CORPUT.

The distinguished editor of the *Journal de Médecine, Chirurgie et Pharmacie de Bruxelles* has favoured us from his hand with a comment in application of the views of Pettenkofer to somewhat enigmatical circumstances of this recent epidemic; the same will be found repeated in the *Presse Médicale Belge*. He considers that the general prevalence of the fever, its partial severity, and sudden decline on occurrence of heavy rains are all in complete accordance with the views of the Munich Professor. During the reign of the fever in Brussels, in consequence of the prolonged drought of 1868, the subterranean level of the waters had subsided to such an extent that the city might, in fact, be considered to stand upon a subterraneous, half-desiccated marsh, the emanations from which were sensible to the olfactories. The quantity of water which had fallen in 1866 amounted to 797·48 mm., in 1867 it had diminished to 665·95, and in 1868 it was not more than 533·17. Any explanation proceeding from the condition of the drains and water-supply is, according to M. Van den Corput, far less satisfactory than that which we derive from the subsidence of the ground water in a soil highly impregnated with organic *débris*.

THE DIRECTOR-GENERAL OF THE ARMY MEDICAL DEPARTMENT.

We are pleased to hear that the Council of the Royal College of Surgeons in Ireland have elected Sir T. Galbraith Logan, M.D., K.C.B., Director-General of the Army Medical Department, to an honorary Fellowship in their College. This marked compliment to the head of their Department will, no doubt, be highly appreciated by Army Medical officers, as a proof that, although engaged in a different sphere of action, they are not deprived of the approval and sympathy of their Professional brethren in civil life.

ANOTHER MISTAKE.

The newspapers record another death from apoplexy, mistaken by the police for drunkenness. A man was brought to the Brixton Police-station on Wednesday evening, charged with being drunk and incapable. He was locked up in a cell, but shortly afterwards, appearing unwell, a Doctor was sent for, and he was removed to his home, where he expired. There should be no excuse for these misadventures. A police Surgeon is attached to each division of the force, and in every case of the least doubtful character he should be sent for.

SPIRITUAL PHYSIC.

Spiritualism is said to be making great progress in France. The "clairvoyants" here, when "under mesmeric influence," prescribe for the various ailments to which humanity is subject; the "spiritualists" in France are pursuing the same course. A certain Madame Fonquet communicates each fortnight, in the spiritual organ, certain new and sure remedies against all kinds of human disorders. For the jaundice, woodlice and other things stewed in white wine are recommended; for corns, a mixture of alum and lard; for neuralgia, valerian and a foot-bath.

UNDESCRIBED BONES IN THE SKULL OF FISH.

As a true knowledge of the osteology of the fish's head is said to be the foundation of, or key to, a right understanding of the skull of all vertebrates, we are happy to announce any fact likely to aid this important branch of science. And we learn that Mr. Gulliver will soon fully describe and give engravings of cranial bones, hitherto nondescript, of the fish. Of these bones, which the discoverer calls postfrontal ossicles, or *expost-frontals*, one is situated in a pit of each postfrontal. As we hear that preparations of them and other similar bones are now being made, we hope they will soon be exhibited, with the splendid series of piscine osteology, in the museum of the Royal College of Surgeons.

LONG INCUBATION OF YELLOW FEVER.

A very curious instance of much importance as regards the incubation of yellow fever has been recently published in the *Gazeta Medica de Bahia*. The Italian corvette *Guiscardo*, on its arrival in that port and city, had yellow fever on board, acquired in Rio de Janeiro, and out of three sick with the fever, who were disembarked at Bahia, two soon afterwards died. More than a month elapsed, when a priest of the archiepiscopal seminary was seized with this complaint, though there were absolutely no other cases of it in the town. It then appeared that this ecclesiastic, having lived long in Rome, and having a good acquaintance with the Italian language, had been called in to confess the patients with yellow fever previously landed from the corvette, and who were at the time of his visit lying in the Hospital Caridade. The priest recovered, but the *cadre* of symptoms were unmistakably those of yellow fever, being verified by same Physician, Dr. Silva Lima, who had also diagnosed the disease in the subjects at the Caridade, and, in fact, the disease was declared before the suggestion of the path of contagion was even hinted at. It follows from this observation that the incubation of yellow fever may be as long as forty-

three days, which was the period of time comprised between the visit of the padre to the Hospital and the commencement of his attack.

RESPONSIBILITY OF DRUGGISTS.

A RATHER important case came before the Court of Exchequer, sitting in Banco, on Monday last. An action had been brought by a gentleman and his wife against a druggist for injuries sustained by the wife through her having used a hair-wash sold and prepared by the defendant, and which turned out to be of a most noxious character. The wash in question was either sold directly to the wife, or purchased for her by her husband, for the purpose of cleansing the hair. It turned out, however, that this wash sold and delivered burnt the hair off the lady's head, and subjected her to great pain and inconvenience. This case now came on for argument by a demurrer to the plaintiff's declaration; the main question raised by the demurrer was whether a druggist so selling or parting with a compound made up of dangerous materials was guilty of such negligence as to render himself liable for the evil consequences resulting from the natural use of such compound. Their lordships held he was.

LIQUIDS OR GASES.

IN his Bakerian Lecture before the Royal Society, Professor Andrews discusses an interesting, if somewhat abstruse, subject. He has found that each gas has a so-called critical point, a temperature above which it cannot be made to liquefy by pressure alone; nevertheless, very great changes in density may be brought about by very small alterations of pressure, the pressure being already to a certain amount. He has chiefly experimented with carbonic acid, to which he assigns as a critical point a temperature of 30·92° C.; with a temperature above this pressure alone cannot cause carbonic acid to become a liquid, but after the pressure has reached a certain point a sudden and remarkable decrease of volume takes place. Nevertheless, the condensed gas does not present the appearance of a liquid, although it has the volume of one. By great pressure Professor Andrews has been able to cause carbonic acid gas to pass uniformly and without any breach of continuity from a condition described as that of a gas to that described as a liquid. His general conclusion is that a gas and a liquid are only distinct stages in the same series of physical changes—in other words, that no abrupt interval separates the one from the other, as has generally been supposed, but that the two are intimately and closely united.

FROM ABROAD.—FÉDÉRATION MÉDICALE BELGE—DISCUSSION ON MEASLES—PROPERTIES OF CHLORAL.

DURING the last summer the Belgian Medical Association, like its congeners in France and England, held its annual meeting. Its grander title, "Fédération Médicale Belge," has been given to it in consequence of its having been made up by the union of the various local Medical societies. According to the account of the meeting which has been recently published, these, notwithstanding the secession of the societies of Nivelles and Liége, are now 34 in number, counting 900 members. The expenses of the "Fédération" amounted in 1869 to 27,286 fr., leaving a balance in hand of 120,474 fr. It does not meet for the purpose of scientific or Medical discussions, which take place in the respective local societies, but solely for the purpose of considering and improving the social position of the Profession, which, according to several of the speakers, stands greatly in need of the support it receives from this union. At the present meeting the question of Medical reform in regard to the relations of the Profession and the State, the Medical service of the State railways, the reciprocal practising on each side of the frontier by the Dutch and Belgian Practitioners living in the vicinity, the Medical attendance on the poor, the establishment of a Medical Benevolent Fund, and the repression of charlatanism, both within and without the ranks of the Profession, were among the subjects brought under consideration.

At a meeting of the Paris Hospital Medical Society, M. Girard, of Marseilles, read an interesting paper "On some Points relative to the History of Measles." Between the months of February and June he had attended 108 cases in private practice. Three of the patients were adults of the ages 35, 28, and 18, severe vomiting in these cases occurring during the days prior to the eruption, and only then ceasing under the persistent employment of ice. All the 108 cases had been placed in more or less prolonged *contact* with a patient suffering from measles, or exhibiting the eruption the day after such contact. Between the period of such contact and the appearance of the eruption 16 days elapsed in 3 cases, 13 in 5 cases, and 14 in the rest, the period being alike whether the subjects were kept isolated or allowed to continue the contact during the whole duration of the disease. Several cases, in which contact took place just before the eruption was about to appear, might have been regarded as examples of spontaneous origin but for the care taken in tracing the true nature of this. During the first week after contact the child eats and plays as usual, but towards the sixth or seventh day he becomes pale and restless, and his appetite is not in order. Sometimes there is slight fever, with or without a slight eruption on the cheeks. But these symptoms disappear, and the child appears to have regained his normal condition. During the second week (and, in one case, six days prior to the eruption) *red punctation* (*pointillé*) of the velum palati may be observed, the appearance becoming more and more marked as the day of the eruption approaches. It has been seen in all the cases to which the author has been called sufficiently early, and in three of these before any other symptom indicative of measles existed. From the observations he has made, M. Girard arrives at the following conclusions:—1. Epidemic influence, without contact, does not exert the action usually attributed to it—a circumstance which allows of a more complete investigation of the action of transmission by contact. 2. Measles may be transmitted at its very commencement, or even during the period of incubation. Without denying that transmission may take place at a later period, it must be rare, and should be admitted only after we have examined the chain of events, and acquired a conviction that no contact had taken place. 3. In the immense majority of cases the period separating the moment of contact and the day of the eruption has been fourteen days. 4. In all cases in which the opportunity of observing has been offered, the initial symptom has been found to be a red punctated state of the velum palati.

During the discussion which followed various speakers observed that the red punctation or rubeolic eruption of the velum palati had been noticed by many, but the peculiarity of M. Girard is his declaring it to be so early a prodromic symptom. M. Girard said his attention was first called to it in 1849 by Vallcix, who had the observation from Louis, and ever since then he has met with numbers of confirmatory cases. From the fifth to the sixth day after contact, and therefore seven or eight days prior to the eruption on the skin, on examining the velum palati (which retains its normal appearance in the parts remaining free) we perceive a red punctation which persists until the period of eruption, and then, becoming confounded with the rubeolic angina, disappears with this three or four days after the cutaneous eruption. This punctation exists before the child has any fever or premonitory catarrh, and while it is still amusing itself at play. M. Isambert stated that he never omits examining the pharynx before the disease is fully declared, and he has never met with the condition described by M. Girard. He therefore cannot regard it as so constant and uninterrupted a sign as represented. Nor can he, while admitting the possibility of contagion occurring at the very commencement of the affection,

believe that it ceases so soon to be operative as represented by M. Girard. M. Bucquoy also takes this view, and cannot think that all precautions are needless after the eleventh day. M. Archambault observed that the experience of the Hôpital des Enfants Malades shows that the contagious period of measles is of far longer duration than that stated by M. Girard, the disease being communicable long after the eleventh day. In country districts, too, the disease is often found developed in the absence of cases still in the first stage of the disease. M. Blachez, seeing the precision with which M. Girard's facts are stated, can only come to the conclusion that things take quite a different course in this matter at Marseilles and Paris. In two of his own children a week only separated the commencement of the two eruptions; and the like occurrence is commonly observed.

Communications still continue to be made to the Académie des Sciences on the subject of chloral. M. Bouchut states his belief that the contradictory results which have been obtained in the hands of different experimenters are to be imputed to the condition of purity or impurity of the substance employed. Chloral should be employed in the state of solid hydrate; and with a pure hydrate the results obtainable are rapid, obvious, and energetic, these being the most tranquil hypnotism and almost absolute insensibility. M. Bouchut's communication may be thus summed up:—Hydrate of chloral is a powerful sedative of the motor and sensitive nervous system. The dose should not exceed five grammes for adults and one and a half or one and a half for children. It may be administered by the mouth, but its effects are more prompt when given by the rectum. Injected hypodermically, it gives rise to formidable eschars. The urine during the sleep induced by chloral is neutral, and when boiled with Fehling's liquor it does not reduce the salts of copper. But twenty-four hours after awakening, when it contains chloral, it is more dense, and reduces the salts of copper, so that a temporary glycosuria which does not exist might be suspected. The action of chloral is that of chloroform, but it is longer in being produced and lasts for a longer period. In some subjects it gives rise to an intoxication resembling that of alcohol, but in nowise of so disgusting a character. In almost all it produces sleep, which is rarely accompanied by hyperæsthesia, a deep anæsthesia being present in the great majority of cases. This is usually in proportion to the quantity employed, and in a dose of from two to five grammes, according to age, it is complete enough to allow of the application of cauteries without pain being felt, and even of the extraction of teeth. As a therapeutical agent it is a sedative in the violent pains of gout and the severe suffering arising from nephritic colic or dental caries—in fact, the first of anæsthetics administered by the stomach. It is also the most prompt and effectual remedy in severe chorea, when the object is to arrest convulsions that menace the safety of the patient.

M. Personne is also engaged in the investigation of the properties of this interesting substance. Among other results he has arrived at, he has found that chloral given to dogs becomes partially transformed into chloroform under the influence of the alkalescence of the blood, as, indeed, was stated by Liebreich; and that after its administration in a pure state the presence of chloroform may be demonstrated in the blood and other fluids of the economy. If also we mix chloral with blood recently drawn from the vein, and maintained at the temperature of the body, no odour of chloroform is perceived; but if a current of air is caused to traverse the mixture, the odour is immediately apparent. In contradiction to M. Bouchut, M. Personne maintains that chloral is never met with in the urine, and of this he has no doubt whatever. As to the reduction of the cupropotassic liquid mentioned in proof by M. Bouchut, it should be known that, in consequence of the urates which it contains, urine will always reduce the copper, providing the ebullition be continued long enough. The presence of chloroform, not even of glucose, is not requisite for this.

REPORT ON THE TEACHING OF THE OUT-PATIENT DEPARTMENTS OF THE LONDON HOSPITALS.

No Hospital can be better provided with conveniences for seeing out-patients than the

London Hospital.

The waiting and consulting-rooms are as commodious as those in the private house of a fashionable Physician, and the comfort of the patients is considered to the extent that two dressing-rooms are provided, one for males and one for females, on each side of the consulting-room, with a male attendant for the men and a female attendant for the women.

1. The out-patient Medical staff consists of one Physician (Dr. Down) and four Assistant-Physicians. Two of the latter act as deputies, and attend in the absence of the senior Assistant-Physicians. The committee, however, have sanctioned an arrangement by which Drs. Jackson and Mackenzie give up one day each per week to each of the two deputies. There is a rule at this Hospital that every Assistant-Physician receives the title of Physician after seven years' service. There has also been an arrangement made recently by which each of the Assistant-Physicians has ten beds for in-patients allotted to him.

2. Special departments are well represented. The ophthalmic by Messrs. Hutchinson, Adams, and Tay, two days in the week; diseases of the skin by Messrs. Hutchinson and Tay, on Wednesdays at 9 a.m.; the aural department by Mr. Rivington on Saturdays at 9.30; the obstetric department by Dr. Palfrey twice a week; the dental department by Mr. Barrett, on Tuesdays at 10 a.m.; laryngoscopy by Dr. Morell Mackenzie on Saturdays. There are also special wards for ophthalmic cases and for cases of venereal disease.

3. The average number of patients seen daily by each out-patient Physician and his assistants amounts to about 200, and by each out-patient Surgeon and his assistants to about 180.

4. The number of students attending the out-patient Medical and Surgical practice varies considerably, according to circumstances—*i.e.*, whether anything is going on elsewhere, as operations, clinical lectures, etc.—so that there may be a roomful, or there may be but two or three.

5. A considerable amount of valuable aid is afforded the out-patient Medical officers in their arduous work, and the arrangements made for this purpose differ from those of most other Hospitals, and deserve imitation.

There are two paid clinical assistants on the Medical side, and two on the Surgical side. They are appointed for three months, and are eligible for re-election, and they are paid at the rate of £40 a year. They are qualified men, and sometimes men of considerable experience. Dr. Hughlings-Jackson writes—"The one who has just ceased to attend with me is a Member of the London College of Physicians." The sum of £60 is also distributed yearly in rewards to the most meritorious of the dressers in the out-patient rooms. No responsibility is thrown on students either in examining or treating cases. They have, however, opportunities of testing urine, applying bandages and apparatus, etc., under the directions of the Physicians and Surgeons or their assistants.

6. As to the nature of the cases which present themselves in the out-patient room, and their fitness for teaching purposes, Dr. Hughlings-Jackson, speaking from a long experience, observes:—"I think the out-patient room furnishes a splendid field for teaching, especially in cases of heart disease, phthisis, pleuritic effusions, chorea, rickets, and all such diseases. Most commonly it is the plan to learn mere symptoms quietly and accurately. I do not think, although I am aware there are directly contrary opinions, that out-patient practice is of much value in teaching treatment. I think students quickly learn the symptoms of chest diseases in the out-patient room, and are made ready for understanding the complexities of the acute cases of chest disease seen in the Hospital wards. They learn innumerable minor things—viz., to recognise common skin diseases; the difference between syphilitic and simple sore throat; the diagnosis of facial paralysis; to distinguish between loss of voice and loss of speech. I show them casts of the uriniferous tubes when I am lucky enough to find any deposited during the short time the visit lasts. (The committee have recently provided us with a microscope for the out-patient room.) I teach students the use of the ophthalmoscope in Medical cases—how to tell the

paralytic walk from locomotor ataxy. I impress on them the little trifles (?) which fill up the crevices of larger blocks of knowledge—such as, for example, that iron makes the stools black; that arsenic should be given after meals; that ipecacuanha increases the action of rhubarb; that santonine causes coloured vision," etc., etc.

The Medical staff at the London Hospital certainly have very great advantages afforded them by the judicious liberality of the governing body; and in many respects the arrangements for practical and teaching purposes adopted in this institution may serve as a model for most others.

Passing from one end of London to the other, a great contrast is presented in the out-patient department of

St. Mary's Hospital.

In the first place, the number of patients seems to be very much less than at the London Hospital or the more central schools, and, compared with certain other Hospitals, there appears to be a kind of langnor about the whole department. Indeed, the rooms appropriated to some of the out-patient Medical officers are so small and ill-furnished that it would be perfectly impossible for them to carry out any systematic teaching to any number of students at one time, however much they might be disposed to attempt it.

It would seem that in the construction of the apartments devoted to out-patient purposes in this institution, the idea of making the department subservient to clinical teaching was entirely lost sight of. The Surgical side is, however, rather better off in this respect than the Medical.

1. There are three Assistant-Physicians and three Assistant-Surgeons, each attending two days in the week. The Physician's visit lasts about two hours and a half, the Surgeon's about one hour and a half.

2. The Physicians see, on an average, about a hundred cases each day; the Surgeons not so many, only from six to seven new cases daily.

3. Very few students attend the out-patient Medical practice—"two or three" and "five or six" the out-patient Surgical practice.

4. Each Assistant-Physician has a clerk, who is a senior student, and he sees and prescribes for the chronic cases, under the supervision of the Physician. Each Assistant-Surgeon has also a senior student, who acts as dresser and clerk; he sits with the Surgeon, and takes cases indiscriminately—usually, however, consulting with the Surgeon in all *new cases*.

5. As to the cases most commonly met with, and which may be utilised for clinical teaching, Dr. Lawson mentions cases of "bronchitis, phthisis, gastric catarrh, chronic endocardial cases, cases of menstrual derangement, a few renal cases, and a large proportion of cases of 'wanting food,' many of them unfit for teaching." The Surgical cases are here, as at all other general Hospitals, very useful for teaching purposes.

6. The same Physician observes—"I don't attempt anything in the shape of systematic teaching. I occasionally comment on questions of diagnosis and therapeutics. There is not time for anything further." On the Surgical side some attempt is made at classifying cases for clinical purposes.

7. The special departments are well represented. Mr. Haynes Walton takes the ophthalmic cases; Mr. Norton gives weekly demonstrations with the laryngoscope; skin diseases are seen once a week by Dr. Handfield Jones and Dr. Cheadle; diseases of women and children are seen by one of the House-Surgeons; Mr. Norton also takes a special class in bandaging and the use of Surgical appliances.

The patients' prescriptions are kept in books, which are retained at the Hospital, and which serve as records of the cases.

We simply desire to remark, in connexion with this and certain other metropolitan Hospitals, that it cannot be right that the out-patient departments of our Medical schools should be practically little other than dispensaries.

PROPOSED LEGISLATION FOR THE PROTECTION OF HABITUAL DRUNKARDS.

Appended hereto is a draft of a short Act, after the model of the Act forming one of the revised statutes of the State of New York. As by the 28th and 29th Vict. c. 99, entitled "An Act to confer on the County Courts a limited jurisdiction in equity," the County Courts already "have and exercise all the power and authority of the High Court of Chancery in (*inter alia*) all proceedings relating to the maintenance or advancement of infants, in which the property of the infant shall not exceed in amount or value the sum of £500" (section 1), the bestowal of a like jurisdiction upon these courts in all proceedings relating to the care and custody of all idiots, lunatics, persons of unsound mind, and persons who shall be incapable of managing their own affairs in consequence of habitual drunkenness, and of their estates, where their property does not exceed the above amount, is simple and perfectly practicable. Should the specimen of an Act which we have here sketched require any further clauses to facilitate its due operation, they could be easily added in committee. We have completed our task in presenting to the Profession a synopsis of a subject admitting of legislative interference and regulation, and it now remains for the Medical Practitioners generally to say whether they will second our efforts, by seeking, in the ensuing session of Parliament, the introduction of a Bill which shall at least bring this crying evil in a tangible, and, we venture to add, a practical form, before the attention and consideration of the British Legislature.

AN ACT FOR EXTENDING AND APPLYING TO HABITUAL DRUNKARDS THE LAW RELATING TO THE PERSONS AND PROPERTY OF "IDIOTS, LUNATICS, PERSONS OF UNSOUND MIND, OR INCAPABLE OF MANAGING THEIR OWN AFFAIRS."

Whereas it is expedient that the powers, authority, and jurisdiction now exercised by the Lord High Chancellor over the persons and property, as well real as personal, of all "idiots, lunatics, persons of unsound mind or incapable of managing their own affairs," should be extended over those incapable of conducting their own affairs in consequence of habitual drunkenness." Be it therefore enacted by the Queen's most excellent Majesty, by and with the advice and consent of the Lords spiritual and temporal and Commons, in this present Parliament assembled, and by the authority of the same, that from and after the passing of this Act the Lord Chancellor shall have the care and custody of all persons who shall be incapable of conducting their own affairs in consequence of habitual drunkenness, and of their real and personal estates, so that the same shall not be wasted or destroyed, as effectually as, and subject to the like powers and provisions now exercised by him, in the case of "idiots, lunatics, persons of unsound mind, or incapable of managing their own affairs," and shall provide for their safe keeping and maintenance, and for the maintenance of their families and the education of their children, out of their personal estates, and the rents and profits of their real estates respectively.

Section II. And be it further enacted that whenever the overseers of the poor of any parish, city, township, village, or extra-parochial place, shall discover any person resident therein to be an habitual drunkard, having property to the amount of £500, which may be endangered by means of such drunkenness, it shall be the duty of such overseers as aforesaid to make application to the Court of Chancery for the exercise of its powers and jurisdiction.

Section III. And be it further enacted that if such habitual drunkard have property to an amount less than £500 the overseers as aforesaid may make such application to the judge of the County Court of the district in which such habitual drunkard is at the time residing, which said County Court is hereby vested with the same powers in relation to the person and real and personal estate of such habitual drunkard as are by this Act conferred upon the Court of Chancery, and shall in all respects proceed in like manner according to the respective rules of practice of the said courts, subject to an appeal to the High Court of Chancery.

Section IV. And be it further enacted that application for a commission in such latter case shall be made to the judge of the said County Court, who may award the same to one or more persons, to inquire into the fact of such alleged habitual drunkenness, and the inquisition taken thereon shall be returned to the next court to be holden in the said district, which shall confirm or set aside the same.

Section V. And be it further enacted that if the party proceeded against shall traverse the inquisition on its return, an issue shall be directed by the court, which shall be tried in the same court, and the verdict thereon shall have the same force and effect as if rendered upon an issue awarded by the Lord Chancellor.

Section VI. And be it further enacted that all appeals from any order, judgment, or decree of any such County Court made pursuant to the provisions of this Act, shall be filed and entered within three months after the making of such order, judgment, or decree, and shall be accompanied by a bond,

with such sureties as the court shall approve, to the opposite party, in the penalty of conditioned for the payment of such costs as shall be awarded against the appellant in case of the order, judgment, or decree being confirmed.

Section VII. And be it further enacted that the expenses of the overseers of the poor, in conducting or defending any application under this Act, shall be audited and allowed in the same manner as other expenses incurred by such overseers in administering or enforcing the laws relating to the poor.

Section VIII. And be it further enacted that the enactments and provisions contained in an Act passed in the eleventh year of the reign of King George IV., and in the first year of the reign of his late Majesty King William IV., entitled "An Act for consolidating and amending the Law relating to Property belonging to Infants, Femes Coverts, Idiots, Lunatics, and Persons of Unsound Mind," be extended and applied to habitual drunkards in the same way as they are now applied, under the interpretation clause of the said Act, to infants, femes coverts, idiots, lunatics, and persons of unsound mind or incapable of managing their own affairs.

Section IX. And be it further enacted that every committee of the estate or person of any habitual drunkard, appointed under this Act, shall be subject to the same rules and regulations, and be responsible for the discharge of the like duties, as now attach to the committees of the estates and persons of idiots, lunatics, persons of unsound mind, or incapable of managing their own affairs.

Section X. And be it further enacted that in case any person adjudged under this Act to be incapable of managing his own affairs, in consequence of habitual drunkenness, shall be restored and become capable of managing his own affairs, his real and personal estate shall be restored to him, and his person discharged from the care and custody as aforesaid as effectually and in the same manner as persons at one time of unsound mind or incapable of managing their own affairs have heretofore been discharged from the like care and custody, and restored to their estates, upon proof afforded of their restoration, recovery, or capability of managing their own affairs.

Section XI. And be it further enacted that any persons desirous of voluntarily submitting themselves and their estate to trustees as committees of their persons and property, subject to the provisions of this Act, shall be permitted to make application for a commission to issue, and the inquisition taken thereon shall have the same force and effect as if obtained by the overseers of the poor as aforesaid.

Section XII. And be it further enacted that nothing in this Act contained shall affect the right of any person who may now apply for a commission to issue on behalf of any alleged idiot, lunatic, person of unsound mind or incapable of managing his own affairs; but that such right shall extend, and hereby is extended, to commissions for inquiring into the fact of alleged habitual drunkenness, in consequence of which habitual drunkards are rendered incapable of conducting or managing their own affairs.

THE FUNCTIONS OF THE CEREBELLUM.

In a late number of the *Anthropological Journal*, Mr. T. S. Prideaux discusses Gall's phrenological doctrines with reference to the functions of the cerebellum. Irrespective, however, of phrenology, Mr. Prideaux has recorded observations upon the physiology of the cerebellum which are of sufficient importance to be brought under the notice of our readers. The chief points of the author's observations are these:—

From experiments upon lower animals, Mr. Prideaux notices that castration does not diminish the size of the cerebellum relatively to that of the cerebrum, but rather conversely—viz., that if any diminution at all occurred it was to be found in the cerebrum. He also noticed that unilateral castration made no difference in the relative size of the lateral lobes of the cerebellum. Furthermore, he observed the larger size of the middle lobe, or vermiform process, in birds over that of the lateral lobes, and set himself to discover in what faculty it was that birds were deficient when compared with other animals, or what faculty they possessed that would account for this predominance of the middle lobe. The conclusion arrived at by the author is that the faculty which in birds is lacking is that of cuticular sensibility, whilst that faculty which they possess more than other animals is that of balancing themselves in a medium of less specific gravity than that of their own bodies.

In support of these two conclusions, he further searched for some class of animals possessing the former faculty in an opposite degree, and considers that he has found what he sought in the class of cetaceans. These animals possess such an acute cuticular sensibility, that they are able to communicate with each other at long distances through vibrations of the water. In these animals the lateral lobes of the cerebellum are larger, in comparison with other nervous centres, than in any other animal, with the exception of the bat. These facts appear to prove that the median and lateral lobes of the cerebellum have different functions, the former being the great ganglia of the nerves of muscular resistance, and the latter the great ganglia of the nerves of cutaneous sensibility. These conclusions were further confirmed by an examination of the cerebellum of the bat. This animal possesses the faculty of supporting itself in the air, and also possesses acute cuticular sensibility, and in it both portions of the cerebellum are largely developed, so much so indeed as to render the cerebellum larger, in comparison with the cerebrum, than in any other animal. Avoiding, as already stated, all phrenological discussions, it may be added that Mr. Prideaux adds a pathological observation on the effect of wounds or other lesions of the cerebellum. The influence upon the sexual functions in these cases is accounted for by the author from the loss or impairment of muscular co-ordination or of cuticular sensibility.

The functions of cutaneous sensibility and of muscular co-ordination have been attributed, conjecturally, to the cerebellum by some physiologists, but there has been no previous attempt at proofs, such as we are now indebted for to Mr. Prideaux.

ON THE MEDICINAL USES OF THE SALTS OF ATROPIA.

Professor Buignet,(a) the eminent French pharmaceutist, has recently directed attention to the various uses of atropine, or atropia, as a general remedy, and not merely in affections of the eye. Two salts of this alkaloid are used in Medicine—namely, the sulphate and the valerianate of atropia. The former is to be found in our Pharmacopœia, but is intended solely for ophthalmic use, atropia and its salts being regarded by British writers on Materia Medica as unfit for internal use in consequence of their highly poisonous action even in very minute doses. The valerianate is formed by mixing a cooled solution of atropia in ether with a cooled solution of valerianic acid, and from this mixture crystals of the required salt soon crystallise. Acting on the long-established axiom in therapeutics that a combination of two similar remedies almost always produces a greater and more rapid effect than an equivalent dose of either of the single remedies, Dr. Michea as long ago as 1853, made trial of this salt in "affections of the nervous system," and especially in cases of epilepsy. His account of the action of this salt was so favourable that a commission was appointed to investigate the subject, and their report was that valerianate of atropia is decidedly preferable to many of the so-called antispasmodics, and that it offered the great advantage of replacing two drugs notoriously variable in their action—belladonna and valerian—by a combination of their active principles, which was far more steady and certain in its action. The method of administering it is in granules, each of which contains a milligramme, or about $\frac{1}{6}$th of a grain, of the salt. One granule daily is the proper dose to begin with in an adult, and in the course of a week a second granule may be taken daily. This is the maximum dose, any excess inducing dilatation of the pupil and disturbed vision. The author quotes the names of more than twenty Physicians who have written to confirm the value of atropia and its salts as therapeutic agents. Taken internally, the salts of atropia have been found serviceable in the treatment of epilepsy, chorea, neuralgia, hysteria, tetanus, intermittent fevers, and those forms of disease of the respiratory organs in which the nervous system is specially involved, as asthma, hooping-cough, and certain forms of nervous bronchitis.

It has been found by Bouchardat and Cresio that cases of severe neuralgia, in which opium, henbane, and sulphuric ether have failed to give relief, have yielded to the local application of an ointment composed of five centigrammes (three-fourths of

(a) *Nouveau Dictionnaire de Médecine et de Chirurgie Pratiques*. Article "Atropine." Tome IV. 1866. Paris: Baillière. London: Williams and Norgate.

a grain) of atropia and four grammes (about a drachm) of lard. Pescheux has reported a case of tetanus which he cured by the aid of subcutaneous injection of sulphate of atropia, and Béhier, Richard, and other French Physicians have practised the same treatment with success in cases of severe localised pain. One part of sulphate of atropia may be dissolved in 100 of water, and from one to five drops injected. Slight symptoms of belladonna poisoning sometimes exhibit themselves in these cases, but are merely transitory. The smaller dose should be first tried.

As a caution to our ophthalmological friends not to let solutions of atropia fall into the hands of their patients, we may mention a case recorded by Béhier, in which an old man *drank* a solution of sulphate of atropia (·013 to 100 grammes of water) which had been prepared for the purpose of dropping into the eye to facilitate an ophthalmoscopic examination. The dose swallowed was one-fifth of a grain. The following were the most marked symptoms :—An acrid taste in the throat, slight embarrassment in the management of the tongue, muscular weakness, a difficulty in walking, which soon became an impossibility, and disturbance of vision. Knowing the antagonism of morphia and atropia (described by Graefe in 1862), M. Béhier prescribed ten drops of laudanum every ten minutes. Each dose diminished the intensity of the symptoms. The patient took on the whole seventy-six drops—a dose which, if he had not previously taken the atropia, would undoubtedly have produced symptoms of poisoning by opium.

The rapidly increasing use of the ophthalmoscope will probably cause a considerable augmentation in the number of cases of poisoning by atropia. Liebreich (in 1863) remarked that the symptoms of poisoning consequent on the instillation of atropia do not so much depend upon the quantity absorbed by the eye itself as upon the quantity which makes its way through the lachrymal passages into the nose, pharynx, and stomach. When these lachrymal passages are completely obliterated, a strong solution may be applied to the eye for any length of time without inducing the slightest general disturbance. He consequently recommends that, in order to prevent as far as possible this mode of escape of the solution into the nose, etc., the patient should incline his head as forward as possible during the period of instillation, should blow his nose and gargle frequently, and should press one of his fingers against the inner angle of the eye, so that the lower lachrymal point should be drawn down. In cases where these rules cannot be attended to (as when a patient is confined to bed), he recommends the application of a small wire apparatus which effectually prevents the escape of the solution. Professor Buignet's excellent memoir concludes with a description of this instrument and of the method of applying it.

REVIEWS.

1. *Die Methode der wissenschaftlichen Darstellung.* Von Dr. F. A. v. Hartsen.
   The Method of Scientific Exposition. By Dr. F. A. v. Hartsen.
2. *Untersuchungen über Psychologie.* Von Dr. F. A. v. Hartsen.
   Psychological Researches. By Dr. F. A. v. Hartsen.
3. *Untersuchungen über Logik.* Von Dr. F. A. v. Hartsen.
   Researches in Logic. By Dr. F. A. v. Hartsen.

Until a comparatively recent period abstract philosophy has, on the Continent, been prevalent in the various branches of science, and an inquiry into the results of this tendency of thought shows that it has been rather injurious than otherwise. The reason of this is obvious. *A priori* assumptions have very frequently been laid down as maxims, which no one was allowed to question, and research has been at once directed to such points as should be the last to become subjects of scientific consideration, and which can advantageously only follow various preliminary inquiries. Teleology has been the one great centre around which the philosophers of the most ancient as well as of modern times have gathered. These men, devising worlds in their studies, laying down laws, and either forcing the laws to accommodate themselves to their contracted worlds, or the latter to their imaginary laws, furthermore even venturing to philosophise on such things as they considered to be beyond the range of human understanding, have in this way formed a science called Metaphysics. There is little need for us to point out that the philosophers of our times have not, in the realms of teleology and metaphysics, advanced one single step beyond those of ancient times; and, if we know a great deal more of the world's prehistoric condition than was known a comparatively short time ago, we are for this progress in knowledge by no means indebted to abstract philosophers, but to those who have taken the spade into their hands, have dived into the soil of different parts of the globe, and have drawn their conclusions from the remnants of a creation existent hundreds of thousands of years previous to our historic period —we mean the anthropologists.

At present natural philosophy has taken the lead in scientific inquiry; she draws so much of philosophic speculation into her service as is necessary for her purpose, and she leaves the rest to those who like to dream in philosophic clouds.

To apply the serviceable part of philosophy to the practical sciences, Medicine included, it is necessary that we should obtain a knowledge of the method by which it may be pursued; to this end literature has hitherto given us no material assistance. Hence we consider it a great merit of the author of the works before us that he has pointed out the path in which we are to go.

The three works of which we have given the titles are intimately connected with each other; beginning with the method to be employed in making clear to others the results of scientific investigation, the author illustrates the method proposed by applying it to psychology, and he concludes with some general observations on logical propositions.

He blames scientific writers for being careless of the forms in which they bring their researches before the scientific world, and he maintains that the employment of æsthetic language assists in giving greater clearness and precision to the expression of ideas; the principal point in the work first mentioned is therefore an inquiry into the nature of distinct exposition and the laws by which it is governed. Interesting as this inquiry is, it does not so much concern us as does that which forms the subject of the second volume—that on psychology. This professes to be merely a commentary on the standard work of Zimmermann; but it is decidedly more than it feigns to be, and we consider its special merit lies in this, that it points out a scientific terminology for mental phenomena—a subject on which the most distinguished writers differ. The advantage of this applies more particularly to the German language, which possesses for the same phenomena different terms, the distinction of which from each other is generally of the greatest difficulty. Herbert defines "volition" as something quite different from that as given by Fechner; the connotations of "emotion" (gefühl) and "sensation" (empfindung) are very indefinite; and Lindner uses "the idea" (begriff) in opposition to "conception" (vorstellung), whilst at other times he considers idea as belonging to conception. If we mistake not, the author has some sympathy with the school of Schelling, and therefore his philosophy tends in many points to assume a somewhat poetic shape; at all events it is indefinite. We allude, for instance, to his notions on the soul, which he is inclined to explain from an anatomical aspect, and which he locates in the so-called "nœud vital" close to the calamus scriptorius. The author is opposed to those writers who look upon life from a materialistic standpoint, as Vogt, Büchner, Huxley, and others; his arguments on this and a great many other subjects are doubtless very ingenious, but we cannot say that he succeeds in making out any case on those points where anatomical facts come into conflict with pure philosophy, and nevertheless nearly the whole volume consists of a discussion of such cases of conflict; the author, although a Medical man, seeming decidedly more partial to philosophy than to experimental science.

Many of the questions discussed in the second volume are naturally again brought before the reader in the third of the works above mentioned, but in the latter case they are treated by a purely logical method. It is not simply a handbook on logic which we have under consideration, but the volume consists partly of reviews of the writings of other authors—Gratry, John Stuart Mill, Maudsley, and others—and partly of disquisitions on several interesting subjects, as, for instance, on miracles. Here our author again stands on what we consider the wrong side. He protests against the usual method of denying the possibility of miracles because of their incompatibility with natural laws. The natural law, he says, must, on the contrary, be derived from facts, and therefore we are not entitled to say that the resurrection, for example, is contrary to the laws of nature, because we are not acquainted with any natural law by which what is dead must remain dead. We must, on the other hand, argue that the resurrection is not opposed to natural laws if cases are known in which the dead have come to life again. So far so good; but now he leaves the question whether such cases are well ascertained or not to historians. This looks like a *petitio principii*. We

must add that many considerations, not historical nor scientific, will decide the belief of most minds on such a question.

In conclusion we must state that, even if the author has failed in reconciling natural philosophy with purely philosophic speculation, he has decidedly succeeded in expressing those ideas which he advances in a very lucid and pleasant style, and he has therefore succeeded in one at least of the objects for which his books were written. The author of "La Ville de Doux-Repos" is not likely to write a dull book.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

FRANCE.

Dr. Peyraud on Regeneration of Cartilage.

PARIS, November 10.

SOME recent experiments have been made by a young physiologist, Dr. Peyraud, of our city, on the regenerative faculties of cartilage by its perichondrium. In these experiments, though the microscope did not do all, it nevertheless helped to establish what the eye, unarmed, could only have supposed and would always have doubted.

It has long since been thought that the density of the intercellular substance of the cartilaginous tissue and the scanty amount of nutritive fluid which consequently it can only imbibe, are the main reasons why cicatrisation of this tissue progresses so slowly, and why regeneration cannot take place.

Redfern's experiments, repeated about the same time in France by M. Broca, 1851, have sufficiently proved that the cicatrisation of cartilage takes place, but, as they thought, always by means of fibrous tissue and never by cartilage. M. Ollier, who has also made numerous experiments upon both permanent and temporary cartilage, all of which may be found recorded in his great work on the regeneration of bones, has noted in some of them the existence of a few cartilage cells situated in the fibrous cicatrix, close to the line of incision. These cells, however, were so few in number and so imperfect that they could only be recognised with the aid of a chemical reagent (tincture of iodine). M. Ollier consequently concludes with MM. Redfern, Broca, and Meunier, that the cicatricial tissue of cartilage is fibrous and does not undergo cartilaginous transformation. The result of his experiments upon the epiphysial cartilages of long bones were identically the same—that is to say, the gap was always filled by fibrous tissue.

Kölliker holds the same opinion, and in his last edition of "Human Histology" he says—"Cartilage shows no disposition at regeneration, and wounds of that tissue are not cicatrised by means of a cartilaginous substance."

M. Le Gros, in 1867, presented a *mémoire* to the Société de Biologie defending the regenerative power of cartilage. His experiments consisted in simple incisions of the articular cartilage, care being taken not to allow the air to enter the cavity of the joint, which was accomplished by displacing the integuments so that the opening in the skin did not correspond to the wound of the articulation. These experiments proved that cartilage cells gradually take the place of the fibro-cellular substance, which is the first to form the cicatrix. But the regeneration was a failure whenever the operation was followed by suppuration. Of course, these experiments only succeeded in young animals in whom nutrition is very active, for it is well known that the more nutrition a tissue receives the more apt is it to regenerate itself.

The great value of Dr. Peyraud's researches consist in the fact that they have established not only the possibility of the regeneration of cartilage, but they have proved, beyond doubt, that this power lies exclusively in the perichondrium, and this permits of a parallelism between the specificity of this membrane and the periosteum.

The animals experimented on were mostly young dogs, from 2 to 6 months old, because the perichondrium at that age is very thick, can be detached without great difficulty, and, as already observed, is more richly supplied with blood-vessels. The cartilage which is most suitable for these experiments is the costal cartilage. Those of the ear or nose give equal results, but require more care on the part of the operator.

For those who wish to repeat the experiments I would say—Make an incision parallel to the direction of the rib down to the perichondrium. Incise this membrane along the middle line of the anterior surface of the rib; pass a sharp spatula beneath the perichondrium, denuding it from the portion of cartilage to be removed, so as to leave an empty sleeve of fibrous membrane.

The result of these experiments—over thirty in number—made by Dr. Peyraud, has been a perfect regeneration of the removed cartilage by cartilage. The chondroplastes were always more numerous and further advanced in their development at the circumference of the rib than in the centre. The two ends of costal cartilage had taken no part whatever in the regeneration; these ends were found rounded off, cone-like, and calcified or ossified. Many of these specimens have been examined by some of our first microscopists (Vulpian, Cornil, Ranvier). Their exactness has also been verified at recent meetings of the Société de Biologie and Société d'Anatomie. The animals were sacrificed from one to six months after the experiments, so that the experimentalist was able to study the regeneration of the cartilage in all its phases.

The same resections practised without preservation of the perichondrium gave negative results in each and every experiment. The perichondrium, therefore, or the anatomical element situated upon its under surface, regenerates cartilage just as the osteogenic sheet, situated beneath the periosteum, regenerates bone.

BIRMINGHAM.

NOVEMBER 8.

THE working-man's fund for the extension of the Queen's Hospital has lately been largely increased by the munificent donation of £500 from Mr. Muntz. This, with the amount which has been already collected, makes a good round sum, and it is likely that much more will be received when the canvass is completed, so that we may look forward to the more practical beginning of the work—in the shape of bricks and mortar—which Mr. Gamgee has taken in hand. Still, there are two opinions as to the wisdom and advisableness of such an undertaking, which, in the eyes of many, smacks of the club-system on a gigantic scale, and which must tend, more or less, to deprive the general Practitioner of fees from the artisan classes; for we know that, when Medical attention can be obtained gratuitously, payment for it is quite beside the question.

A second edition of Dr. Heslop's sensational pamphlet has appeared. This can only be explained on the supposition that its author is determined to make himself popular at the expense of his brethren.

Dr. Robinson, the public vaccinator, has asked the guardians to defray the expenses of his vaccination station—a very reasonable request, seeing that an "Act of Parliament" expressly provides for such payments; but, with proverbial indifference and opposition to legislative enactments which affect the *status* of their Medical officers, they have ignored his request. This bears rather hardly upon Dr. Robinson, because, when he accepted the appointment, he was led to expect that it would be worth at least £400 a year, whereas it scarcely realises £250, out of which sum he has to pay for the stations and employ "scouts." Dr. Robinson may not find it worth his while to continue in office unless his post is made more remunerative, in which case the guardians will lose a most active officer, and the public a careful vaccinator.

Dr. Richardson, of London, has been delighting us with his wonderful powers of describing the most intricate physiological processes with the rarest simplicity. Need I say that he was listened to by a large audience with the closest attention, and, at the conclusion of his interesting and learned address, was loudly cheered?

Hospital Sunday has just passed; this year the collections were for the Queen's Hospital. The returns which have been made up to the present time from the various places of worship show the large sum of nearly £4000. This is in excess of what was collected for the same charity three years ago, and it will be a very acceptable addition to the exchequer of the Hospital, which, in a pecuniary sense, is never in a very flourishing condition, although the institution ranks high in popular opinion and is a first-rate clinical school for students, its officers having worked hard to secure for it this character.

In spite of prognostications to the contrary, the outdoor Poor-law Medical relief arrangements work satisfactorily, and I hear of no complaints either from the Medical officers or the guardians. The former only complain of their inadequate payment.

The Council of Queen's College has published the following report, which sets forth the position and prospects of the College. It appears from it that the College owes its chief

means of support to the Medical department; and such, indeed, is the fact. Were the other sections of the College as well favoured and administered to, the institution would soon be out of debt:—

"The number of students in attendance on the lectures of the Theological Department during the year has been from 20 to 23; in the Medical Department during the winter session, 88; during the summer session, 60. In the year, six theological students have been admitted to deacons' orders, by various bishops; and 42 Medical students have presented themselves for examination at one or other of the Examining Boards. There have been two or three students in the Arts Department during each term of the year, preparing for entrance into the senior branches of study. The Council has had the satisfaction of awarding, under the powers conferred by the Act, the academical rank of civil engineer to Mr. E. W. Jones, son of Mr. George Jones, Surgeon, of this town; he having performed the exercises legally required previous to 1867. Proofs of a desire existing in various quarters for a revival of the Engineering Department in the College, have been brought under the notice of the Council. Before, however, any step for extending the present arrangements can be safely recommended, the resources of the College ought to be greatly increased, and its financial position further assured. In view of the urgent necessity of raising funds to pay off some portion at least of the large debt arising from the liabilities of the old Corporation and from the costs of obtaining the new scheme, the Council has prepared an appeal to the public. Donations have, up to the present date, been promised to the amount of £495; and annual subscriptions to the amount of £9 9s. The future progress and development of the College must very greatly depend upon the response made to this appeal. No instalment has been set aside from the income towards the sinking fund for eventual extinction of the College debt, because it has not been even yet possible to determine the exact total of the liabilities, and consequently the amount to be raised under the provisions of the Act is not yet fixed."

SCOTLAND.

ANTISEPTIC SURGERY.

(From another Correspondent.)

Anent the article in last week's number of the *Medical Times and Gazette* (November 13), we feel it our duty, politely, but emphatically, to state that the facts(?) there adduced do not in any way embody the antiseptic treatment as pursued by Mr. Lister. In Glasgow Royal Infirmary carbolic acid is applied in some cases as an antiseptic, and in others simply as a deodorising lotion; and these two widely different classes of cases must on no account be confounded. This seems to be the chief obstacle in the way of a proper appreciation of the antiseptic treatment. No great value is attached specially to carbolic acid over others of that class as a disinfecting and deodorising lotion. As to the form of dressing employed, a very limited intelligence might suggest that the "paste and putty" have given place to more convenient forms of dressing. We deny that the watery solution is the chief agent, it being only used as a temporary lotion while changing the dressings. Your correspondent, by confining his critical visit to Dr. Macleod's wards, had surely little opportunity for inspecting Mr. Lister's cases. We think that correspondence on antiseptic treatment should be confined to those who have opportunities of watching the practice.

AN EX-DRESSER OF MR. LISTER'S.

[Our former correspondent did not, we think, confound the two classes of cases alluded to; he merely described what he saw, but drew no inferences with regard to Mr. Lister's mode of treatment. Undoubtedly, also, things formerly deemed essential to this mode of treatment—putty to wit—are now abandoned as useless. Finally, does "Mr. Lister's Ex-Dresser" mean to say that those only who have watched Mr. Lister's practice are qualified to judge of the results of any particular mode of treatment?—ED. *Medical Times and Gazette.*]

NEW MEDICAL MAYOR.—James D. Brown, Esq., was last week unanimously chosen Mayor of the town and county of Haverfordwest.

GENERAL CORRESPONDENCE.

MIS-STATEMENTS OF THE STATISTICS OF THE EDINBURGH ROYAL MATERNITY HOSPITAL.

LETTER FROM DR. CHARLES BELL.

[To the Editor of the Medical Times and Gazette.]

SIR,—It has been said by high authority that "he who spareth the rod hateth the child," and by inverse reasoning, therefore, it is natural to conclude that he who spareth not the rod, whether justly or unjustly, must have an ardent attachment for the object of his affection. I have been led to this reflection by a series of unfair attacks made within the last few months by Dr. Matthews Duncan on the Royal Maternity Hospital of this town, the obvious tendency of which is to lower that valuable institution in the estimation of the public, and to disgust its Medical officers.

In the last number of your journal, after some laudatory remarks in favour of himself as "a careful and shrewd inquirer" and "man of common sense," Dr. Duncan proceeds to make a virulent attack upon the Maternity, stating that it is remarkably appropriate for his purpose—namely, the vilifying and defaming small Hospitals. By his remarks he leads the reader to suppose that he has personally inspected the Hospital, and that he is thoroughly acquainted with its character; but in place of this, however, his statements are founded on erroneous information obtained from the *Dublin Quarterly Journal of Medicine* for August, 1869. Had he wished for correct statistics of the Hospital, he could easily have obtained them by applying to any of the Medical officers; but this seems not quite to have suited his purpose. There is one fact, however, which he refers to, and makes much of it—namely, that in 1867 the mortality of the Hospital amounted to 1 in 43; but this high death-rate did not depend on puerperal causes, or on the character of the Hospital, and it is most satisfactory to state that every married woman delivered in it that year returned home in a fit state to resume her domestic duties. If it was Dr. Duncan's wish to do justice to the Hospital and to judge of its usefulness by the statistics of one year, why should he have chosen the most unfavourable that has occurred for many years? Why should he not have fixed on 1857, when the mortality was 1 in 245; on 1866, when it was 1 in 94; or even on the last year, when it was 1 in 80?

Knowing the peculiar condition of the Hospital and how ill it is supported by the public from narrow-minded prejudice, it is singular that Dr. Duncan should have thought of comparing its statistics with those of the Dublin Hospital, which has every advantage an Hospital can have; yet I rejoice it stands the test well, for in place of its mortality being 1 in 31½ during the last fifteen years, as Dr. E. Kennedy states of the Dublin Hospital, the mortality of the Edinburgh Maternity Hospital amounts to only 1 in 65½ during the same fifteen years. Sir James Simpson is fully justified, therefore, in "accepting a special yearly vote of thanks for his interference in the management of the institution and the treatment of the patients."

I am, &c.

CHARLES BELL, M.D.,
One of the ordinary Physicians to the Edinburgh Royal Maternity Hospital.

DISLOCATIONS.

LETTER FROM DR. P. CAMPBELL.

[To the Editor of the Medical Times and Gazette.]

SIR.—On perusing your notice in last week's issue of the cases of dislocation at the hip reduced by manipulation, under the care of Mr. Maunder, I was reminded of a similar case I had recently met with. The patient, a middle-aged female farm servant, was accidentally injured by a runaway horse. I saw her about an hour and a half after it took place, when the usual symptoms of dislocation of the thigh on the dorsum ilii were unmistakable, there being shortening of the limb to the extent of nearly two inches. Moving her to the edge of the bed, and directing two of the other servants to keep the body and pelvis fixed, I grasped the thigh with one hand and arm, guiding the head of the femur on to the acetabulum with the other; then, forcibly abducting and rotating outwards, combined with extension, reduction was speedily effected with an audible snap. No chloroform was administered.

As showing how some cases will do well even under adverse

circumstances, the following case may be of interest, should you deem it worthy of insertion.

Some time ago, a man about 60 years of age, when in a state of intoxication, fell downstairs one evening about nine o'clock. Next morning, about the same hour, having come to his senses, he called upon me with a compound dislocation of the last phalanx of the thumb backwards, the soft parts being completely disrupted for two-thirds of the circumference on the palmar aspect, and the ends of the bones quite denuded and dry. I replaced the dislocated phalanx easily, applied water dressing and a bandage. In a couple of days, to my agreeable surprise, the wound had healed by first intention—there was no subsequent irritation, and the mobility of the joint remained unimpaired, with the exception of flexion being temporarily curtailed. I am, &c.

Bridge of Allan, November 8. P. Campbell, M.D. &c.

THE BERRY DEFENCE FUND.

Letter from Mr. O. W. Berry.

[To the Editor of the Medical Times and Gazette.]

Sir,—The remarks which appeared in your paper a few months since upon the iniquitous charge brought against me by a woman whom I afterwards prosecuted for perjury, have been followed by numerous letters of sympathy and condolence addressed to me not only by personal friends, but also by others to whom I am perfectly unknown. I felt bound to prosecute the wretched woman, not on personal grounds, but as a duty to the Profession to which I belong, some members of which have marked their appreciation of the course I pursued by contributing to reimburse me with a portion of the heavy expenses it entailed. I have to acknowledge the receipt of the fund, amounting to £36 13s., and to offer my best thanks to the gentlemen who formed the committee for the trouble they have taken, and to the contributors for their sympathy and support.

I am, &c. O. W. Berry, M.R.C.S. Eng., L.S.A.

Wimbledon, November 17.

PROFESSOR STOKES'S ADDRESS.

Letter from Mr. John Gorham.

[To the Editor of the Medical Times and Gazette.]

Sir,—I have just read that admirable address delivered by Dr. Stokes at the Meath Hospital, and reported in your last number of the *Medical Times and Gazette*. The address ought to be reprinted and sent to every Medical man in the kingdom. Its high tone of etiquette, based on truly Christian principles, cannot be too much extolled. I am, &c.

Tunbridge, Kent, November 13. John Gorham.

CLINICAL THERMOMETERS.

Letter from Mr. L. P. Casella.

[To the Editor of the Medical Times and Gazette.]

Sir,—Much interest having been taken for some time past in the use of clinical thermometers, and a great deal having been written respecting them, I think it but just towards at least three eminent men, as well as to myself, to ask your insertion of the following upon the subject.

Of the length of time that thermometers have been used in Medical practice I need not say much. As far back as 1839, a delicate and sensitive instrument was made for the purpose, and, though it had not the advantage of being graduated on the stem, was, I doubt not, fairly correct. It was not self-registering, and being of round bore, the indications were so microscopic in size, for sake of sensitiveness, that it appears to have been but little used.

At the time of the great Exhibition in 1851, my attention was first directed to an arrangement of a self-registering thermometer then exhibited for the first time by Professor Phillips, F.R.S., of Oxford, the principle of registration being by means of a speck of air extracted from the mercury of the bulb, and, after completion of the instrument, so placed as to detach any required length of mercury to be used as an index. So attenuated, however, is this air-speck as certainly to be less in amount than is known to exist in any other registering thermometer with which I am acquainted. The Professor's specimen (made, I believe, by himself) had only a small piece thus detached, and the instrument being also small, a most desirable and convenient form of portable registering thermometer was obtained. Strange to say, though much wanted, this excellent discovery received but little notice at the time, except, indeed, the warm approval of a distinguished man, the late John Welch, Esq., F.R.S., of the Royal Kew Observatory. As a meteorologist, Mr. Welch at once applied it to meteorological purposes, and, by detaching a larger portion of the mercury by the same means, at once adapted an ordinary thermometer for use as a registering instrument. In reporting to the Kew Committee of the British Association upon the instruments of the Observatory, Mr. Welch described the thermometers thus made as "the most convenient form of all registering thermometers." Notwithstanding this, the principle met with strong opposition in quarters where it certainly should have been least expected. Mr. Welch, however, continued to use it exclusively at the Observatory, where, I believe, his original one may still be seen in daily use.

Perceiving the great value of the instrument, I endeavoured to draw the attention of Medical men to its use as a clinical registering thermometer. I also tried others to whose especial requirements I believed, and still believe, it to be admirably adapted, but beyond its slow introduction for meteorological purposes, I am sorry to say, with but little success, for my friends in the Medical Profession quietly observed that their "wants and appliances were already sufficiently numerous," and that the plain instrument seemed to answer where such investigations were required.

Having by the aid of some of our most eminent meteorological authorities thoroughly established the value of Phillips's principle for thermometric registration, its next value was found in applying it especially to the wants of the members of the Alpine Club. By these gentlemen, its convenient size and portability being appreciated, it was at once adopted, and has ever since been held by them as perfect for its purpose.

At this time, and when Dr. Aitken, of the Royal Victoria Hospital, Netley, was directing his attention to the influence of heat on the human frame, the sight of one of these thermometers was, I believe, the chief cause of my introduction to that gentleman, and through his kind co-operation "the self-registering clinical thermometer" was quickly and, I must say, most judiciously arranged, the length being about ten inches, for the double purpose of having the degrees expanded and keeping the graduations a sufficient length from the bulb. In non-registering instruments, it is obvious that a few inches of spare stem is indispensable, whilst in registering ones two or three inches is desirable for preventing beginners especially from shaking the index into the bulb, and thus uniting it with the other mercury.

Like most other successes, this useful instrument soon found imitators of various kinds, adopting the term "original" to some little matter of detail, as if applicable to the whole registering principle of the instrument, but worse than this, and more to be regretted, covering with the names of precision, etc., most serious defects, from want of experience in properly carrying out the registering principle of this simple, interesting, and valuable little instrument known from the first as "Aitken's clinical thermometer." I am, &c.

23, Hatton-garden, E.C., Oct. 19. Louis P. Casella.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, November 9, 1869.

George Burrows, M.D., F.R.S., President, in the chair.

The President, Dr. Burrows, in a few words from the chair, welcomed the Fellows to their labours. He expressed a hope that this would be an active and prosperous session, especially as it was not at all unlikely that it might bring about some important change in the constitution of the Society, and it was desirable that their work might bear comparison with that of former years, both in papers and debates. He showed them the new volume of *Transactions*, which would be speedily issued.

Dr. James Newton Heale read a paper on

THE PHYSIOLOGICAL RATIONALE OF PNEUMONIA AND BRONCHITIS.

Pneumonia has always been described as inflammation of the substance of the lungs. The author ventures to doubt this conclusion, and to suggest that pneumonia may be one thing, and inflammation of the pulmonary tissue another. No doubt

can be entertained that the venous blood is sent to the lungs, not because the tissue of those organs requires blood of that particular kind, but because the body at large reqnires arterial blood; and there seems no ground, either in probability or fact, for supposing that the lungs need for their nourishment either a proportionately larger quantity of blood, or blood of a different character, than suffices to accomplish a like purpose in other organs of similar dimensions. But if the blood brought by the pulmonary artery to the lungs is not supplied for the purpose of nourishing its tissue, for what purpose is it sent there? The blood reaches the lungs, firstly, in order that it should be rendered arterial in exact proportion to the requirements of the body at large; and secondly, that a particular force, comprised in the word "vitality," should be excited in exact proportion to the degree in which the change from venous into arterial blood is accomplished. It is abundantly clear that the quantity of blood carried to the lungs by the pulmonary artery cannot be increased or diminished by any supposed requirements of their tissue for a greater or less supply of blood. The blood so conveyed must be in strict accordance with the quantity of venous blood furnished by all the organs throughout the body taken in the aggregate, which will likewise be in precise relation with the activity of function then exercised, and will in like manner exactly tally with the degree of "vitality" which is in active exercise throughout the body at the same time. The degree in which the blood is being then arterialised furnishes the key to the whole chain of vital phenomena. Passing to the strictly pathological consideration of the subject, are we justified in drawing the conclusion that pneumonia is identical with inflammation of the lungs? The author thinks that a state of cirrhosis, either partial or general, fulfils much more near'y the condition of inflammation of the substance of the lungs than does that of pneumonia. There cannot be a doubt that the lungs do frequently become "engorged" with blood brought by the pulmonary artery, and that this constitutes an early stage, and is indeed nothing else than pneumonia. Whence does that engorgement proceed? Certainly not from a refusal of the tissue of the lungs to appropriate the blood, because if a supply of blood out of all proportion to the quantity which that tissue could by any possibility apply to the purposes of its nutrition were the cause of engorgement, it is clear that the lungs must at all times be in such a state, because it is impossible that the tissue of the lungs could at any time appropriate to its own purposes a hundredth part of the blood brought by the pulmonary artery. When the lungs become engorged it is not on account of the failure of the nutrition of those organs, but because, from some cause, the venous blood, when brought to them, fails to become arterialised. It is retained in the lungs, and these organs become engorged because the blood is not arterialised and transmitted onwards. Many causes are capable of producing such a result. 1. The lungs may be themselves in fault—*e.g.*, some defect in their structure may prevent the blood being brought into sufficiently close contact with the air. 2. The blood may not be arterialised because the air itself may be in fault. 3. The blood itself may be in fault—*e.g.*, pus-globules, or tuberculous matter artificially introduced, may block up some of the smaller arteries, and prevent the blood reaching the plexus of the air-cells. 4. The failure of the arterialisation may result from a severance of the continnity, whereby the capillaries in the lungs may become disunited from those in the system at large, where the functional changes in correspondence with the arterialisation in the lungs ought to take place, the vitality which should be created by the concurrence of both being arrested, and the arterialisation fails in consequence. Numerous instances were cited of pneumonia by such circumstances as enumerated above. From the consideration of pneumonia, the transition to that of bronchitis is not difficult. Inasmuch as anatomical investigation conclusively proves that the plexus of the bronchial membrane and its peculiar secretion are products of the pulmonary blood-vessels, and not, as was long supposed, of the bronchial arteries, it follows that pneumonia and bronchitis must be nearly allied; but inasmuch as the plexus of the air-cells, when the venous blood is converted into arterial, intervenes between the blood sent by the pulmonary artery and that which reaches the bronchial membrane, this circumstance creates a very notable distinction between the two, and establishes a pathological difference of great importance. Reflection upon the anatomical peculiarities of these blood-vessels will likewise show that the blood cannot be propelled into the plexus of the bronchial membrane by the direct action of the right ventricle, since that force would be expended before the blood would reach the plexus of the bronchial membrane; and, moreover, the blood, after it has passed the air-cells, has the option, as it were, of reaching the left auricle by the veins, which carry the blood thither without traversing the plexus of the bronchial membrane. Any cause which would have the effect of retarding the blood in its transit through the left auricle would, by impeding its onward flow, increase the quantity of blood which would flow through the plexus of the bronchial membrane, and thus have a tendency to produce congestion in that membrane. Numerous pathological instances illustrative of the above were cited, and the following conclusions were drawn from them:—1st. That an increased function in the plexus of the bronchial membrane would conduce to diminish any accidental congestion in the left auricle; a copious discharge of bronchial mucus would be calculated to rednce any such congestion by the climination of the fluid. 2nd. The increased activity of the function of the bronchial membrane, thus called into operation, would materially aid in overcoming the obstacle by bringing into play a largely increased aërating surface; in fact, the whole bronchial membrane would then become auxiliary to the air-cells, not only occasioning additional arterialisation of blood, but also causing an augmented supply of vital influence as the concomitant of such arterialisation, and so assist in overcoming the obstruction which caused the congestion in the auricle. In short, the membrane of the bronchial tubes is made, in such contingencies, to reinforce the action of the pulmonary capillaries, and to supplement its action in the creation of arterial blood and of vital force. The fundamental distinction, therefore, between pneumonia and bronchitis, is comprised in the fact that pneumonia is an affection belonging to the blood before it has passed through the air-cells, and while it is as yet wholly unarterialised; while bronchitis is an affection of the same blood operating after it has passed the air-cells, and having, at least to some extent, become arterialised; and the morbid action peculiar to bronchitis takes place while the blood is ramifying in the bronchial mucous membrane, and after that particular blood has escaped all risk of pneumonia.

Dr. Powell thonght Dr. Heale confounded crupose with epithelial pneumonia.

Dr. Schulhof thought, were the theory true, we ought to have pneumonia more common as an accompaniment of emphysema than bronchitis.

Dr. Waters could not agree as to the cause of pneumonia, nor yet as to the pathology of bronchitis. Pneumonia was inflammation of the vessels of the air sacs, and these nourish the sac and give rise to its inflammation. The citation of emphysema was most pertinent; were the theory true, pneumonia must be common with emphysema. After burns the action was reflex, not mechanical.

Dr. Heale said that in emphysema there was a greatly increased quantity of blood passing over the mucous membranes.

Dr. A. T. H. Waters read a paper on

Observations on the Treatment of Pneumonia, with an Analysis of Cases treated by the Author.

The paper was founded on the results of treatment in fifty-three consecutive cases of acute pneumonia treated by the author in the Liverpool Northern Hospital, and was accompanied by a tabular statement presenting the leading features of each case. *Of the Age of the Patients.*—Under 10 years 1 case; between 10 and 20 years, 7 cases; between 20 and 30 years, 25 cases; between 30 and 40 years, 12 cases; between 40 and 50 years, 7 cases; between 50 and 60 years, 1 case. All the patients were males except two. A large proportion of them were sailors. Many were strong, robust-looking men, whose previous health had been good, and in whom the disease had existed for a few days only before admission into the Hospital. The disease was single in 44 cases, involving from one-half to the whole of the lung; it was double in 9 cases. Of the single cases, the right lung was attacked in 20, the left in 24. Of the double cases, the left lung was most involved in 6, the right in 1. Both lungs were equally involved—viz., one half—in 2 cases. *Of the Treatment.*—Venesection was not practised in any case. Only 3 cases were cupped; and only 2 had leeches applied. Whenever antimony was given, it was in small doses—from one-twelfth to one-fourth of a grain—except in 2 instances, in which it was given in doses of three quarters of a grain and a grain. In 33 cases—a large majority of the whole—no antimony was given. In a large proportion of the cases some alcoholic stimulant was given early in the disease. In 30 cases alcoholic stimulants formed the main therapeutic agent; and in some of the most severe cases no other medicine was given. In 6 of the remaining cases stimu-

lants were given after a few days' treatment by other means. The stimulants were given at regular intervals, frequently with food, beef-tea, or milk. In the instances marked by a very rapid pulse and great dyspnœa, brandy was given every hour, or every hour and a half. Mercury—calomel with opium—was not given in any case. In one case blue-pill was given twice a day for six days; but no soreness of the gums was produced. In no other instance was mercury given, except as a purgative in combination with some other drug. In every case nutrients were allowed freely—viz., beef-tea and milk from the commencement of treatment, and solid food as soon as the patient could take it. *Of the Results.*—Of the 53 cases, 1 died. In this case, after convalescence had apparently set in, and the pulse had fallen to 80, effusion into the pleura took place somewhat suddenly and to a large extent, and death soon followed. The average duration of the 52 cases that recovered, from the commencement of treatment to the period of convalescence—namely, when all active symptoms had subsided, when the pulse had fallen to a natural or nearly natural standard, and when the patient could take solid food—was $8\frac{1}{16}$ days. The date of the commencement of the attack was clearly ascertained in 41 cases. The average duration of these, from the onset of disease to the time of convalescence, was $11\frac{1}{2}$ days. The average number of days during which the 52 patients remained in the Hospital was $24\frac{1}{3}$ days; but, of these patients, 6 were kept in for a long time in consequence of impaired health from other causes besides pneumonia—namely, from rheumatic fever, tubercular symptoms and gangrene of the lung, great debility, and emphysema. Excluding these 6 cases, we have, as an average of the remaining 46, $20\frac{1}{2}$ days. In reference to this average it should be borne in mind that the patients were, for the most part, not discharged until they had gained sufficient strength to be able to resume work. The results of these cases tend to prove that pneumonia is far from being a fatal malady, and that under a treatment which consists in supporting the patient, and in abstaining from depletory or depressing measures, its mortality is low. None but Hospital cases have been tabulated, as these alone are available for public reference; but the author stated that he had pursued a similar line of treatment in cases met with in private practice. In conclusion, the author referred to the general principles of treatment which he adopted. The treatment adopted is not characterised by the exhibition of large doses of any of the so-called antiphlogistic remedies. Nourishment is never withheld if the patients can take it, and powerful purgatives are not resorted to. Stimulants are frequently prescribed at any early period of the disease, and they are often mainly relied on. General bloodletting was never practised, and local bleeding only occasionally (in five of the recorded cases). The author is of opinion that we possess no remedy which is specially and specifically curative of pneumonia. He occasionally prescribes antimony in small doses; but he thinks the cases are few in which it is useful, and that in no case should its administration be prolonged. The propriety or impropriety of administering alcohol in pneumonia is one of the most important questions in connexion with the treatment of the disease. No fixed rules can be laid down on this point. Whether stimulants are to be given or not must be decided by the general features of each case. There can be no doubt that many cases of pneumonia may be conducted to a satisfactory issue without the administration of alcohol, and that there are cases in which alcohol aggravates the symptoms. At the same time there are also cases which are as decidedly benefited by it. To distinguish between these cases is sometimes difficult. When the pulse is very quick, the dyspnœa urgent, and the disease extensive, the author never hesitated to prescribe stimulants freely. The author does not prescribe mercury—calomel with opium—in the disease. He thinks that too high a value has been placed on mercury as a remedy in the stage of hepatisation, and that it possesses no special properties for promoting absorption of the effused matters. It is useful as a purgative; but if given with the view of producing salivation, it will generally be found prejudicial. Opium is useful in relieving the pain in the side which so often occurs in pneumonia, for allaying cough, and procuring sleep. Ipecacuanha is apparently useful in some cases. The author frequently gives it with stimulants in the pneumonia of children. Carbonate of ammonia, chloric ether, and bark are also often given by the author, either alone or in conjunction with alcoholic stimulants, and quinine as soon as the acute symptoms have subsided. Salines are not, as a rule, administered. The administration of nourishment forms an important element in the treatment of pneumonia, as well as of all other acute affections. In the early stages of a severe attack there is but little desire for food; and there is a risk, if the mere feelings of the patient are alone consulted, that nourishment may be withholden too long. Beef-tea and milk may be safely allowed even in the acute stage, and as the case progresses the diet should be more liberal. In cases which require an early and free administration of alcohol, nutrients should be given liberally from the first. The author believes that mild counter-irritation is useful in the early stages of an attack, and that, later, blisters are frequently of service. In conclusion, he observed that, informing an opinion of the most appropriate treatment in any case of pneumonia, regard must be had to the constitutional condition of the patient, the frequency and character of the pulse, and the antecedent circumstances of the patient, rather than to the amount of lung involved or the stage which the disease has reached. It is the patient, and not simply the diseased lung, that we have to treat.

Mr. Wyatt asked if the temperature had been taken, this being of importance with reference both to diagnosis and to treatment, especially with alcohol; also as to the period of resolution. It was put down from three to four days. He had never seen it so soon.

Dr. Burdon Sanderson referred to diagnosis. The mere fact that a patient had pneumonia conveyed very little information. There were two kinds—that connected with bronchitis (the catarrhal), and that more strictly epithelial. Catarrhal was most common in London. It was important to draw this distinction; and to do so short abstracts of the cases were wanted. This want of distinction constituted the great difficulty in estimating the treatment.

Dr. T. Williams asked if resolution took place in all, if pleurisy was seen as a complication, and how far counter-irritation was tried.

Dr. Heale thought the great thing was to restore the impeded circulation.

Dr. Sansom thought alcohol of value, partly because it destroyed septic agencies, partly because it acted on the vaso-motor system of nerves.

The President referred to the peculiarity of the statistics as proving pneumonia to be more common in the left than in the right lung.

Dr. O'Connor spoke of the diagnosis and treatment of pneumonia, and extolled the value of the signs derivable from the tongue.

In reply, Dr. Waters said he had used the thermometer, but not in all. He said nothing of resolution. The nature of the case, whether simple or complicated, was shown in the table. The pneumonia was mostly lobar. Blisters he had found useful in the latter stages. He was quite sure as to the sides affected, and as to the diagnosis of each case.

After the meeting, Mr. Wyatt showed a new Regimental Tunic proposed for the Coldstream Guards.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, November 3.

Dr. Graily Hewitt, President, in the Chair.

The following gentlemen were elected Fellows:—Dr. Gill, Mr. G. Rice Ord (Streatham), and Mr. Taylor (Earl's Colne).

Dr. Edward Jones, of Sydenham, exhibited an Anencephalous Fœtus, and gave particulars of the delivery. In addition to the cranial deformity, there was also a spina bifida in the cervical region.

Mr. Worship, of Sevenoaks, exhibited a Small Extra-Uterine-Tubal Fœtation, and gave full particulars of the symptoms which preceded and followed rupture of the cyst, and an account of the post-mortem examination. The fœtation had occurred in the right Fallopian tube. The uterus was lined with a decidua.

Dr. Madge gave particulars of four cases of Congenital Imperforate Vagina, and one case of Congenital Phymosis, occurring in the same family.

Dr. Aveling read a paper on a New Principle of Treatment in Cases of Prolapsus and Procidentia Uteri. He proposed to cause the uterus to assume such an angle with the vagina that it could not readily enter and pass through it. In a case of complete procidentia which he cured by removing a portion of mucous membrane from the anterior vaginal wall, he found that retroversion had resulted, and he attributed the success of the operation to the displacement caused. He believed that the most useful pessaries were those which pressed upwards

the anterior vaginal pouch, and thereby caused slight retroversion. Displacement posteriorly to the extent of fifty degrees he believed to be sufficient to prevent prolapsus.

Dr. Routh said it was a question with him whether Dr. Aveling's case, interesting as it was, was really a case of procidentia. True procidentia was very rare. Many of the so-called cases were cases of allongement, as described by Huguier. Huguier, in sixty-four cases of so-called procidentia examined through a course of fifteen years, had met only with two true cases; and he (Dr. Routh) had met with but three. In these cases of allongement he had almost invariably practised the perineal operation; and this, he believed, succeeded mainly owing to the loss of blood sustained, which caused the uterine hypertrophy to diminish, helped by the long rest enforced. In Dr. Aveling's case this bleeding, which he thought so important an element in the cure, was very small as compared with that in the perineal or Huguier's operation; and if the cure was only effected by inducing retroflexion, and the uterus was much lengthened, the pressure on the sacrum must give rise to the troubles usually observed in retroflexion, and to a greater degree.

Dr. Barnes observed that although Huguier's description of apparent procidentia as real hypertrophic elongation of the uterus was correct in the great majority of instances, still he not unfrequently saw cases in which the whole uterus could be felt outside the vulva, enclosed in the everted vagina. In these cases the uterus was generally retroflexed.

The President was disposed to think that the retroversion must have existed before the operation was performed. The displacement in question was, in his experience, a most troublesome affliction for the patient.

Dr. Rogers considered procidentia, as distinct from allongement, to be not uncommon. He had operated in several cases after the mode suggested by Dr. Marion Sims, and with the best results, the uterus remaining in its normal position.

Dr. Aveling, in reply, would only observe that it was not in cases of prolapsus caused by elongation of the cervix that he proposed this principle of treatment.

Dr. Barnes then read a paper on Uterine Hæmorrhage after Labour. The author endeavoured to define the conditions upon which arrest of hæmorrhage after labour depended, the action of the remedies in common use, and the indications for resort to particular remedies. The remedies almost exclusively used depended for their efficacy upon their power of exciting contraction of the uterus. This presupposed nerve-force enough to respond to excitation; but when this was exhausted, remedies failed. It became then necessary to seek a new power that would act under the condition of exhausted contractility. This was found in styptics like perchloride of iron, which acted by coagulating the blood in the mouths of the open vessels, and corrugating the inner surface of the uterus. Acting exactly where ordinary means failed, it was a new power to save women from dying of hæmorrhage. Examining the action of ergot, compression of the uterus, and cold, he urged that these should not be trusted if they failed to act quickly; for if they so failed it was probably because contractility was gone. If persevered in beyond this point, they did harm. Ergot and cold added to the depression; kneading might bruise the uterus; all were apt to occasion some form of puerperal fever. The perchloride had in several cases been followed by death when used for injecting nævi; but this case was essentially different from that of injecting the uterus. In his own practice he had observed three orders of cases. In the first all recovered well, the hæmorrhage being immediately stopped; in some of these death would almost certainly have ensued but for the remedy. In the second series recovery occurred, phlegmasia dolens supervening; but phlegmasia dolens was not unusual after severe hæmorrhage, and some of these cases would have died but for the remedy. In the third death followed, but the patients were moribund when the remedy was applied—it came too late. Here the remedy was transfusion. The practical lesson resulting from a review of these cases was to observe the rule he had laid down—not to persist too long in the use of cold, kneading, and other remedies, but to resort to the perchloride before collapse had set in. Dr. Barnes showed a convenient case, constructed by Krohne and Sesemann, containing a set of his dilators, a Higginson's syringe with uterine tube, and a bottle for perchloride of iron.

Dr. Rogers could most cordially agree with every word of Dr. Barnes's admirable paper. He (Dr. Rogers) had first used the perchloride some fifteen years ago in post-partum hæmorrhage, having failed with a strong solution of alum. He had since then employed it five or six times, and, in every case, successfully. He thought Dr. Barnes had omitted the mention of galvanism, on which he placed some reliance, and which had been advocated by his late friend, Dr. Mackenzie.

Dr. Cleveland thought one of the difficulties in the treatment of post-partum hæmorrhage consisted in determining when the means in general use should give way to the remedy recommended by the author. It was difficult, too, when single-handed, to have the patient, for ever so short a time, to prepare an injection. He had himself used an 8 oz. india-rubber bottle, to which was easily attached a flexible male catheter. This could be used more readily than a Higginson's syringe, and with less risk of injecting air. He would inquire if the author had used emetics, as he had himself witnessed the good effect of vomiting on more than one occasion. He would also ask if the free use of stimulants, especially at the commencement of flooding, was not open to objection.

Dr. Wynn Williams was hardly prepared to hear that the knowledge of perchloride of iron as a styptic in these cases was as limited as the author supposed. He himself had used it for a long time, although not exactly in the same manner as the author of the paper, but in a way which he might call the ready method. This consisted in taking a sponge, on which some of the tincture of the perchloride had been poured, and passing it into the uterus through the hollow of the hand already introduced, after, of course, previously emptying the uterus of clots, and then sponging the interior of the uterus with it, leaving it in the uterus, if seen fit, with a string attached. He thought this plan less objectionable than injecting a considerable quantity of fluid. The stains on the hands of the operator were readily removed by a solution of oxalic acid or salts of lemon.

Dr. Braxton Hicks most cordially agreed with the whole paper. He wished to add, however, a few remarks. In the first place he thought there was a considerable difference in different cases as to the condition of the internal surface of the uterus after expulsion of the placenta. In some uteri examined after death, the large apertures of the sinuses described by many authors were absent. There were of course the arterial openings and those of their return veins—of considerable size certainly, but not very large. In others it would be found that the sinuses, in their oblique passage through the uterine walls, occasionally abutted on the line of separation of the placental decidua. When the placenta was removed, then the feeble wall gave way, and severe loss would result, unless the uterus contracted quite firmly. In the former case it did not require that severe uterine contraction, and the perchloride would readily act; in the latter it would probably be found that even the perchloride would fail to arrest this great stream. Enormous gushes he believed to be the result of a preaccumulation which had been going on unobserved. To one class of cases Dr. Barnes had not alluded—viz., placenta prævia, where the cervical zone was relaxed after delivery. In these the perchloride applied to this surface was of much value. In severe cases also of abortion, when the uterus had been emptied, he had used it frequently with complete success, and without any untoward result. He used a somewhat weaker solution than Dr. Barnes.

Dr. Hall Davis could add his testimony to the value of the iron solutions. He had used them for several years among his Hospital patients; scarcely a week passed without his resorting to them. He had used the pernitrate, the persulphate, and the perchloride, and had found them about equally efficacious. It was of the utmost importance before using them to empty the uterus of any contained clots, that the styptic might fairly come into contact with its internal surface.

Dr. Playfair referred to the importance of aiming at the prevention of post-partum hæmorrhage, and urged the careful following down of the contracting uterus with the hand. On the subject of the value of the perchloride, he could but add his testimony to that of the previous speakers.

Dr. Tyler Smith, after eulogising the paper of Dr. Barnes, said that he believed but few cases of dangerous flooding would occur if in all cases a full dose of ergot were given immediately after the birth of the child. It would, in his opinion, be a vast improvement in obstetrics if the forceps could be substituted for ergot as now often given during labour, and if the ergot were administered habitually at the moment of birth, or while the head was passing the vulva. Besides the prevention of hæmorrhage, subinvolution of the uterus would become less frequent. This rule of giving ergot had been extensively followed by his advice, and with the best results, in India, where flooding was still more common than in this country.

Dr. Aveling feared that the styptic fluid might enter the circulation and produce thrombosis. He thought the principle good, but that the sponge plan of Dr. Williams might be safer

than Dr. Barnes's. He would have liked to have heard some reference to transfusion.

The PRESIDENT thought the Profession would be gratified in hearing, through the medium of this Society, the opinion of so many distinguished men on this important subject. After the decided opinions expressed in favour of the perchloride of iron, its use, so ably advocated by Dr. Barnes, would probably become more extended. As preventive of hæmorrhage he had great belief in pressure, and in fact the only cases in which he had seen hæmorrhage fatal under his own care were cases in which, unusual attention to the child being required, the uterus had not been uninterruptedly watched over. Transfusion, to which Dr. Aveling had alluded, was adapted for cases of a somewhat different nature, where the hæmorrhage had ceased.

Dr. BARNES, in reply, said he had not forgotten either the subject of transfusion or prevention, but the problem set in this paper was how to deal with hæmorrhage when present. With regard to electricity, he had preceded his friend the late Dr. Mackenzie in proving the power of faradisation in causing uterine contraction, but he had abandoned it because it was inconvenient, often intensely distressing to the patient, and inferior to other means. As to Dr. Hicks's remarks upon the frequent absence of large openings of sinuses on the inner surface of the uterus, he reminded the Society that the obliquity of the openings rendered it very difficult to find them; and that Dr. Chowne and others, by injecting the vena cava backwards, showed that water would escape in torrents on the uterine surface. With reference to priority, he must say that he was surprised to hear such very general expressions of approval of the treatment; but that it was not yet a recognised plan was proved by the absence of mention of it in our text-books. It appeared to have been first used by D'Outrepont; it was pointedly recommended by Kiwisch in 1840; his own first published recommendation of it was in his Lettsomian Lectures on Placenta Prævia in 1857, and of course he had used it before that date. In conclusion, he expressed his belief that the perchloride of iron would come into general use as a recognised plan of treating uterine hæmorrhage.

OBITUARY.

SIR JAMES PRIOR, F.R.C.S.,

was for many years in the Medical service of the navy. He served off Greenland, and in the North Sea, in Africa, in the East Indies, Brazil, and on the Eastern Coast of Africa. He was also engaged in the reduction of Heligoland, of the Mauritius, and of Java. He was Staff-Surgeon of the Chatham Division of Royal Marines, and was appointed in 1843 Deputy Inspector-General of Hospitals and Fleets. He was the author of a "Life of Burke," a "Life of Goldsmith," and some Medical works. The "Life of Goldsmith" attracted great attention at the time of its publication, and was generally regarded as the best biography of the poet. Sir James Prior was an elegant scholar, and his "style" pure and classic. He was born in 1790, and was knighted in 1858.

RICHARD GRIFFIN, F.R.C.S., J.P.

MR. GRIFFIN, the indefatigable and courageous advocate of the Poor-law Surgeons of this kingdom, has ceased from his labours. For a considerable time past he has been in bad health, and incapacitated for practice. He was formerly House-Surgeon of the Norfolk and Norwich Hospital, and was subsequently Honorary Surgeon of the Dispensary and Infirmary of that town. He settled early in life at Weymouth, at which place he obtained a very extensive practice both as a general and a consulting Practitioner. He was in the Commission of the Peace. For many years he was Surgeon to one of the districts of the Weymouth Union, and it was in this position that he worked with such energy as a reformer of the Poor-law in regard to Union Surgeons. He was not happily placed with the guardians of the district, and his efforts in the cause of the poor were often frustrated, and he was subjected to much annoyance. He, however, persevered against most formidable obstacles, and succeeded in forming the Poor-law Medical Reform Association, of which for several years he was chairman.

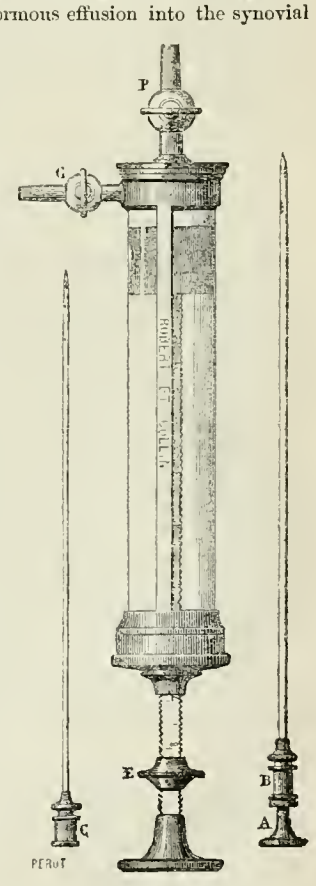
The public career of Mr. Griffin was for several years the history of Poor-law Medical Reform. He was the active spirit of the movement. His correspondence was truly overwhelming, yet he found time to give addresses, to frame petitions, and to collect funds for carrying on the war against injustice and prejudice. The readers of this journal will recollect with what frequency for several years communications were made to it by Mr. Griffin. He collected a mass of information on the question which he had so much at heart that was truly astonishing; and much of this he condensed and offered to give as evidence before a Parliamentary Committee which had been formed to inquire into the matter. There is reason to believe that he was prevented giving this evidence by parties interested in keeping the abuses of the system secret. Mr. Griffin some time since became paralysed, and died on the 12th inst.

In estimating his character, we must put in prominent relief his amazing industry, his dauntless courage, and his disinterested motives. He was an accomplished scholar—wrote well and spoke well. His failings were consequent in some degree on the very energy of his character. He was self-opinionated and obstinate, and "bore no brother near the throne." He wanted grasp of thought. He failed to do the good he would otherwise have accomplished by taking too exclusively a Professional view of the question at issue. He complained of the position of Poor-law Medical officers as a personal affair, and did not show, as he might have done, that society at large was as much interested in the matter as his Professional brethren. But he was well fitted for a reformer. He rendered important service to a large class of Medical Practitioners, amongst whom his name will always be remembered with affection and admiration.

NEW INVENTIONS.

DR. DIEULAFOY'S *ASPIRATEUR SOUS-CUTANÉ.*

I SEND you a plate representing Dr. Dieulafoy's *aspirateur sous-cutané*, which, what little I have seen of it, seems a very practical instrument. The two cases in which I have witnessed its employment were, one an enormous effusion into the synovial cavity of the knee-joint from blennorrhagia, the other a hydatid cyst of the liver. The liquid was withdrawn in both cases without the least difficulty or accident whatever, although the fluid in the first was of a syrupy consistence. The great advantage of the instrument, besides continued aspiration, is the very minute calibre of the trocar, a true capillary form, and which may be introduced into many organs without danger. The author recommends the instrument not only for the treatment of serous, purulent, or hæmatic effusions into natural or accidental cavities, but also as a means of diagnosis of such morbid collections; and it is in this latter capacity that much service may be expected from its use. In deep-seated abscesses, for instance, where fluctuation is almost imperceptible, or in collections where the nature of the liquid is not understood, and where an exact diagnosis is desirable before Surgical intervention, this instrument can be of great value. The lower cock, which upon being opened allows the aspirated fluid to escape from the barrel of the pump, also serves to aspirate a medicamentous liquid in case an injection is deemed necessary. Thus, after withdrawal of the morbid liquid, an injection may be practised without removing either the trocar or the pump.



FEMALE DOCTORS.—It is said that a woman is attending Medical lectures in Stevens's Hospital School of Medicine, Dublin.

NEW BOOKS, WITH SHORT CRITIQUES.

The Student's Guide to Physical Diagnosis. By SAMUEL FENWICK, M.D., Assistant-Physician to the London Hospital, Co-Lecturer on Physiology at the London Hospital Medical College, etc. London: John Churchill and Sons. Pp. 176.

*** For Dr. Fenwick's little work we bespeak a hearty welcome. It is essentially a student's book, and a good one too. It is not intended to teach the refinements or the minutiæ of diagnosis—that the student rarely wants. It proceeds on a simple and intelligible plan, something like that introduced into botany for a somewhat similar purpose, and which is commonly known as the dichotomous system: only it is not nearly carried to perfection here. We proceed thus. The patient presents a certain symptom, the disease is so and so, or belongs to such and such a group—the patient does not present the system in question, the disease is not so and so, and it belongs to such and such another group. There are some capital diagrammatic illustrations (chiefly after Da Costa), not exactly depicting morbid conditions, but showing the conditions on which they, or rather their symptoms, depend in an exaggerated fashion. Of course every man has his own little peculiarities and specialities, so to speak; these are not completely absent from Dr. Fenwick's production; nevertheless they are not so manifest but that the author has good reason to be satisfied with his work, and the student will have ground for satisfaction if he acquire and practise the tenets here taught.

The Climate of the South of France as suited to Invalids, with Notices of Mediterranean and other Winter Stations. By C. T. WILLIAMS, M.A., M.D. Oxon., Assistant-Physician to the Hospital for Consumption and Diseases of the Chest, Brompton. 2nd Edition. London: Longmans. Pp. 134.

*** The second edition of this little work is considerably enlarged both in size and scope. The first edition dealt with the South of France only; the present includes other Mediterranean stations, as those of Italy, Spain, and North Africa. In an appendix an account is given of some summer stations, the Engadine and others. Meteorological considerations are prominently brought forward.

Truth: a Libel by Law. The Case of Sharp v. *Wilson.* By JAMES WILSON, L.F.P.S.G. Edinburgh: Henry Robinson.

*** For a good many reasons this book had been better unwritten. It contains the painful history of one of those quarrels between Medical men primarily originating in petty Professional jealousies. To such quarrels we must undoubtedly attribute the inferior position of our Profession as regards its influence on public affairs. We cannot all unite, be the object what it may. The details of the case are painful beyond description. Alleged incapacity, said to result in dreadful suffering and loss of life, constitutes its theme. We cannot think that Mr. Wilson has been wise in publishing this book.

Dr. Harold's Handbook. By Mrs. GASCOIGNE. London: Longmans. 1869.

*** This is not a Medical book, but it deserves a good word from the Medical Profession, who may do a good service to their patients by recommending it in any case where an amusing book may be amongst the aids to recovery. It consists of a series of tales, remarkably well written, with what it is fashionable to call a strong realistic touch, and showing the author to be a keen but genial and kindly observer of life and manners. That which we have to thank the author for is the flattering picture which she gives of our Profession in her impersonation of Dr. Harold, from whose note-book the tales are supposed to be taken. It is decidedly agreeable to find that the typical Doctor in the eye of the public is a busy, bustling, large-hearted, prosperous man, never tired, never out of spirits, enjoying universal confidence because of his sound common sense and kindness. With all the ills that harass our distressed fraternity, we may thank Heaven that people pay us at least in good words.

The Medical and Surgical Reporter. Philadelphia, U.S.

*** Contains a small quantity of original matter, and a variety of amusing and instructive quotations. The Paris correspondent is altogether in error when he says that Mr. Spencer Wells failed to extract the bullet from Garibaldi's foot. We are sure Mr. Spencer Wells had nothing to do with the case.

DR. HALFORD, of Melbourne, has issued a pamphlet on "The New Treatment of Snakebite," for the use, as we understand it, of the general public. If so, it is too full of technical details as to cases, and so on. His plan of treatment is now well known here as elsewhere, and we are glad indeed to find that in certain cases it has been successful; but undoubtedly it has not been universally so. We have been always delighted to record Dr. Halford's experiments and his successes, and we shall be equally so to hear more of the same kind. At the same time we must confess we do not like the tone of this pamphlet as much as we have that of some of Dr. Halford's previous efforts.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 16th inst.:—

Barrett, Ashley William, Stepney, student of the London Hospital.
Brodie, Edward Fitzgerald, L.R.Q.C.P. Ireland, Dublin, of the Dublin School.
Christian, John Griffith, Rhyl, North Wales, of St. George's Hospital.
Crisp, James Luke, South Shields, of the Newcastle School.
Davies, Francis Pritchard, M.B. Edin., Birmingham, of the Edinburgh and Birmingham Schools.
Durham, Frederick, Northampton, of Guy's Hospital.
Elphick, Edward, L.R.C.P. Lond., Adelaide, South Australia, of Guy's Hospital.
Gaitskell, Edward Forbes, L.R.C.P. Lond., and L.S.A., Streatham, of Guy's Hospital.
Harris, James Alfred, Audley, Staffordshire, of the Edinburgh School.
Hiron, John Hickman, L.S.A., Studley, Warwickshire, of the Birmingham School.
Hobley, Simon Halford, L.S.A., Carnarvon, of King's College.
Hutton, Robert James, L.R.C.P. Edin., Lever-street, Islington, of St. Bartholomew's Hospital.
Joy, Frederick William, L.R.C.P. Edin., Northwold, Brandon, of University College.
Laslett, Frederick William, L.R.C.P. Edin., Old Charlton, Kent, of Guy's Hospital.
Little, Charles Edward, Lynn, Norfolk, of Charing-cross Hospital.
Mallam, William Prior, L.R.C.P. Lond., Kidlington, Oxon, of Guy's Hospital.
Paige, Herbert William, Carlisle, of the Cambridge and London Hospitals.
Rowland, Edwin Roger, Lind Wotting, St. George's Hospital.
Saunders, William Egerton, Peckham, of Guy's Hospital.
Seaton, Edward, Surbiton, of St. Thomas's Hospital.
Simon, Maximilian Frank, Blackheath, of St. Thomas's Hospital.
Smith, Richard Thomas, Hebden-bridge, Yorkshire, of University College.
Snell, Enoch, L.S.A., Leeds, of University College.
Solly, Stephen Francis, L.S.A., St. George's-circus, S.E., of Westminster Hospital.
Stables, Walter William Godfrey, L.R.C.P. Edin., Wandsworth, of St. Bartholomew's Hospital.
Symons, Henry Edward, Stoke Newington, of St. Bartholomew's Hospital.
Taylor, Frederick Lyres, L.S.A., Norwich, of King's College.
Thompson, Philip, Penshaw, Durham, of the Manchester School.
Walpole, Arthur Herbert, Norwich, of the Newcastle School.

The following gentlemen were admitted Members on the 17th inst.:—

Barker, Richard Henry, Hungerford, Berks, student of St. George's Hospital.
Bennett, Frederick Charles, Salisbury, of University College.
Bolton, John George Elliott, Mauritius, of University College.
Brooks, Samuel Brewer, L.R.C.P. Ed. and L.S.A., Kirton, Lincolnshire, of University College.
Clark, Andrew, L.S.A., Greenford, Middlesex, of University College.
Davies, William Bowen, Llandovery, of St. Bartholomew's Hospital.
Derbyshire, Francis, Manchester, of the Middlesex and Manchester Hospitals.
Fisher, Frederick Alfred, Holloway, of St. Bartholomew's Hospital.
Gill, William, L.S.A., Torquay, of the London Hospital.
Harris, Henry, Denmark-hill, of St. Thomas's Hospital.
Harrison, Henry Frank Egbert, Fareham, Hants, of St. Mary's Hospital.
Hodges, William, Bristol, of the Bristol School.
Hanson, William Andrew, Newcastle, of the Newcastle School.
Lawrence, Charles Hinds, L.S.A. and L.R.C.P. Ed., Adelaide, South Australia, of University College.
Ley, John William, South Molton, of the London Hospital.
Mayhew, Charles Henry, L.R.C.P. Lond., Kingston, Jamaica, of King's College.
Mitchell, Joseph, L.S.A., Leicester, of St. Thomas's Hospital.
Norton, Herbert, Forest-hill, of St. Bartholomew's Hospital.
Risdon, Alfred, Dolton, North Devon, of St. George's Hospital.
Roberts, Richard Lawton, Ruabon, N. Wales, of University College.
Rosser, Walter, L.S.A., Risca, Monmouthshire, of St. Thomas's Hospital.
Town, George Frederick Ewens, Crewkerne, Somerset, of the Charing-cross Hospital.
Vachell, Charles Tanfield, Cardiff, of King's College.

It is deserving of honourable mention that all the candidates passed on this occasion, and that only three were referred to previous evening.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, November 11, 1869:—

Fenton, George, Great Smith-street, Westminster.
Sers, Robert Hanslip, Epperstone, near Southwell.

The following gentleman also, on the same day, passed his First Professional Examination:—

Sleman, John, St. Mary's Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

BURROUGHS, G. E. E.—Resident Obstetrical Officer to Charing-cross Hospital.

Gosse, Charles.—House-Surgeon to the Royal Westminster Ophthalmic Hospital.

Little, C. E., M.R.C.S.—Resident Medical Officer to Charing-cross Hospital.

Towt, G. F. E., M.R.C.S.—House-Surgeon to Charing-cross Hospital.

NAVAL AND MILITARY APPOINTMENTS.

Admiralty.—The following appointments have been made:—Dr. John J. U. Bremner, Staff Surgeon to the *Royal Adelaide*, additional, for service in the *Revenge*, to be appointed to the *Zealous* when recommissioned; John Buckley, Surgeon to the *Ocean*, additional, for service in the *Rinaldo* when commissioned; Dr. Samuel Campbell, Surgeon to the *Ocean*, additional, for service in the *Zebra* when commissioned; Robert Atkinson, Assistant-Surgeon to the *Duke of Wellington*, additional, for service in the *Donegal*, to be appointed to the *Ocean* when recommissioned in China; Joseph V. N. Blake, Assistant-Surgeon to the *Royal Adelaide*, additional, for service in the *Revenge*, to be appointed to the *Zealous* when recommissioned; Dr. Gordon Price, Acting Assistant-Surgeon to the *Ocean*, additional, for service in the *Rinaldo* when commissioned; William T. Paton, Acting Assistant-Surgeon to the *Ocean*, additional, for service in the *Zebra* when commissioned; George Murdock, Acting Assistant-Surgeon to the *Royal Adelaide*, additional, for service in the *Revenge*, to be appointed to the *Zealous* when recommissioned.

Brevet.—The undermentioned officers, who have retired upon full pay, to have a step of honorary rank as follows:—To be Inspector-General of Hospitals: Deputy Inspector-General of Hospitals John Emilius Mayer, Madras Establishment. To be Deputy Inspectors-General of Hospitals: Surgeon-Major Hugh Francis Clarke Cleghorn, Madras Establishment; Surgeon-Major George James Shaw, Bombay Establishment.

Medical Department.—Assistant-Surgeon James Alfred Turner, from the Royal Artillery, to be Staff Surgeon, *vice* Thomas Clark Brady, placed upon half-pay; Staff Assistant-Surgeon Thomas John Tucker to be Staff Surgeon, *vice* John Copeland Knipe, appointed to the 36th Foot; Assistant-Surgeon James Bonnyman, M.B., from the 89th Foot, to be Staff Assistant-Surgeon, *vice* Eugene M'Shane, placed on half-pay.

36th Foot.—Staff Surgeon John Copeland Knipe to be Surgeon, *vice* Arthur Bell, deceased.

89th Foot.—Staff Assistant-Surgeon Alexander Long to be Assistant-Surgeon, *vice* James Bonnyman, M.B., appointed to the Staff.

BIRTHS.

Miller.—On November 9, the wife of J. N. Miller, M.D., Blackheath, of a son.

Reynolds.—On November 11, at Pembroke Dock, the wife of Dr. Howard D. Reynolds, of a son.

Stevenson.—On November 16, at 21, Caversham-road, N.W., the wife of Thomas Stevenson, M.D., M.R.C.P., of a son.

MARRIAGES.

Blake—Alder.—On November 11, at Hurstbourne Tarrant, Andover, Thomas William Blake, M.R.C.S., second son of the late Thomas Blake, Esq., of Galway, Ireland, to Katherine Alice, younger daughter of the Rev. Gilbert Alder, Vicar of Hurstbourne and Rural Dean.

Bryant—Willock.—On November 9, at St. Mark's Church, St. John's Wood, William Hickes Bryant, M.R.C.S.E., son of the late R. Jennings Bryant, Esq., of Gascoyne-place, Plymouth, to Sophie, second daughter of the Rev. William A. Willock, D.D., Rector of Clonish, county Fermanagh, and formerly Fellow of Trinity College, Dublin.

Coates—Smith.—On November 11, at the parish church of Crediton, Frederick William Coates, M.D., of Burford House, Malvern, eldest son of William Martin Coates, Esq., of Salisbury, to Mary Agatha, eldest daughter of the Rev. Charles Felton Smith, M.A., Vicar of Crediton.

Croft—Paxton.—On November 10, at the parish church, Bicester, John Henry Croft, M.R.C.S.E., to Liddy, sixth daughter of Jonas Paxton, Esq., of Bicester, Oxon.

Evans—Gallagher.—On November 4, at St. Chrysostom's, Liverpool, Thomas Walter Evans, M.R.C.S. Eng., L.S.A., of 115, Heyworth-street, Everton, to Margaret, younger daughter of William Gallagher, Esq., of Everton.

Falkner—Codd.—On Nov. 10, at Rickmansworth, Herts, Henry Falkner, fourth son of Francis Falkner, Esq., of 15, Lower Fitzwilliam-street, Dublin, to Elizabeth (Thadie), eldest daughter of G. G. Codd, Esq., M.R.C.S., Rickmansworth.

Goad—Johnstone.—On November 13, at All Saints' Church, Leamington, Horace Boileau Goad, Esq., of Cawnpore, India, eldest son of Major S. B. Goad, of Simla, to Fanny Matilda, fifth daughter of the late James Johnstone, M.D.

Graves—Beatson.—On November 9, in Hound Church, Hants, William Graves, Army Medical Staff, to Mary Theodora, eldest daughter of George S. Beatson, M.D., C.B., Inspector-General of Hospitals, and Honorary Physician to the Queen.

Leeson—Squarey.—On November 9, at Trinity Church, Marylebone, Henry Beaumont Leeson, M.D., M.A., F.R.S., etc., of Bonchurch, Isle of Wight, to Maria Jane Squarey, of 13, Upper Wimpole-street, London.

Miller—Young.—On November 11, at St. Austin's, Stafford, R. M. Miller, M.D., of Wolverhampton, to Theresa, third daughter of the late George Young, Esq., of Saverley House, Staffordshire.

Notter—McIlree.—On October 21, at Trinity Church, Montreal, James Lane Notter, M.B., Staff Assistant-Surgeon, of Carrigdune House, County Cork, Ireland, to Fanny, eldest daughter of J. D. McIlree, Esq., Inspector-General of Hospitals, and Principal Medical Officer in the Dominion of Canada.

Rattray—Stuart.—On November 9, at Altamount, Blairgowrie, N.B., James Clerk Rattray, M.D., of Coral Bank, Rattray, to Jessie Louisa, elder daughter of John Stuart, Esq., late of Bombay.

Teary—Chapman.—At Woodchurch, Kent, John Jenkin Terry, Surgeon, of Wittersham, Kent, to Sarah, widow of the late W. R. Chapman, M.D., of Hastings.

DEATHS.

Gaalick, John William, M.D., M.R.C.P. Lond., at Halifax, on November 11, aged 69.

Griffin, Richard, M.R.C.S., on Friday, November 12, at 12, Royal-terrace, Weymouth, aged 63.

Hood, Emily Kate, only daughter of the late Dr. David Hood, H.M.'s Bengal Medical Service, at 7, Rue Chateaubriand, Paris, on October 31, aged 9 years and 8 months.

Thompson, Elizabeth Maria, widow of J. Bowen Thompson, M.D., late of Beyrout, Syria, at the residence of her brother-in-law, Henry Smith, Esq., of Morden College, Blackheath, on November 14.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

Bradford Infirmary and Dispensary.—Assistant Resident Medical Officer; must possess one legal qualification. Applications and testimonials to the Secretary on or before November 30.

Brighton and Hove Dispensary.—Resident House-Surgeon; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Chairman of the Committee of Management on or before November 29. Election on December 7.

Charing-cross Hospital.—Physician-Accoucheur; must have a degree from one of the universities recognised by the General Medical Council, and be F. or M.R.C.P. Lond. Applications and testimonials to the Secretary on or before the 30th inst. at 2 o'clock.

Cholsey New Pauper Lunatic Asylum.—Medical Superintendent. Applications and testimonials to J. T. Morland, Esq., Clerk to the Committee of Visitors, at the Asylum, Cholsey, near Abingdon, Berks, on or before December 16.

East Ward Union.—Medical Officer and Public Vaccinator for the Workhouse at Kirkby Stephen. Candidates must be registered, and possess the qualifications prescribed by the Poor-law Board. Applications and testimonials to Mr. John Whitehead, Clerk to the Guardians, Appleby, on or before December 4. Election on the 6th.

Lincoln County Hospital.—Physician; must possess a Medical qualification. Applications and testimonials to Mr. J. W. Danby, Lincoln, on or before November 20. Election on the 22nd.

Liverpool Royal Lunatic Asylum.—Medical Superintendent. Applications and testimonials to E. Gibbon, Esq., Royal Infirmary, Liverpool, from whom further information may be obtained.

Middlesex Hospital.—Resident Obstetric Assistant; must possess one legal qualification. Applications and testimonials to the Secretary at the Hospital on or before November 25.

Ramsgate and St. Lawrence Royal Dispensary.—Resident Medical Officer; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Secretary on or before December 4. Election on the 6th.

Royal Free Hospital, Gray's-inn-road.—Junior House-Surgeon; must be M.R.C.S. Applications and testimonials to the Secretary on or before November 24.

Royal South London Dispensary.—Honorary District Surgeon. Further particulars may be obtained of Mr. Hentsch at the Dispensary.

St. George's, Hanover-square, Dispensary, 59, Mount-street, Grosvenor-square.—Physician-Accoucheur; must be M.R.C.P.L. Applications and testimonials to the Hon. Secretary on or before November 29. Election the next day at 4.30 p.m., when personal attendance will be required.

St. Pancras and Northern Dispensary.—Resident Medical Officer; must have both Medical and Surgical qualifications. Applications and testimonials to S. S. Wigg, Esq., 33, Gordon-street, Gordon-square, W.C., from whom further information may be obtained.

South Shields Dispensary.—House-Surgeon; must have both Medical and Surgical qualifications. Applications and testimonials to the Committee on or before November 25.

Sussex County Hospital.—House-Surgeon. Applications and testimonials to A. Veysey, Esq., Sec., Brighton, on or before November 24.

Swansea New Hospital.—House-Surgeon; must be legally qualified. Applications and testimonials to the Secretary, 23, Gower-street, Swansea, on or before November 24. Election December 1.

University College Hospital.—Assistant-Physician. Applications and testimonials to the Secretary, John Robson, Esq., on or before December 1.

Westminster General Dispensary.—Surgeon; must be M.R.C.S., not practising midwifery or pharmacy, and be registered. Applications and testimonials to the Secretary on or before November 22.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Eastry Union.—Mr. John Sladden has resigned the Ash District; area 8037; population 2559; salary £50 per annum.

East Ward Union.—Dr. Henderson has resigned the Kirkby Stephen District; area 15,700; population 2709; salary £17 per annum. Also the Workhouse; salary £20 per annum.

Solihull Union.—Mr. Thomas Lowe has resigned the Workhouse; salary £25 per annum.

APPOINTMENT.

Sevenoaks Union.—Charles F. Gregory, M.R.C.S.E., L.S.A., to the Sixth District.

The Queen has been pleased to confer the honour of knighthood on James Alderson, Esq., M.D., F.R.S., President of the Royal College of Physicians.

Public Aquarium at Brighton.—Steps have been taken for the erection of a large public aquarium at Brighton.

Dr. Leared, in certain researches he has made, and which in abstract have been published in the *Proceedings of the Royal Society*, has come to the conclusion that sulphocyanides not only occur normally in the saliva, but also in the urine, the blood, and the white of egg. He found that its absence in the saliva corresponded with an impaired condition of health.

Dr. W. H. Stone has published, under the title of the "Novus Theætetus," his introductory lecture delivered this year at St. Thomas's Hospital. His text is "Man the Measure of all Things." It is a rare gratification to see signs of scholarship in a Medical address. But may we be allowed to hint that the sermon was possibly a little too deep for the auditory?

New Fellow.—At a meeting of the Council of the Royal College of Surgeons, on the 11th inst., Dr. Edward James Shearman, of Moorgate, Rotherham, was admitted a Fellow of the College, his diploma of Membership bearing date February 3, 1843.

Public Health.—The Council of King's College, London, have established a chair of hygiene, and have appointed Dr. Guy their first Professor. Arrangements will be made for a course of lectures to be given during the second half of the winter session, in the months of January, February, and March.

A special general court of the governors of St. Bartholomew's Hospital will be held on Monday, the 22nd inst., with reference to recent remarks in the public press respecting this Hospital. As the matter is of public interest, a motion will be submitted to the Court that reporters be admitted on the occasion.

There will be held at Christ Church, on Saturday, December 18, an election to a Lees Readership in Physics, as well as to the Readership in Anatomy before announced. Candidates must have passed all the examinations required by the University for the B.A. degree. The person elected will be required to reside and to give instruction to undergraduates. Candidates are requested to forward testimonials to the Dean of Christ Church on or before Monday, December 13, and to call on the Dean on that day at 10 a.m. Candidates for the Lees Readership in Anatomy are also requested to send in testimonials, and to call on the same day.

Natural Science Exhibition at Cambridge.—St. John's College offers an exhibition of the value of £50 a year for natural science. The examination will commence on April 29, 1870, and will be open to all students who are not members of the University, as well as to undergraduates in their first term.

St. Andrews Medical Graduates' Association.—The Anniversary Session will be held at the Freemasons' Tavern on Wednesday and Thursday, December 1 and 2. On Wednesday, at 7.30 p.m., a paper on "The Clinical Examination of the Urine in relation to Disease," by Dr. Black, of Chesterfield, will be read and discussed. On Thursday, at 5 p.m., the President, Dr. Richardson, F.R.S., will deliver the Anniversary Address, "The Science of Cure." Members of the Profession are invited to attend. The anniversary dinner will be held at the same place on Thursday, at 7.30 p.m.

Medical Mayors.—Blandford, George W. Daniell, M.R.C.S. Eng.; Denbigh, Evan Pierce, M.D. St. And. (fourth time); Devizes, Edward Clapham, M.D. Edin.; Devonport, John Rolston, M.D. Edin. (re-elected): Hartlepool, George Moore, M.D. St. And.; Ruthin, Josiah R. Jenkins, M.D. Aberd. (re-elected); South Molton, Richard Ley, M.R.C.S. Eng.; Wells, Thomas Purnell, M.D. St. And. (re-elected for third successive year); Yarmouth, Isle of Wight, Charles W. Holles, M.D. Edin.

Dublin Chemical and Philosophical Club.—The annual *conversazione* of this Club was held on Tuesday evening, the 16th inst., at the Queen's Institute, Molesworth-street. A novelty of the evening was the attendance of ladies. Much is said in the present day about the "rights of women," and there can surely be no more useful recognition of those rights than the admission of the fair sex to such intellectual and mind-expanding treats as those afforded by the annual meetings of many of our scientific societies. The magnetic telegraph was in operation, worked by ladies of the institute. Among other works of the institute exhibited were several beautiful specimens of enamelling in porcelain, wood engraving, and photograph colouring. Numerous objects of interest were brought forward by Drs. John Barker, Reynolds, and Frazer; Messrs. Yeates, Woodworth, Tichborne, F.C.S., Draper, John Robinson, W. Allen, etc. Some fern fossils recently found in Ireland were shown by Dr. Bailey.

Small-pox and Fever in Mile-end Old Town.—In his yearly report to the vestry, Dr. Matthews Corner states that during the past year 104 patients were sent to the Fever Hospital and 3 to the Small-pox Hospital at the cost of the hamlet. In the previous year there were 93 cases of fever and 14 cases of small-pox. Most of these cases, if proper sanitary measures had been carried out, might have been prevented.

Collegiate Examinations.—At the Pass Examination for the diploma of Membership of the Royal College of Surgeons on Saturday last, the following questions on Surgical Anatomy and the Principles and Practice of Surgery were submitted to the 84 candidates, viz.:—"1. Name the muscles (giving their attachments) by which deformity is produced or maintained in the following affections, viz.:—1. Talipes equinus; 2. Talipes varus; 3. Talipes valgus. 2. Mention the causes which may produce extravasation of urine into the perinæum; state the direction it takes, and the reasons for that direction; state also the local and constitutional symptoms which attend it, and the treatment required. 3. Mention the structures which must be divided in the respective operations for hydrothorax, ascites, hydrocele, and fistula in ano. 4. Describe the appearances of an ordinary syphilitic sore, and mention the different forms of secondary syphilitic eruption. 5. Describe the Surgical anatomy of the sartorius muscle in reference to deligation of the femoral artery. 6. Describe the local symptoms of acute periostitis (say of the tibia); state the possible results, and mention the treatment." To those candidates who were not already in possession of a Medical degree or licence, the following questions on the Principles and Practice of Medicine were submitted, viz.:—"1. What are the symptoms and physical signs of effusion of fluid in the chest? Describe the treatment of such a case by medicine; and if you have recourse to paracentesis, state your reasons for the operation, and the mode of performing it. 2. You are called to a person (of any age) in convulsions. How do you proceed to discover their cause? and then what is your treatment? 3. Enumerate the principal diuretic medicines in use. Give the preparations as contained in the British Pharmacopœia, with their composition and doses."

Health of St. Marylebone.—Infectious Diseases.—Dr. Whitmore, in his report for October, says:—"I regret being unable to report any diminution whatever in this fatal and highly contagious epidemic. It is now generally prevalent in all the parochial districts, and in those localities where we should most expect to find it—viz., where the population is densest and most crowded. With two or three exceptions only, all the deaths from scarlet fever during the past month have occurred in houses which are let out to several families, each family occupying not more than one, or at most two rooms. In houses thus tenanted the freest possible intercourse exists amongst the inmates, children wander about the different rooms and play together on the landings and staircases, and no attempts whatever are made by parents to separate their sick and infected children from those that are healthy. When it shall please Providence that the present epidemic shall subside, it will be from no directly repressive efforts within the power of local authorities to adopt, but simply because the disease has expended itself, and the particular ζύμωσις or fermentation is at an end. Efficient measures of hygiene systematically carried out, such as good drainage, ample water supply, ventilation, cleanliness, &c., &c., may do something to mitigate symptoms and lessen the predisposition to contagious influences, but they will not suffice to arrest, in any material degree, the spread of such a malady as scarlet fever; this can only be done by confining the contagion to the four walls of the sick chamber, and by keeping the patient isolated until all infection has entirely subsided. "Salus populi suprema lex," is a motto which can be best illustrated by efficient sanitary enactments; it should be made a punishable offence to allow persons suffering from small-pox, fever, scarlatina, or other contagious malady to have any personal intercourse with the rest of the community; when that is done—but not till then—we may expect a marked and permanent decline in the mortality from epidemic contagious diseases. The custom which prevails amongst the better classes, of removing children into the country by railway at an early period of convalescence from scarlet fever—that is to say, at the time when the cuticle is peeling from the hands, face, and other parts of the body, is most reprehensible, for at this particular time the contagion is probably stronger than at any other period of the disease. Since my last report, scarlet fever has broken out in York-court, and two deaths have already occurred from it; I therefore await with some anxiety the result of proceedings recently taken up

by the vestry in regard to certain houses in this court; and should it be found that the Act of last session of Parliament, giving to local authorities the power of pulling down houses unfit for human habitation, can be efficiently and readily carried out, it will, I am persuaded, do as much if not more to benefit, both morally and physically, the poor of this metropolis than any other sanitary enactment."

THE FIRST VACCINATOR.—In the old churchyard of Worth, Dorsetshire, is a tomb with the following inscription, "Benjamin Jesty, of Downshay, died April 16, 1816, aged 79. He was born at Yetminster in this county, and was an upright, honest man, particularly noted for having been the first person known that introduced the cow-pox by inoculation, and who, for his great strength of mind, made the experiment from the cow on his wife and two sons in the year 1774."

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Dublin.—The prospectus of the *Irish Medical Journal* has been issued. Can Ireland support a weekly Medical journal in addition to the one she has?

Newcastle and Gateshead.—Dr. G. H. Phillipson's fourth annual report of the health and meteorology of the above towns is one of the most exhaustive kind; the tables are models.

Bristol.—Mr. Safford's paper on Sanitary Police read at the meeting of Bristol has been printed separately. It is to be obtained at the Victoria Press, 11, Harp-alley, Farringdon-street.

THE COLLEGE OF SURGEONS IN 1800.

*** The following, handed to us by a Medical literary antiquarian, is from a paper in the handwriting of Mr. Birch, one of the members of the Court of Assistants of the College of Surgeons in 1800:—

From both these accounts it seems the quacks beat the regulars, because they understood best the weakness and vices of mankind.

When I have been in the country I have observed there has been plenty of surgery to employ any one they could have confidence in; but, as the Professional people are engaged all night with midwifery, they are asleep all day to everything which requires thought.

Insanity requires much more looking after than is bestowed upon it. The army and navy require much better Surgeons than they are supplied with, and mates who are really qualified to be assistants to the Surgeons, not mere apothecaries' journeymen.

The whole attention of pupils is now directed to lectures; the mechanical parts of Surgery, which they should be first adroit in, is totally neglected. I know very many who have passed examination at the College who could not apply a torniquet or bandage, or dress a patient after an operation. The dressings of most of the Hospitals are generally performed by the nurses; few of the Surgeons take the trouble to know this.

The practical part of Surgery wants much reformation. There is scarce a Surgeon in London who spreads a plaister at home. Truss-makers ride in carriages by their neglect, oculists make fortunes, farriers pretend to be Surgeons, and Surgeons descend to be farriers. The offices of profit and dignity which used to be the rewards of well-earned reputation are bestowed upon men educated merely as apothecaries, and who have Surgery to learn after their appointments have taken place. Mr. Gunning's letter ought to be read over once a year; it contains some judicious observations. The whole attention of the Court of Assistants seems to be absorbed by the museum, which, I think, will be the ruin of the College, while the improvement of practical Surgery is little attended to.

The public and Parliament will not have reason to think highly of the Profession of Medicine after the bubble of the cow-pox. The College of Surgeons never collectively gave their opinion about it, and therefore should claim an exemption from the censure most deservedly affixed to the introduction of a new disease, and all its fatal consequences, into the human frame.

Dr. Hulke and other Correspondents.—We are at a loss really to understand the prospectus of "The Professional and Commercial Provident Association." Can it be a joke? Is it to be supposed that Medical Practitioners in country towns, or even in London, can be found to act upon the provisions of the lithographed letter of Mr. P. W. Freeland, secretary? Let us see what these provisions are. First, one Medical officer is to be appointed in each town; if the town be large, two or more. Second, the officer is to supply Medical attendance and medicine to members. For each member he is to receive 7s. 6d. annually. But, then, observe, thirdly, "the provincial Medical officer is required to pay on appointment £3 for three fully paid-up shares." But mark the consideration of the directors, "without further liability!" We are informed, moreover, that each London Medical officer holds five shares! Well, having given his name as provincial Medical officer, "some good agents shall be set to work at once." To do what? To canvass for members amongst the Medical officer's or his neighbours' patients? If not, what for? We see great objections to this scheme, which embraces also money-lending in various forms, protection to employers in engaging clerks and assistants, &c. As far as our Profession is concerned, it is easy to foretell what must be the effect if the plan ever come to maturity. The members are to pay 5s. on admission, and "subscriptions, according to benefits, from 3s. per month." Why, the entire Medical practice of the country would be a seven-and-sixpenny club practice. We have already quite enough of club practice amongst the lower orders. We have no desire to extend its "benefits" to the middle and upper classes.

DIPSOMANIA.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—At the risk of being thought troublesome and forward, I venture to solicit a nook again in your periodical for further remark. I have had much satisfaction in reading the law communications of your correspondent "W.," particularly the latter, which, it appears to me, fully meets the question; being American, too, no one here can object to it as interfering with the liberty of the subject. I am not aware that this American law is known at all in England, but anyhow it deserves to be made known and its example followed. The term dipsomania, which you have considered a bad designation, I would merely set up as conventional for want of a better, in the light in which we speak of any bad habit indulged—a mania for this or that indulgence. In making a law to reach the reckless and brutal drunkard, I would beg to mention another form of inebriety, less prominent and unseen, and more, I conceive, a physical than moral malady. I have known well-educated and estimable persons, perfectly correct and exemplary for a time, subject at intervals to giving way to drink. From these repeated indulgences injury to health, circumstances, life, and the distress of friends have all followed, while Medical men and friends have been incompetent to interfere. I have been informed by a Physician conducting a large asylum, that several persons have been in the habit, when the drink fit came on, of putting themselves under his care until the craving for drink passed over, but that when under his care, and when the craving became more intense, they would use every artifice to induce the keepers to get wine or spirits for them. This fact, it appears to me, ought to be sufficient to give Medical men and the friends a power to place such cases under legal restraint, pending circumstances.

Nailsworth, November 15. I am, &c. THOS. STOKES.

Mr. John Ward (Plymouth) has forwarded to us a number of the *Western Daily Mercury* containing an advertisement of a Professional work by a resident Practitioner, with the request—"Please inform your readers how far this is consistent with Medical etiquette in advertising a purely Medical book in a daily newspaper of general circulation." The book is one of a truly scientific character, and upon that ground there is no just cause of complaint. The author of the book is quite at liberty to make his work known in any legitimate way. We do not see in what manner he has violated Professional etiquette in advertising as he has done.

Sheffield.—Dr. Taylor has addressed a letter to the *Sheffield Telegraph* in reference to the case we commented upon last week, in which he vindicates his conduct successfully. He shows that he gave notice by certificate, a fortnight before the death of the patient, of her "urgent need of beef-tea and port wine, and, unless they are immediately supplied to her, I will not be responsible for her life." He proves that he is correct with respect to the amount earned by the man and his family, which was a total of 13s. a week; and he proves that there is no rule of the Sheffield Hospital which authorises the issuing of wine from the Hospital stores. The *Telegraph* has an able and spirited leading article on the matter.

PAROCHIAL VACCINATION.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I had no wish when I first wrote to you on the above subject to be led into any controversy; but there are some points in your correspondent's letter of last Saturday to which I wish to refer.

I certainly had no idea that any parent, rich or poor, was entitled to parochial vaccination as a right; but if such be the case, I maintain that the public have a most unjust advantage given them over private vaccinators by the Government.

I have in times gone by been both district and private vaccinator, either as assistant or principal, for nearly twenty years, and never experienced any difficulty in keeping up my supply of lymph. Occasionally when I have run myself out of lymph by vaccinating an unhealthy child, I have applied to some Medical friend for a fresh supply, and I trust there are but few Medical men who would refuse to help one in such an emergency. I cannot believe that private are less backward than public vaccinators in helping one another; and since, if my plan were carried out, more children would probably be vaccinated, it follows that the quantity of lymph at any given time in any district would be greater than at present. Whence, then, the difficulty your correspondent imagines in the supply of fresh lymph?

I certainly, then, would do away with "public vaccinators." Nor do I think the public would suffer thereby. I repeat, in the words of your correspondent, "Let every Medical man vaccinate the children he has brought into the world," and if not paid by the parents send in his claim to the guardians, the district Medical officer operating on the children of such as are attended by midwives. I believe this would give general satisfaction to all but the public vaccinators, and escape from vaccination be wellnigh impossible.

Your correspondent talks as though I had accused him of "touting." I believe the word was used as an editorial remark in your paper in allusion to such tricks as I had exposed, before even your correspondent had replied to my first letter; but that this same touting does prevail amongst some of the public vaccinators there is unfortunately sufficient evidence to prove. Some time ago one of these philanthropic gentlemen called upon a patient of mine, and insisted on examining the arms of a child that I had vaccinated, although he was told by the mother that the operation had been perfectly satisfactory, and, indeed, the certificate was offered for his inspection. Luckily for him the father was absent from home. In last week's *Lancet* a much worse case still is recorded by Mr. Herbert; and doubtless throughout the country much injustice is done. Perhaps your correspondent will inform me what need we have of public vaccinators and what special qualifications they possess over others. He says, as a matter of economy, some parents apply to him. Does this occur so often that the amount of fees received from this disinterested sort of practice outbalances the amount of friendship he shows his friend; for if it only occurs in the two cases he mentions the natural inference is that his friendship is not worth the trouble of sending a couple of capillary tubes of lymph? Again, I do not suppose it will be denied that the certificate of vaccination of a general Practitioner is at least of quite equal value to the form supplied by the public vaccinator. Where, therefore, is the fairness your correspondent speaks of in his being able to monopolise the fees to the detriment of his qualified brother? There are, it seems, people nowadays

who are well off, and who think it no disgrace on the score of economy to have their children vaccinated and the fees paid for out of the public purse; and if this is legal, surely every qualified Practitioner ought in justice to be able to send in his claim. Very possibly the private Practitioner has been but poorly paid, occasionally not at all, for a perhaps tedious confinement, and then the public vaccinator steps in and legally claims a fee which would have done some little towards recompensing his less fortunate brother.

In conclusion, I submit that the private Practitioner has a great advantage over the other in being able to judge as to the healthiness of the family belonging to the vaccinated child. There may be a history of syphilis unknown to the public man, and, although opinion is divided as to the power of infection from such source, it is, I think, wise to avoid lymph from such children. Taking all the circumstances I have mentioned into consideration, as well as the simplicity and justice of the scheme I advocate, and the increased care private Practitioners would take to see that all the children they brought into the world were properly vaccinated from healthy subjects, I think I have made out a case for altering the present unsatisfactory state of the Vaccination Acts.

I am, &c. ALPHA.

P.S.—Since writing the above, I find in page 693 of the *Lancet* of last Saturday that a public vaccinator admits that he revaccinated a child after it had been done recently by another man; and further it is proved that this revaccination (which, it is stated, was forced against the wish of the parent) was entered in his book for payment.

COMMUNICATIONS have been received from—

Dr. WHITMORE; Mr. JOHN WARD; Mr. BALMANNO SQUIRE; Mr. JOHN SIMON; ALPHA; Mr. R. W. GAIFFIN; Dr. A. B. SHEPPERD; Mr. G. GASKOIN; Mr. W. H. CROSS; Mr. JOHN GORHAM; Mr. C. WOODCOCK; Dr. H. D. REYNOLDS; Mr. T. STOKES; Dr. H. LAWSON; Dr. GERVIS; Mr. GULLIVER; Mr. J. CHATTO; Mr. WANKLYN; Mr. JOHN WOODMAN; Dr. YEO; Dr. ANGUS SMITH; Mr. WEIGHTMAN; Mr. P. LE NEVE FOSTER; Dr. G. SCOTT; Mr. T. W. EVANS; AN EX-DAESSER OF MR. LISTER'S; Mr. TEMPEST ANDERSON; Professor BENTLEY; Dr. L. SEDGWICK; Mr. O. W. BERAY; Dr. JAMES WILSON; Mr. C. F. MAUNDER; Mr. G. E. E. BURROUGHS; Mr. CHARLES GOSSE.

BOOKS RECEIVED—

Corner's Report on the Public Health and Sanitary Condition of Mile-end Old Town—Duncan on the Mortality of Childbed—New York Medical Journal, No. 56—Ransome on the Measurement of the Movements of the Chest—The Journal of Anatomy and Physiology, No. 5, second series—The Liverpool Medical and Surgical Reports, vol. 3—Swain on the Knee-joint—Marshall on Scarlet Fever.

NEWSPAPERS RECEIVED—

Nature—Western Daily Mercury—Academy—New York Medical Gazette—Edinburgh Evening Courant—Medical Press and Circular—Montreal Gazette.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, November 13, 1869, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the year 1869.	Persons to an Acre. (1869.)	Births Registered during the week ending Nov. 13.	Deaths. Corrected Average Weekly Number.	Deaths. Registered during the week ending Nov. 13.	Temperatur of Air (Fahr Highest during the Week.	Temperatur of Air (Fahr Lowest during the Week.	Temperatur of Air (Fahr Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3170754	40·7	2271	1462	1689	56·0	27·3	41·1	0·08	8
Bristol (City)	169423	36·1	121	76	*68	55·1	27·2	42·3	0·16	16
Birmingham (Boro')	360846	46·1	244	175	171	55·6	29·4	42·6	0·26	26
Liverpool (Boro')	509052	99·7	367	295	270	58·5	35·2	44·1	1·07	108
Manchester (City)	370892	82·7	264	210	*207	58·0	23·2	39·9	1·36	137
Salford (Borough)	119350	23·1	94	60	66	54·1	24·2	40·8	1·32	133
Sheffield (Borough)	239752	10·5	199	126	153	54·0	30·7	40·3	0·62	63
Bradford (Borough)	138522	21·0	113	71	76	50·8	30·1	39·7	0·36	36
Leeds (Borough)	253110	11·7	223	129	156	52·0	31·0	40·3	0 33	33
Hull (Borough)	126682	35·6	84	59	57	56·0	26·0	37·1	0·56	57
Newstl-on-Tyne, do.	130503	24·5	95	69	69	...	...	...	...	...
Edinburgh (City)	178002	40·2	126	86	113	50·7	29·0	40·1	0·40	40
Glasgow (City)	458937	90·6	310	268	289	50·0	24·4	39·5	2·37	239
Dublin (City, etc.†)	320762	32·9	171	158	151	58·3	26·8	43·9	0·55	56
Total of 14 large Towns	6546587	35·5	4682	3244	3535	58·5	23·2	40·9	0·73	74
Paris (City)	1889842	...	...	...	877	...	...	...	...	...
					Week ending Nov. 6.	Week ending Nov. 6.				
Vienna (City)	605200	...	...	...	...	...	...	...	...	...

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·880 in. The barometrical reading increased from 29·52 in. on Tuesday, Nov. 9, to 30·27 in. on Friday, Nov. 12.

The general direction of the wind was W.S.W., N.W., and S.W.

Note.—The population of Cities and Boroughs in 1869 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous.

* The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

† Inclusive of some suburbs.

VITAL STATISTICS OF LONDON.

Week ending Saturday, November 13, 1869.

BIRTHS.

Births of Boys, 1160; Girls, 1111; Total, 2271.
Average of 10 corresponding weeks, 1859-68, 1983·6.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	841	848	1689
Average of the ten years 1858-67	665·2	630·4	1295·6
Average corrected to increased population	...	...	1425
Deaths of people above 90	...	...	...

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-cough.	Fever.	Diarrhœa.	Cholera.
West	463388	1	2	13	1	9	7	2	...
North	618210	2	4	45	4	10	5	5	...
Central	378058	...	1	21	3	3	3	3	...
East	571158	5	11	60	1	27	7	5	...
South	773175	1	13	79	1	20	17	6	...
Total	2803989	9	31	218	10	69	39	21	...

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·880 in.
Mean temperature	41·1
Highest point of thermometer	56·0
Lowest point of thermometer	27·3
Mean dew-point temperature	35·0
General direction of wind	W.S.W., N.W., & S.W.
Whole amount of rain in the week	0·08

APPOINTMENTS FOR THE WEEK.

November 20. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m. King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 1½ p.m.

22. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 1½ p.m.; St. Peter's Hospital for Stone, 2½ p.m.

MEDICAL SOCIETY OF LONDON, 8 p.m. Mr. De Méric, "Syphilitic Elephantiasis." Mr. Henry Lee, "On some Unusual Cases in Surgery."

23. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.

ETHNOLOGICAL SOCIETY, 8 p.m. Sir George Grey, Bart., "On some Quartzite Implements of Palæolithic Type from the Drift of the Cape of Good Hope." Dr. Leitner, "On the Races and Languages of Dardistan hitherto undescribed."

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m. Dr. Wm. Meyer (of Copenhagen), "On Adenoid Vegetations in the Naso-pharyngeal Cavity."

24. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.

HUNTERIAN SOCIETY, 8 p.m. Dr. Moxon, "On a Case of Paraplegia."

SOCIETY OF ARTS, 8 p.m. Meeting.

25. *Thursday.*

Operations at St. George's, 1 p.m. Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

26. *Friday.*

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

CLINICAL SOCIETY, 8½ p.m. Dr. Cholmeley, "Case in which a peculiar Eruption appeared during the Exhibition of Bromide of Potassium." Mr. Cooper Forster, "Cases in which Torsion has been employed." Dr. Oppert, "Cases illustrative of the Treatment of Syphilis by Hypodermic Injection."

EXPECTED OPERATIONS.

London Hospital.—The following Operations will be performed on Saturday (this day) at 1½ p.m.:—

By Mr. Maunder—Prostatic Lithotomy; Drilling of Humerus.

ORIGINAL LECTURES.

ON THE RELATION EXISTING BETWEEN TUBERCULOSIS AND SYPHILIS.

By Dr. HERMANN LEBERT,
Professor of Clinical Medicine in the University of Breslau.

II.

GENTLEMEN,—The last sentence of the former lecture—viz., that tuberculosis in constitutional syphilis not only does not contraindicate the treatment by means of mercurial inunction, but, with a few exceptions of rare occurrence, demands it most strongly—stands in contradiction to an important item in the codex of prejudices, which is too often called by self-pleasing practitioners "experience;" and many patients perish in consequence of this baseless prejudice.

The question is therefore self-suggesting—What relation exists between tuberculosis and syphilis?

To begin, we must first refer again to our case. Our little patient, 8 years of age, had neither scrofula nor tuberculosis before the commencement of her syphilitic disease; on the contrary, she enjoyed good health; she coughed occasionally, but never long or severely. The child's mother was married a second time; her first husband, the father of our patient, died of tuberculosis; two children died in their first year; the mother coughs occasionally and expectorates a little, but has no symptoms of tuberculosis. We may therefore assume that there existed in the child hereditary taint derived from the father; at all events, the rapid development of tubercular inflammation of the cervical and inguinal glands, as well as of the small disseminated deposits in the right apex, were occasioned by the syphilis. I have often observed that if any predisposition exists, syphilis awakens the dormant germs of tuberculosis, and causes its development. But I have made the same observation in certain individuals, whose antecedents, health, and conformation would by no means justify a conclusion in favour of the existence of any such disposition to tuberculosis.

To my mind, therefore, this principle is certain, that syphilitic infection is not only able to develope an existing predisposition to tubercle, but, that it can cause tuberculosis without any such disposition. Tuberculosis must consequently be classed as one of those diseases which may be caused by syphilis.

From a histological point of view the question is not easily solved, because the syphilitic inflammatory gummous deposits, from the size of a millet-seed to that of large infiltrations, may have such an appearance, and be of such microscopic structure, as to be undistinguishable from tubercular deposits. Irritation of the interstitial connective tissue of the organs along the tubes and ducts, of the vessels and glands, may likewise develope in both diseases in a similar manner. Nevertheless, tubercular deposits in the lungs and glands possess something so peculiar to themselves, that in their general appearance they deviate from these rules, by which at a different period syphilitic deposits are formed in those organs; otherwise, tubercle produced by syphilis differs in no particular from that which is independent of syphilis. Hence no cause exists for looking on these tubercles as gummous nodules; both are governed by the same general law, that, in infection of the whole organism of an entirely different nature and mode of development, the more multiple may be the deposits formed in the different organs, the deeper the whole organism is affected by such infection.

If those unhappy patients who become tuberculous in consequence of syphilis were left without anti-syphilitic treatment, the result would prove very injurious to them, for they would be perishing by the double effect, not only of the existing and increasing first cause of their illness, but also of the consequences peculiar to tuberculosis; whereas, by means of anti-syphilitic treatment, I have seen marked improvement and permanent recovery in commencing tuberculosis of the lungs, and even in cases of extensive tubercular infiltration of the glands.

I will now make only a few remarks on infantile syphilis, avoiding altogether the important chapter of congenital syphilis.

In our out-patient department you have abundant opportunity of observing how often recently acquired syphilis occurs in children, and that even in the first year of infancy. In these cases we generally from the commencement meet with secondary symptoms, condylomata, rhagades, rashes, ulcers on the mucous membranes, and so on. On close investigation, we usually find that the child has been affected in consequence of the negligence of a syphilitic mother or father, by sleeping in the same bed with them, by contamination with infecting secretions, etc. After the most searching examination we can find in these cases neither congenital taint nor criminal infection. Amongst the higher classes, I sometimes find something similar through infection from a syphilitic wet nurse. The misfortune in such cases is that the slighter localisations remain unnoticed and get well, but many years after the wet nurse has left the family, syphilis manifests itself in deceptive forms which are often not recognised, but are mistaken for and treated as scrofula. Thus I have seen cases in which syphilitic defects of the soft and hard palate, ozæna, and considerable change in the shape of the nose existed, and which, in consultation, I have recognised as syphilitic at a time when *restitutio ad integrum* was impossible. It is for this reason that I frequently draw your attention to infantile syphilis, in order that you may not mistake it, and that you may learn to treat the disease at an early period, so as to prevent such unfortunate creatures from being maimed and branded by the ignorance of the Physician, and from having to endure a long and sad existence. Here, as in all departments of Medicine, pathological physiology, the clinic, and therapeutics form an inseparable trio, each of which enhances the value of the others.

ORIGINAL COMMUNICATIONS.

ON RISE OF TEMPERATURE OF THE BODY AFTER DEATH.

By NATHANIEL ALCOCK,
Assistant-Surgeon 35th Regiment.

MANY must have reflected on the apparent anomaly that, when respiration had ceased, circulation stopped, and all existence been concluded, heat, the very essence of life, should be augmented, and wondered whether, as the last act of tissue metamorphosis was passing into the first stage of decomposition, any strange phenomenon of tissue change could be developed in transition which would give rise to an increased temperature.

Dr. Aitken mentions a case of tetanus, recorded by Wunderlich, in which, "shortly before death, the heat rose to 110·75°; at the moment of death the thermometer was at 112·5°. After death the temperature still rose, and was found to be 113·8° an hour after the fatal event." Elevation of temperature after death has also been observed in cases of cholera in India.

Dr. Richardson has proved by his experiments that the heat of the internal parts exceeds that of the surface by 4°, and frequently by more than 4°, under ordinary circumstances; and in this seems to lie the explanation of the unnatural fact, since, as the occurrence has only been noted in cases in which the interval from perfect health to dissolution has been very short, it is probable that at the moment of death the temperature of the interior of the body was at least 4° above the highest reading at the surface, and that, in compliance with the laws of cooling, the transmission outwards of the internal heat raised the thermometer a degree at the surface. This is more remarkable, too, in cholera, where the icy coldness from morbid contraction of the peripheral vessels is succeeded by post-mortem warmth. It is then in reality a cooling of the body, which in lingering death from protracted illness takes place gradually so as even to precede demise, but which in almost sudden dissolution from rapid disease does not begin till after death. It is but a repetition of the universal law in obedience to which the body hurriedly returns into space the vital spark of heat lent for a lifetime.

Aldershot.

NAIL-PARERS are a class of people found in Chinese cities who practise a lucrative trade. They are excessively well up in their profession, and are therefore much patronised. Foreigners often call in their assistance. Several severe cases, the result of over-paring, have come to the Hospital. They seldom, if ever, require to extirpate corns or bunions, these affections being unknown to the Chinese. Their shoes and boots are made of cloth, rags, and paper.—*The Fifth Annual Report of the Peking Hospital, by Dr. John Dudgeon.*

CASE OF ILEUS RELIEVED BY INFLATION.

By GEORGE WHYTE, M.D.

The following case of obstruction of the bowels may be of interest as showing the value of "inflation" for the relief of this very fatal disease. The remedy itself is as old as Hippocrates, and very easily administered. I was sent for on November 18 last to see a married woman of about 40 years of age who was suffering from obstruction of the bowels. On the 16th she had taken ʒj. magnes. sulph., but without relief. She afterwards had an enema administered by a midwife, but this came away in a short time almost clean. When I saw the patient she was complaining of severe pain over the abdomen, which was swollen and tympanitic. The pain, she said, began below and to the right of the umbilicus some days before she took the "salts." She put her finger at once on this spot, as it was more acutely painful than the rest of the abdomen. She had been vomiting a good deal, the matter brought up being stercoral, and she was still very much nauseated. The tongue was furred, brown, and dry; pulse small and quick; the urine was freely secreted. I ordered at once a large enema to be thrown up slowly. This found a ready passage, but in a very short time came away clean. During the day she got other two, one of which contained croton oil, but neither had any effect in relieving the obstruction. On the contrary, she gradually got worse, the pain greatly increasing and the vomiting becoming incessant and stercoral. One grain of solid opium was ordered every hour till the pain was relieved, and large warm poultices to be constantly applied to the abdomen.

November 19.—Feels easier, but is still vomiting stercoral matter. Very weak and anxious-looking; pulse small and quick. Another large enema was given, but without affording the slightest relief. I afterwards introduced a long tube into the rectum as far up as I could, and, having connected it with a small hand bellows, very slowly inflated the bowels, every now and then kneading the abdomen with my hands. The operation caused a good deal of pain, but I continued till the abdomen was quite hard, and the patient began to vomit severely, putting up along with the matters quantities of wind. On removing the tube she expressed herself as being much relieved, and in a very short time she had a free liquid evacuation. The vomiting and pain ceased, and she made a rapid and complete recovery.

Elgin.

TWO CASES OF NEURALGIA, WITH GRAVE COMPLICATIONS, TREATED SUCCESSFULLY BY MEANS OF THE SPINAL ICE-BAG.

By JOHN CHAPMAN, M.D., M.R.C.P.,
Physician to the Farringdon Dispensary.

Case 1.—*Female aged* 40. *Paroxysmal neuralgia of the head, face, mouth, throat, and extremities; swelling and tenderness of the scalp; convulsive twitchings; numbness; weakness of the right side; headache, dimness of sight, mental confusion, and loss of memory; constipation of the bowels; excessively frequent micturition; defective and painful menstruation; prolapsus uteri; habitual coldness of the extremities. Recovery.*

January 25, 1868.—S. T., aged 40, married, consulted me at the Farringdon Dispensary, on account of a remarkable complication of neuralgic troubles. She suffers from neuralgic paroxysms every day; they are worst in the head and face, but involve the four limbs also. The pain of the head is chiefly on the right side—reaching to the vertex, and in the forehead. She has often acute throbbing headache, and at the same time superficial shooting and burning pains over the scalp, which during the attacks is notably swollen—especially in the forehead, and very tender. The pain and burning heat often invade the roof of the mouth and the throat. During the paroxysms of "plunging shooting pain," as she describes it, she suffers from violent twitchings, which she says are "just like the cramp," over the right side of the head and chiefly in the temple. The pain often extends along the right side of the neck, arm, and fingers; has cramps in the left hand generally once or twice a day, and frequently in the night. When the pain passes down the arm, the muscles of the right leg, and especially the flexors of the toes, are also twitched or contracted, and the leg feels heavy. The left leg is now becoming affected in the same way. The patient says that when she gets up in the morning her forehead begins to swell, but without pain; that in about an hour afterwards the pain comes on, and usually continues excessively violent during about a couple of hours. Simultaneously with the swelling of the forehead, the sight of both eyes becomes dim; the dimness lessens when the pain subsides. She says that the feeling in the roof of the mouth is "like the cramp," that she feels a distinct twitching in the right side of it, and that drinking warm liquids pains her in that part. She complains that the hands and feet are frequently numb. Her sufferings have so affected her head, that her mind has become seriously impaired: she experiences great mental confusion and loss of memory; she says—"I've frequently thought I should go out of my mind with my head. I can scarcely recollect anything. I've often given people wrong change at the counter (she keeps a small shop), and trembled so I've not known what to do." Is in the habit of sitting for hours without speaking to anybody. When the attacks come on she dislikes her husband and children, and wishes them away from her. She began to suffer in the head about two years ago; the attacks commenced with a burning pain at the top, gradually increased in severity, and during the last twenty months she has never, she believes, passed a whole day without pain. She suffers from excessive coldness of the feet and knees. She finds that putting her feet in warm water relieves her head. Menstruation regular but extremly defective, and excessively painful. Suffers from prolapsus uteri, for which she began to have Medical advice two years ago. Makes water about every ten minutes in the daytime, and is obliged to get up frequently in the night to do so. This trouble has lasted about three years. Tongue fairly clean, bowels constipated. Pressure on the spines of the upper cervical vertebræ causes overwhelming pain, and also a distressing feeling in the roof of the mouth and down the throat. When the pressure is applied on the third vertebra, it affects the throat lower down than does pressure on the first and second. Pressure on the lower cervical vertebræ does not cause pain, but there is great tenderness between the scapulæ, and pressure there causes her also to feel the distress in the throat, and induces great faintness. I prescribed as follows:—℞ Misturæ cinchonæ ʒj.; potassii iodidi gr. ijss., bis die. Apply ice during forty-five minutes twice a day along the lower third of the spine.

29th.—The pain in the head and arm is not quite so severe, and the roof of the mouth is better. The patient thinks her feet "have seemed once or twice to come warm, and they're fuller than they were." Treatment as before.

February 5.—The burning pain at the top of the head, and the pain in the face, are less severe; the pain in the arm, and the pain and burning in the roof of the month and throat, are again lessened, and she has less throbbing than before. I said to her: "The ice did not make your feet cold, did it?" "No, sir," she answered, "it did not; indeed, they are rather warmer than they were—my hands too; and my appetite has been very good this last week. I have seemed better altogether. I've felt relief of the headache in ten minutes after I've put on the ice." To continue its use during sixty minutes twice a day, as last ordered, but also to apply an ice-bag across the occiput, from ear to ear, each morning an hour before the attack comes on.

15th.—The swelling, as well as the pain down the front of the face, is lessened; "the cramping pains" of the right arm are gone, there being only a "numb feeling" left now. The patient finds that the ice-bag across the occiput gives her great relief. She has menstruated during the last week, and "more plentifully than for the last two years." The flow continued during three days, and was accompanied with much less pain than usual. The ice was applied along the spine throughout the period of sixty minutes twice a day, as usual, and was found to be "a great comfort." She says, "The ice is beautiful. If you are lying in bed with the ice on, it's wonderful how warm your feet get! You don't notice it so much when you're up and about. My hands, too, are not so cold; I seem altogether very different." Treatment as before.

22nd.—The cramps in the hands are reduced to a "slight twitching only;" the patient is now obliged to pass water only three or four times a day, and she "very seldom" gets up in the night at all to do so. To continue the ice as before. ℞ Infusi calumbæ ʒj.; potassii iodidi gr. ij., ter die.

27th.—The hands and feet are less numb, and the legs feel lighter; the headaches are steadily lessening, and the twitchings are nearly gone. Yesterday a paroxysm was cut short

within five minutes after the application of ice across the occiput. She says, "It's wonderful the benefit I've received; I usedn't to know scarcely what I was doing, now I am altogether much more clear." To omit the medicine, and apply the ice along the whole spine twice a day during sixty minutes.

March 7.—The paroxysms, which before treatment came on about 9 a.m., do not now come on till about noon. The numbness of the hands and left arm is much lessened. The right hand is well, and there is only very slight numbness in the left hand now. The left leg was both heavy and numb from the hip to the foot inclusive; now the foot alone is numb, and that only while she is walking. To continue the ice as before. ℞ Ferri ammonio-citratis gr. iv. bis die.

14th.—The attacks now keep off until 3 or 4 p.m., and are less severe than they were a week ago. Bowels regular without aperients. She makes water not more than four or five times in the twenty-four hours. Treatment as before.

21st.—The neuralgia of the head is still lessening, and the attacks do not recur till 4 or 5 p.m. "The womb," she says, "is much stronger; it does not come down as it did." Her head continues clearer. She says the ice makes her long to go to sleep in the daytime, but that her business prevents her. Treatment as before.

28th.—The last two days have been passed wholly without pain; it is now two years since she had a like experience. Appetite improved; bowels open daily. She says, "The ice-bag has, I think, regulated the bowels, for they were always confined, very often a week together. And I sleep better; not so heavy in the head. I used to be very heavy in the head. The numbness has quite gone from the hands." Treatment as before.

April 18.—Has now been several days without an attack; and when one occurs "it is merely a passing over the head," and lasts only about fifteen minutes. She menstruated a fortnight ago, during a full week; the flow was much greater, and the pain much less than formerly. The numbness in the head is going. ℞ Ammonii bromidi, potassii bromidi, ana gr. v., ter die. Continue the ice as before.

May 2.—Is in every respect better; has had only three attacks during the last fortnight; is stronger, and has better appetite and spirits than she has had for eight years before. She remarks: "I really don't think I shall ever be able to do without the ice—it is so comforting." ℞ Ferri et quiniæ citratis gr. v. bis die. Continue the ice as before.

13th.—Goes many days now without any pain at all in the head—is, in fact, "very nearly free from pain altogether." Her mind is quite clear, and her memory so improved, that she says, "I can recollect anything now." She has, however, still some temporary swelling of the scalp "most days." All twitching, and nearly all numbness, have ceased. The right side, which has been very weak for seven or eight years, now seems as strong as the left, except when she walks far, or makes great exertions. She menstruated copiously last week and without any pain at all. ℞ Syrupi ferri iodidi ʒj. bis die. Ice as before.

20th.—Continues quite free from pain. It is now three weeks since she had a severe attack. Her sight is greatly improved. The numbness is gone entirely, unless when she walks. Her complexion, which was dark and sallow, is now remarkably clear, and she looks thoroughly well. She says, "Recovery from my long illness seems like as if I were waking from a dream; for I was scarcely conscious when I came to you first." Treatment as before.

I saw this patient a few times more during the summer. She continued free from attacks, and reported her health quite restored.

Case 2.—Female aged 32. Neuralgia of the four extremities, and of the left side of the chest; backache; headache; excessive irritability of the bladder; deficient, intermittent, and painful menstruation; bearing down of the womb; leucorrhœa; habitual coldness of the feet. Recovery.

H. E., aged 32, a very intelligent woman, consulted me on January 4, 1868, at the Farringdon Dispensary on account of great pain in all the four limbs, but most especially in the fingers and toes; of continuous pain in the left side over a fixed spot not larger than half a crown, and of a pain which she has had "on and off" for years between the left shoulder and the spine and in the shoulder itself. She also complained of headache, which came on each morning; and of dreadful and almost continuous aching in the lower part of the back—so severe that often she could not stand upright. She was troubled with excessive irritability of the bladder, varying in intensity, and often involving the necessity of urinating about every five minutes. This trouble has continued since her last confinement, which occurred about eighteen months ago. The menses were very scanty, lasting but two days, and needing the use of only two napkins. They stopped entirely during the day, and meanwhile she suffered great pain in the womb, and at the bottom of the back. They were preluded by leucorrhœa, "nearly as much," she said, as her "regular discharge," and continuing a day or two after it stopped. She also suffered from bearing down of the womb, and from habitual coldness of the feet. The bowels acted regularly. There was excessive tenderness along the lower half of the spine. I prescribed as follows: ℞ Ammonii chloridi gr. v.; infusi calumbæ ʒj., bis die. Apply the lumbar ice-bag, placing the bottom of it on a level with the fourth lumbar vertebra, during forty-five minutes twice a day.

11th.—The patient has used the ice only four times; but she reports the pain in the limbs to be so nearly gone that she has scarcely felt it since. Her back, she says, seems rather worse. This opinion is, I apprehend, due to the fact that her attention is more exclusively directed to it, in consequence of the cessation of pain in her limbs. She says she finds the ice-bag unpleasant in the daytime, but a great comfort to her at night. To use it at night only, and to continue the medicine as before.

15th.—Makes water now about every hour. The pain in the limbs has not recurred. Is quite clear of headache. I now find that when she said she found the ice-bag unpleasant in the daytime she meant not while using it, but after she had taken it off: she then felt cold and uncomfortable. To use it in the daytime again as well as at night, and to apply it each time during ninety minutes.

18th.—Has borne the ice quite well, and has experienced much comfort from it. The head and limbs continue clear of pain; the pain in the left side is less acute, and sometimes goes quite away; that between the shoulders is better, and the pain in the back—her worst trouble—is wonderfully relieved; indeed, she has been clear of it for a whole day together. Appetite improved. Is near her menstrual period. To continue the use of the ice as last ordered straight through the period. ℞ Infusi cinchonæ ʒj. bis die.

22nd.—The pain in the side now leaves her entirely, though it recurs at times slightly. Her back is much better. She says, "Not being able to get ice on Sunday, I quite missed it. It always makes me sleepy." Treatment as before.

February 5.—Began to menstruate on the 31st ult.; the flow continued day and night during three days, and was much more copious than usual. She suffered less pain than she has done for a long period before. She used the ice ninety minutes twice a day during each of the three days of menstruation without any discomfort whatever. She says her back is wonderfully better; in fact, the maladies for which she consulted me are, as she says, cured. She is now suffering from a slight cold, and a cough which has troubled her much during the last two or three days and nights. I requested her to omit the ice for a week, and to apply double-columned water-bag containing water at 120° between the scapulæ when going to bed; but warned her to expect some return of neuralgia in the hands meanwhile.

15th.—She says she felt relief in her chest directly she lay down on the warm water-bag, that she slept well until four a.m., coughed a little the following day and not since. Has used the water-bag three nights. She says, "Since leaving off the ice my feet have become cold again, my back is beginning to ache, a little pain has come back in my hands, and I've made a very great deal of water again." I now ordered the water-bag to be used only if the cough should recur, and ice to be applied in one cell only of the lumbar ice-bag in the lumbar region. No medicine.

22nd.—The cough has not returned, and therefore she has not used the water-bag. She says, "I feel much better." The feet have become warm again, and she has continued free from pain. She makes water less frequently again—viz., at intervals of from ninety to one hundred and twenty minutes, and she says, "I don't have that distressing bearing-down feeling as I did. I feel the ice such a relief and refreshment for several hours after I have used it." She reports, however, that she has again occasionally, but in a slight degree, the old pains in the back, under the left shoulder, and also in the limbs, especially in the hands. To apply ice in both cells of the lumbar-bag—so that the bottom of the bag shall be on a level with the fourth lumbar vertebra—during ninety minutes twice a day. ℞ Ferri et quiniæ citratis gr. iv. bis die.

26th.—The patient's husband, who consulted me to-day, stated that his wife is so wonderfully better that he has not known her in such good health for ten years before.

March 14.—She has not used the ice during the last ten days. Continues, however, quite free from neuralgia. Has suffered from a little cough for about a fortnight. On the 8th inst. had slight hæmoptysis (while in church), and again yesterday. Felt a fulness in the chest, at the right of the lower part of the sternum. She now tells me, for the first time, that she spat blood twelve years ago. Pulse feeble and irregular. ℞ Acidi nitrici diluti ♏x.; quiniæ disulphatis gr. j., ter die.

28th.—Continues free from neuralgia. Hæmoptysis has not recurred, and the cough has subsided. ℞ Syrupi ferri iodidi ʒj. bis die.

April 15.—Has slight pain beneath the left shoulder; in other respects feels well, though her appetite has fallen off a little. To apply a very narrow ice-bag (viz., the ten-inch, which is made for children) between the scapulæ during thirty minutes twice a day. ℞ Quiniæ disulphatis gr. j.; acidi sulphurici diluti ♏x., bis die.

15th.—Has lost the pain last complained of. To continue treatment last prescribed.

May 6.—Remains free from pain. The narrow ice-bag now produces a feeling of discomfort in the chest. Menstruated a few days ago. She remarks that the menses, which used to be scanty, intermittent, and painful, are now copious, continuous, and painless. To leave off the use of ice and continue the medicine.

13th.—Has had no recurrence of pain of any kind. The leucorrhœa which formerly preceded menstruation has quite ceased to do so; and all the other symptoms on account of which she consulted me have subsided.

At this date the patient reported herself well, and therefore ceased attendance at the Dispensary.

October 28, 1869.—She came again, in order to obtain advice for her child. She looked extremely well, and said that she had had no relapse, and that she had never enjoyed such excellent health for many years as she had done since May, 1868.

25, Somerset-street, W.

DEATH FROM CHLOROFORM.

By J. ALEXANDER ROSS, M.D., Ch.M., L.R.C.S.I.,
House-Physician to the North Staffordshire Infirmary.

The Medical and general public have no doubt heard ere this that another case has, I regret to say, terminated fatally from chloroform. It became necessary to perform castration on Alfred B., a miner, aged 50, who was accordingly admitted into the Hospital. He had always been in good health except for some weeks, when he was affected, as far as I can learn, with melancholia, and was an inmate of a lunatic asylum. This was, I believe, some years ago, and since then he had complained little except occasionally of pain in the head and "tiunitus aurium."

At 3 o'clock p.m. on Saturday, September 11, I proceeded to administer chloroform to this patient, using for the purpose the best Scotch chloroform, and employing as inhaler a piece of lint folded once and made into the cone or Phrygian-cap shape. I believe this to be the safest mode of administering the drug, as the loose texture of the material and the shape are both calculated to admit of the admixture of a large proportion of air. There were present at the time two honorary Surgeons and an honorary Medical officer, the latter of whom continually kept himself informed of the state of the patient's pulse, having his finger on it during the entire time. When I had administered the first dose, which consisted of about twenty drops, I proceeded to administer the second one, and, as I was about to apply it to the patient, I was warned to desist, as his pulse had suddenly ceased. In an instant all appliances were brought into use for the purpose of restoring the patient—viz., ammonia, electricity, and Dr. Sylvester's method of inducing artificial respiration, the tongue being well drawn forward. These measures were persevered in for one hour, but without effect.

The great efficacy of Dr. Sylvester's admirable method was patent to all. Large volumes of air entered and were expelled from the lungs. Phlebotomy was also had recourse to at the bend of the elbow, and from the wound there flowed, by the aid of friction made continuously in the same direction (from the hand to the elbow), one ounce of intensely dark red blood. Before the efforts to restore life were given up, hypostatic congestion set in along the back and sides, and the cutaneous surface of the legs became mottled.

The autopsy was made on Monday, September 13, when the following appearances were found:—On proceeding to examine the head, fluid bluish-red blood flowed from the preliminary incision; the same flowed from the vessels of the brain; the dura mater was adherent to the calvaria; the pia mater and arachnoid were of an opaque white colour, especially at the base of the brain, and a small quantity of thick sero-purulent matter escaped from the middle subarachnoid space when it was opened. The contents of the cranium otherwise appeared normal. The heart was a little larger than usual, and flabby, being also invested with a little more fat than is generally found; it contained a small quantity of fluid blood of the same dark colour in the chambers, and the substance of the walls also was dark red. The visceral and parietal layers of the pleuræ were connected, but not closely, for the adhesions were sufficiently long to admit of extensive motion of the organs. The other viscera were normal.

Reviewing all the ante- and post-mortem facts connected with the case, I am inclined to think that no organic disease played any important part with regard to its unfortunate termination.

True, there were morbid appearances found on the brain, but I remember well giving chloroform to a woman who had cancerous deposits in almost every organ of the body, and a malignant tumour on the posterior part of the brain, and yet this woman bore well the administration of the anæsthetic during a tedious operation, but died a few days afterwards.

Next, the heart was found rather large and flabby. I believe that this state, however, was not the result of disease, but simply due to the *rigor mortis* being totally absent, or setting in imperfectly, and remaining but for a short time.

If we accept the theory that *rigor mortis* is due to the coagulation of the blood, which is a very tenable one, we shall be able to account for the flabby condition of the heart.

1. Fluid purple blood flowed from every incision at the autopsy.

2. Some blood—and it was also purple—ran from the heart as it was being taken out, leaving the heart completely empty, there being no coagula.

3. The cardiac walls themselves were very dark-coloured.

4. The fluid which escaped from the lungs was also of the same colour.

Now toxicologists maintain that chloroform produces paralysis of the internal organs by acting on the nerve centres through the blood; this being the case, the heart ceases to contract, and remains in the dilated soft condition, no *rigor mortis* setting in with sufficient power to cause its contraction.

There was no *rigor mortis* present at any time when I saw the dead body, and I visited it frequently.

Indeed, we should expect beforehand that there would be little or no coagulation of the blood after death from chloroform, as oxygen is the chief agent in promoting the action of the fibrino-genetic and the fibrino-plastic substances one upon the other; and it is, no doubt, this deficient supply of oxygen which causes the temperature of the body under chloroform to be lower than normal, for, the oxygen being in part absent, the chemical union between the carbon—the residue of the used-up tissues—and the oxygen cannot take place so as to form carbonic acid, therefore one of the sources of heat is wanting.

It is very probable that there are idiosyncrasies in some persons which render them peculiarly liable, independent of any disease, to death from chloroform, just as we find that one application of acid nitrate of mercury to a very limited sore in some persons, will produce violent salivation—that one dose of iodide of potassium will occasionally produce all its train of symptoms in a susceptible person—and, to adopt a more homely example, that an individual sometimes becomes sick, or even dangerously ill, from eating shell-fish, or, more strange still, mutton.

The patient to whom I administered chloroform a few minutes before the unfortunate one whose sad end is the subject of this report, has extensive disease of the heart, and next day I administered it to another patient, who has likewise very advanced cardiac disease. This patient was also very nervous, and, although he asked for chloroform, yet he was continually saying that it would kill him, and asked me repeatedly to feel his pulse, and put my hand on his heart. These patients bore it well.

Professor Syme's remarks on chloroform in the *Lancet* of January 20, 1855, and Dr. Crisp's in the same journal of June 4, 1853, are very practical. Both authorities think that death is not so often due to disease of the heart as supposed. Dr. Crisp says that, of forty-two deaths collected by him up to that date, only "five occurred to patients over forty years of age, and twenty deaths took place in patients under thirty," up to

which age it is a rare thing to find retrograde metamorphoses taking place in the heart.

The coroner's jury brought in the following verdict in this case:—"That the deceased had died from the effects of chloroform, properly administered by duly qualified Practitioners for the purpose of rendering him insensible to pain while undergoing an operation."

Since sending the above report, I found an interesting communication on idiosyncrasies, by Mr. Nunn, in the *British Medical Journal* of January 11, 1859. In it he records two cases in which poisonous symptoms took place after eating rice—one in which a lady suffered from "swelling of the tongue and throat, accompanied by 'alarming illness'" after eating egg; another in which a lady experienced "swelling of the tongue, frothing of the mouth, and blueness of the fingers," from partaking of honey—and other instances where men have been more or less seriously affected from eating veal, shrimps, etc.

In Neligan's "Medicines," by Macnamara, I find the following:—"I have had under my care patients whom the smallest dose of assafœtida would make faint. . . . . The most remarkable idiosyncrasy with which I am acquainted existed in an individual whom I knew, who would fall down in a fit were any person to persevere in cracking his nails in his presence. At the first sound his face became congested and livid, and, were the operator cruel enough to persevere with the experiment, he would go off, almost as if in epilepsy, although at all other times free from any such tendency."

Now, if things which are "human nature's daily food," as in the instances related by Mr. Nunn, prove to some persons not only injurious to health, but dangerous to life, is it not reasonable to suppose that chloroform, which is dangerous to life in all cases if not properly and cautiously administered, may occasionally find an individual who is peculiarly obnoxious to its influence?

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

MEDICAL COLLEGE HOSPITAL, CALCUTTA.

(Cases under the care of Professor PARTRIDGE.)

CASE OF HYPERTROPHY OF SCROTUM COMPLICATED WITH INGUINAL HERNIA—OPERATION—DEATH.

L. N. B., aged 34, a Hindoo, native of Chelampore, near Burdwan, admitted into the Medical College Hospital on November 23, 1867, with a large scrotal tumour. The growth was an example of the most common variety of scrotal hypertrophy, forming an ovoid symmetrically shaped mass, pendent from the pubic region, in which the penis was altogether embedded. The growth of the tumour commenced about thirteen years prior to the patient's admission into the Hospital, and continued uninterruptedly from that time, its progress, however, having been somewhat accelerated during the last three years. During the whole time he was subject to attacks of fever, which were not, however, distinctly periodic. He stated that he occasionally experienced a sensation of a protrusion of the contents of the abdomen into the right side of the growth. On a careful examination of the neck of the tumour, it was found that the hypertrophy of the skin and subjacent tissues extended higher than is usual in such cases, involving the integument of the hypogastric region, and also extending into the folds of the groin, so that the position of the inguinal canal was rendered obscure; no impulse could be felt when the patient coughed, but there was decided fulness in the position of the right spermatic cord. He was kept under observation for nine days. Chloroform was administered, and the tumour removed in the usual manner, on December 2. Great care was taken in making the incision in search of the right testicle, and a voluminous hernial sac was soon exposed to view. The hernia was carefully reduced, the sac dissected out, and the operation then completed in the ordinary manner. A plug of lint was placed over the external ring, and kept in position by a couple of iron-wire sutures, passed through the adjoining edges of the incision, and the wound was dressed with lint soaked in carbolic oil, a spica bandage being placed over all to maintain the pad in its proper position. The patient was carefully weighed immediately before and immediately after the operation; his weight before the operation was 10 stone 9½ lbs., and after 7 stone 11½ lbs., showing a difference of 40 lbs. The tumour itself weighed after removal 30¾ lbs., so that the loss from hæmorrhage, draining of serous fluids from the growth, etc., during the operation, amounted to 9¾ lbs. For six days the patient progressed most satisfactorily; the wound assumed a healthy appearance, and granulation was fairly established, when, on December 9, he was attacked with diarrhœa, which continued for several days in spite of the free use of astringents. The plug over the external ring was removed on the 7th, or the 13th, in consequence of the straining accompanying the continual diarrhœa; the hernia descended, and it was found impossible to maintain it in a reduced state without exercising a dangerous amount of pressure on the surface of the wound. The diarrhœa continuing, the patient's strength began to fail; the wound assumed a pale and flabby appearance; on the 18th, hiccough set in with slight abdominal tenderness, his pulse became small and feeble, he continued to sink, and at last died on the evening of the 20th. At the time of his death the surface of the wound had assumed a sloughing character. On a post-mortem examination, the cavity of the abdomen was found to contain a small quantity of semi-purulent fluid, and there were distinct evidences of low peritonitis, radiating from the position of the hernial sac; there were recent exudations on the surface of the ascending colon, the lower portion of the ileum, and the peritoneum lining the pelvis; the great omentum was much thickened, and a portion of its lower border protruded into the hernial sac. The sac contained a quantity of semi-purulent fluid, and there was considerable exudation about its neck. All the other viscera in the body were healthy.

CASE OF HYPERTROPHY OF SCROTUM COMPLICATED WITH INGUINAL HERNIA—OPERATION—RECOVERY.

S. R., a Hindoo, aged 50, admitted into the Medical College Hospital on April 6, 1869, with a scrotal tumour of three years' growth. The tumour had been preceded for a period of seven years by a hydrocele on the right side. At the time of his admission, the tumour measured transversely twenty-five inches in circumference at its widest part; its circumference, measured from the pubis to the perinæum, was thirty inches. No impulse on coughing could be detected in either groin, but there was a suspicious fulness around the right spermatic cord at the external ring. Chloroform was administered, and the tumour removed on April 10. On making the usual incision in search of the left testicle, no traces of testicle or cord were discoverable, the gland on that side apparently having never descended; on the right side a large hernial sac was discovered, situated behind the spermatic cord and tunica vaginalis. The latter structure was very much thickened, and distended with fluid, and the testicle when exposed was found to be much reduced in size. The contents of the hernial sac were carefully returned into the abdomen, but the sac itself, being firmly adherent to the deep scrotal structures, was found to be irreducible. The operation was completed in the usual manner. Before dressing the wound, I attempted to close the inguinal canal on the principles advocated by Mr. Wood. Introducing my finger from the scrotal wound into the inguinal canal as a guide, I transfixed the conjoined tendon with a curved needle, bringing the point out near the fold of the groin. Threading the eye with one end of a long loop of wire, I drew the needle back through the scrotal wound, and then detached the wire; again introducing the needle through the inguinal canal, I transfixed the external pillar of the ring, bringing out the needle point through the same external orifice in the integument. I then threaded the eye with the other end of the loop of wire, and drew it also back through the scrotal wound; by traction on the two ends of the wire, the size of the loop in the groin was reduced to the dimensions of the finger of an assistant who held it. The two ends of wire were then firmly twisted together in the scrotal wound, and the pillars of the ring afterwards approximated by traction, and subsequent twisting of the wire loop protruding through the integument of the groin. From the peculiar relation of the hernial sac to the spermatic cord (the cord being in front instead of behind), I hesitated to make this traction very great, through dread of interfering with the nutrition of the testicle, so that the occlusion of the inguinal canal was necessarily less perfect than it might have been. The wound was dressed as usual, with lint soaked in carbolic oil. The patient suffered from slight febrile excitement for a few days, the pulse rising to 102, and the temperature in the axilla to 99°. The wire was removed ten days after the opera-

tion. By April 20 all febrile excitement had disappeared, the wound began to granulate healthily, and from that time his progress towards recovery was uninterrupted. On May 14 the hernia again descended, but, as by that time the healing of the scrotal wound had considerably advanced, its descent gave rise to no untoward symptoms. The patient was discharged with the wound perfectly healed on July 19, 1869.

This case is mainly interesting as being, I believe, the first successful operation in a case of scrotal tumour complicated with hernia. More recently my colleague Dr. Fayrer has had another successful case, the particulars of which he will doubtless publish.

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Medical Times and Gazette.

SATURDAY, NOVEMBER 27, 1869.

MEDICAL OPINIONS.

If we were all logicians, and held no opinions but those which had been derived from a close induction from sufficiently numerous facts accurately observed in all their relationships, we should have arrived, if not at all the truths required for the practice of our art, yet at something like uniformity of practice. Truth being one and indivisible, an agreement in a scientific basis would do away with much of the discordancy in our notions as to the *juvantia* and *lædentia* in disease; and it is simply because we are not logicians that this Medical Utopia is so distant as it yet appears to be. The disagreements of Doctors are not confined to rival schools; men who profess to be guided, on the whole, by the same principles, are found sometimes utterly opposed in opinion when details of practice are in question; and it not rarely happens in such cases that the differing parties each express their opinions with confidence. This is not a very satisfactory state of things, and it will be worth while briefly to inquire into its causes and origin—if only on this account, that we may thus obtain some assistance in the task which we all have now and then to accomplish—namely, the estimating, at their true value, the opinions of those about us.

We have been led to this more immediately by the perusal of a curious and important document issued by the Indian Government, and purporting to be a report on the treatment of epidemic cholera, by Dr. John Murray, from information collected from Medical officers in the several presidencies and governments. It is curious inasmuch as Dr. Murray has, with great labour, gathered together and tabulated the opinions he has received, assigning to each opinion its numerical value according to the number of officers whom he finds holding it. It is important because it brings out into expression the varied opinions held, and so both suggests subjects for investigation and indicates roughly the method of inquiry, the places where the inquiry may be made with the greatest probability of success, and the sort of persons to whom it should be entrusted.

Some extracts from the appendix to Dr. Murray's report will show us how Medical opinions are sometimes formed:—

1. The question is "the influence of latrines on the spread of the disease." The answer given by one Surgeon on a matter only to be determined by facts is as follows:—

"From my own experience I have never had reason to believe that cholera is communicable from the evacuations in consequence of any cholera poison they may contain. Believing, as I do, that cholera is caused by a poison in the air which acts primarily on the blood, I cannot understand how the poison of cholera can be in the evacuations. But granting that the cholera poison is in the discharges, is there any real evidence to prove that the disease is diffused by means of air and water? Suppose we take 20 ounces of a cholera evacuation (by this I mean genuine 'congee water' evacuation, free from any bilious and fæcal matter) and thoroughly evaporate it, what amount of solid residuum, which doubtless will contain the cholera poison, if present, may we expect to obtain? And granting that this residuum contained the most virulent cholera poison, is it according to common sense to believe that a poison so disintegrated and so thoroughly divided and subdivided into the smallest quantities by the action of the wind, etc., could have the slighest influence for evil, and could cause cholera to break out *on a sudden amongst a population spread over a large expanse of country?* Besides, would not cholera evacuations follow the rule of other animal matters (fluid and solid) when separated from the body—*i.e.*, would they not putrefy, and would not the process of putrefaction thoroughly destroy any cholera poison they might contain? Again, if a poison was generated by the putrefaction process, would this poison be the poison of cholera? It is somewhere mentioned, in Copland's 'Practice of Medicine,' I think, that during an outbreak of cholera in Warsaw, some Medical men drank cholera vomit without experiencing the slightest bad effects; this proves that cholera poison is either not present in the matter ejected from the stomach, or, if it is present, that it cannot be absorbed by mucous membrane."

A Deputy Inspector-General equally influenced by his preconceived notions, and not taking the trouble to gather facts on the point at issue, writes thus:—"I am clearly of opinion that cholera is not communicable in any of its stages, neither is it reproduced by evacuations. I look upon cholera as a disease of the nervous system, produced by a malaria arising in and from an unknown state of the atmosphere."

2. The question relates to the influence of trees in checking the dissemination of cholera. A Deputy Inspector-General of Hospitals again writes thus:—"The influence of trees in purifying the air is undoubted, and hence it assists in checking the spread of cholera." Admirable reasoning! about as good as seems to have led a Surgeon-Major to the contrary inference—"I imagine cholera to be of telluric (probably mineral) origin, and that the earth itself is a chief medium of conducting such a disease. Whatever the hypothesis may be worth, one thing is certain, that cholera poison will travel contrary to and in the teeth of the strongest trade winds; and such a property seems to me incompatible with the supposition that trees will *intercept* it." We may add, however, that, by other officers who comprehended the value of observation in determining a scientific question, some crucial instances are recorded indicating the value of trees in checking the dissemination of the disease.

3. It is curious to observe how the opinions held by different officers, arising out of the limited experience of each, differ. The question relates to the communicability of the disease and the importance of isolation. One Surgeon writes thus:—

"Of the communicability of cholera by personal contact I have been fully impressed since 1861, when I saw many cases of it in the 1st Nagpore Irregulars, and I was myself affected in this way. It repeatedly happened that when a party of four or five men went to the funeral of a comrade, one or two were attacked with the disease soon afterwards, and in several this happened before they returned to their lines. In my own case I withstood the disease until a case happened that was marked by some peculiar symptoms, and being very much interested in it, I not only handled the patient, but some of the soiled clothes, and was almost immediately attacked."

Another writes:—

"I have seen a soldier seized with cholera while counting

out before me the articles of clothing from the kit of a comrade who had just died."

Per contra, another officer writes thus :—

"(Isolation?) would be almost always impracticable and useless unless the fact is established that the disease is propagated and communicable by direct contact. At Varna, during the height of the epidemic, where many hundreds of cases were congregated in one building under every circumstance most opposed to sanitary influence, a Medical officer and a fatigue party of men from each regiment were sent down daily for a twelve hours' spell of duty in the cholera Hospitals. These Medical men and attendants, exposed, as it were, to concentrated contagion, did not suffer themselves, nor did they disseminate the disease on return to their respective regiments."

Another, a Deputy Inspector-General, writes—

"After witnessing many epidemics of cholera in India, I have never seen a case traceable to contagion, nor have any of the orderlies, or Medical officers, or attendants been attacked in the epidemics I have seen."

Yet either cholera is communicable thus, or it is not. There must have been, on the one side or the other, a deficiency either in extent or accuracy of the observations for such opposite opinions to have resulted.

4. One question relates to the relative value of chlorodyne and opium. A Surgeon in the Madras Infantry makes a clean breast and tells us—"At the earnest request of the magistrate who was in charge of the gaol, I gave chlorodyne a full and fair trial. Earl Russell's letters to the papers had just then been published, and created a great feeling in favour of chlorodyne as a cure for cholera. I found no benefit whatever from its use." Probably similarly moved, others tried this medicine with varying results—some thinking it invaluable in the earlier stages for the checking of the diarrhœa, others apparently preferring to give chloroform in a combination of their own concocting. One speaks of chlorodyne as "a very much over-praised drug. It stupefies the patient, deranges the stomach, and masks the symptoms." Somehow or other the opinions expressed on the value of chlorodyne on either side are extreme opinions—a common result when a bepuffed popular medicine is in question.

We need not carry our extracts any further. They are not made with any object of depreciating the report, for there is a great deal in it well worthy of study and recollection for future use. One or two of the replies are amusing. For instance, in reply to a query as to the primary action of the cholera poison on the sympathetic system, one officer, whose philosophy cannot be sufficiently admired, says that "this theory, in the present state of the knowledge on the subject, is as good as any other." Another officer, speaking of shampooing for the cramps, says—"Native shampooers should be employed under a European, who should not himself shampoo; he should have a glass of grog when coming on duty." We should like to know more of this gentleman, a Deputy-Inspector-General who would provide a different sauce for the goose and the gander.

THE AIR WE BREATHE.—II.

Mention has been made of the extreme constancy of the composition of the atmosphere. The air on the open heath or on the seashore contains 20·999 per cent. of oxygen (by volume), the air of a close sitting-room 20·89 per cent., and that of the pit of a crowded theatre 20·70 per cent. of oxygen. In like manner fresh country air contains 0·03 to 0·04 per cent. (by volume) of carbonic acid, and the worst air in a theatre 0·32 per cent. of carbonic acid. The question very naturally arises how is it that, notwithstanding the consumption of oxygen and production of carbonic acid by the processes of respiration and combustion, there is so very slight a change in the atmosphere of a crowded room? The reply is that the cubic capacity of a room, and consequently the amount of air in it, is very vast in comparison with the actual quantitities of oxygen consumed by respiration and by the combustion of the gas used for illumination. If the amount of atmospheric air required to fill any of the theatres be calculated and the quantity of oxygen consumed by the respiration of the audience, using known data for the calculation, it will be found that in three hours there cannot be a consumption of oxygen which is of sufficient magnitude to lower the percentage of that gas in the atmosphere very much below the number actually observed. In making this calculation it may be assumed that there is no ventilation whatsoever, and that the theatre once filled with air remains hermetically closed for the whole three hours. In the actual case, however, the possibility of effecting a change in the composition of the atmosphere of a building is still further diminished by the effect of currents of air and of diffusion.

With regard to the possible physiological effect of lowering the percentage of oxygen from 21·00 to 20·70, and of raising that of carbonic acid to 0·30, there are direct experiments showing that the feeling of closeness is not due to this change in composition. If we do nothing to a specimen of air except withdraw this quantity of oxygen and add 0·30 per cent. of *pure* carbonic acid, the specimen of air will not become close and disagreeable, and may be breathed for a time without any unpleasant sensations. The air to which the workmen in some soda-water works are exposed is often quite fresh and yet highly charged with carbonic acid. It is only when the process of discharging carbonic acid into the atmosphere is also a process for discharging other impurities into it that the peculiar closeness with which all persons are so familiar arises. Although, however, carbonic acid does not occasion the closeness of ill-ventilated rooms, still the experiments of Dr. Angus Smith appear to show that the presence of this gas in abnormal quantities does produce a depressing effect on the human subject, manifesting itself by a diminution of the pulse and an increase in the frequency of the inspirations. To produce these effects it seems to be necessary to have at least 1·00 per cent. of carbonic acid in the air—a proportion much higher than is actually found in close rooms. Although the evils of ill-ventilation arise neither from deficiency of oxygen nor from accumulation of carbonic acid, but from the discharge of some kind of organic matter into the atmosphere, yet a slight deficiency of oxygen and an increase in the carbonic acid of the atmosphere being associated with this organic matter, we may usefully employ these analytical data as signs of the pollution of the atmosphere. Practically, for reasons which will at once suggest themselves to the chemist, little use is to be made of the slight lowering of the oxygen; but we may very advantageously employ the increase in the carbonic acid, which, although a trifling percentage calculated on the air, is a large percentage calculated on the carbonic acid, and which, moreover, may be observed with very great ease and certainty by the employment of the admirable method introduced by Dalton, and recently improved by Pettenkofer. We will conclude by citing, from a recent paper of Dr. Angus Smith's, some determinations of the carbonic acid in close atmospheres :—

	Percentage of CO_2 (by volume).
London, Strand Theatre, gallery, 10 p.m.	0·101
,, Surrey Theatre, boxes, 10 p.m.	0·111
,, ,, ,, ,, 12 p.m.	0·218
,, Olympic Theatre, 11.30 p.m.	0·0817
,, ,, ,, 11.55 p.m.	0·1014
,, Victoria Theatre, boxes, 10 p.m.	0·126
,, Haymarket Theatre, dress circle, 11.30 p.m.	0·0757
,, City of London Theatre, pit, 11.15 p.m.	0·252
Manchester Theatre Royal, gallery, 10.50 p.m.	0·1358
,, Queen's Theatre, pit	0·1026
A factory in Manchester	0·2860
,, ,,	0·2830
,, ,,	0·2900
,, ,,	0·3000

For comparison we append determinations of the carbonic acid in the air which occupies the streets of London and Manchester:—

London, Cheapside	0·0352
„ „	0·0398
„ Newgate-street	0·0413
„ Oxford-street	0·0344
„ top of Monument	0·0380
„ „ „	0·0405
Manchester, Market-street	0·0374
„ Deansgate	0·0578

Accumulation of carbonic acid is a sign of a close atmosphere, though not the cause of the closeness.

THE ORIGIN OF SYPHILIS.

The origin of any form of disease cannot fail to be of interest, and that of syphilis possesses this element in the highest degree. It is, we think, tolerably clear that syphilis did not exist in classic times, but it is perfectly certain that, towards the year 1500, it was widely spread, its characters were severe, and it attracted much attention not only among the Physicians of the time, but also among the public generally. Up to a recent date it was customary to refer its origin to the siege of Naples in 1495, but undoubtedly syphilis prevailed before that date; and the camp fever which decimated the army lying before that city, characterised, as the worst forms of typhus not unusually are, by the formation of buboes, was evidently confounded with the less known malady. The discovery of America by Columbus in 1493 has given, in the opinion of some, a clue to the mystery. That a disease so well marked in its characters—and it was even better marked then—as syphilis should suddenly spring into being is, to say the least of it, not easily accountable, but the notion of its acquisition from the Indians and its transmission to Europe by Columbus's voyages would be readily intelligible. In the year 1867 there appeared in our columns a series of papers by Mr. Gaskoin strongly corroborative of the latter view, and we should not again have referred to the subject but for the appearance of a small German work(a) on the early history of syphilis. The former portion of this work is chiefly devoted to an inquiry into the early treatment of syphilis, wherein the author shows the antiquity of the method of mercurial inunction and other interesting matters, but the latter portion is occupied by a criticism of Mr. Gaskoin's papers above alluded to, and a somewhat violent attack it is.

It will be at once seen that the whole affair depends on dates. If syphilis existed before the departure or return of Columbus, the notion of its introduction from America falls to the ground. Now, if we are to depend on the date of one of the letters published by Peter Martyr, and referring to the illness of one Arias Barbosa, Professor of Greek in the University of Salamanca, we must admit the existence of syphilis in 1488, five years before the discovery of America and the return of Columbus; but the authenticity, or rather the date, of this is disputed. It will perhaps be remembered that Mr. Gaskoin's conclusions depended greatly on the testimony of Diaz de Isla, a very early copy of whose work on syphilis, dating from 1539 or earlier, was discovered and commented on by Dr. Bonifacio de Monteja, of Madrid, in 1863. This author distinctly states that the disease was imported from America by Columbus. The question then arises how far this testimony is to be accepted, and on this point Finckenstein is strong that it is worthless, and he further accuses Mr. Gaskoin of the want of a critical spirit in other evidence he has brought forward.

Undoubtedly, in the names applied to the disease in various countries, there is indicated a want of exact knowledge as to its primary origin that tends to the belief of an endemic causation; for had the disease been transmitted from America, its connexion with the discoverers could scarcely have failed to be generally remarked, and such, we know, was not the case among contemporary writers. Another difficulty occurs in the confusion of one disease with another. We have seen above that petechial typhus was confounded with it; and such also was undoubtedly the case with bad forms of itch. Then, again, it must not be forgotten that the earliest writers do not assign an American origin to the disease, whilst later authorities would doubtless incline to connect two such notable contemporaneous events as the origin of syphilis and the discovery of America. The question, then, comes to be—How are we to account for the rise and extraordinarily rapid spread of the disease? Those writers who deny the American origin of the complaint are obliged to fall back on one or other of two doctrines—either that it prevailed from all time, or that the condition of affairs at the time when it first made itself known was such as to account for its appearance. Dr. Finckenstein adopts the latter thesis, and points out the extraordinary condition of Europe at that period. The southern portion was really one vast barrack. Wars and rumours of wars everywhere prevailed, and these wars were, to a great extent, carried on by Free Companions, men of the most reckless and loosest character. In high places, things were no better. Even the Papal chair was occupied by an incarnation of immorality. In such a condition of affairs, men look for the origin of the disease; and in the marches of such enormous bodies of men, as well as in the expatriation of the Jews from Spain (according to some), they see the means for its rapid spread. In this opinion many of our modern syphilologists concur, two notably who have carefully inquired into the matter—Zeissl and Auspitz. And so we are once more at sea, and the origin of syphilis remains undetermined.

The former portion of Dr. Finckenstein's book is also of great interest. In it he deals with the treatment adopted from time to time during the earliest days of the disease. Curiously enough, one of the very first writers on the subject, Juan Almenar, made use of the remedy now generally in vogue, and that, too, in the way by many the most highly esteemed. It was perhaps from the confounding of the disease with the itch that Practitioners were led to employ a mercurial inunction. At all events, that form of medication was early adopted. Almenar employed an ointment containing suet, lard, theriaca, mithridaticum, mercury, water of fumaria and scabiosa, with certain inactive ingredients, and with this he seems to have been very successful. The next writers were Gaspar Torella and Pedro Pintor, of whom Pintor says that the disease is cured by itch salve—no doubt a mercurial preparation, and one whose use he carried further than did Almenar. Torella believed the disease to be of the nature of itch, but assigned to it a sexual origin. He also accordingly treated it by inunction. The next writer was Francisco Lopez de Villalobos, who wrote his poem in the year 1498. This poem, which Finckenstein translates, is remarkable in more ways than one, but especially for the exactness of its descriptions and the beauty of its language, being one of the best samples of classic Castilian. This author also praises the use of mercury. Rodrigo Ruiz Diaz de Isla, who followed, is characterised as a quack and an ignoramus. As has been already seen, he assigned the origin of syphilis to an American source (Girtanner), and is consequently styled by Finckenstein an "uncritical author" and a "foolish person." Perhaps the statement that the vegetables in a garden where was hung the washing of one affected with venereal disease became similarly affected better entitles him to that designation. At all events, he must have known how to get on in the world, for in a short time he had amassed 12,000 ducats.

In 1529 (Francisco Delgado) and 1539 (Nicolaus Poll) we have notice of a new mode of cure—that by guaiacum. The earlier authors already cited repudiated, or at all events were

(a) Zur Geschichte der Syphilis. Die ältesten spanischen Nachrichten über diese Krankheit und das Gedicht des Francisco Lopez de Villalobos vom Jahre 1498, zum ersten Mal in deutsche Verse übertragen von Dr. Raphael Finckenstein, Privat-docent an der königl. Universität zu Breslau.
(On the History of Syphilis. The oldest Spanish Accounts of this Disease and the Poem of F. L. de Villalobos of Date 1498, for the first time translated into German Verse by Dr. R. Finckenstein, Private Tutor in the University of Breslau. Breslau: E. Morgenstern.)

silent as to, the origin of syphilis in America; but when the notion came to be spread abroad, it was only natural to seek a remedy where the disease was supposed to have originated. The fact that guaiacum was brought by the natives to those inquiring after a remedy for the disease was supposed to indicate their knowledge both of the disease and its remedy; but the fact is that they used it for everything in the shape of disease, and not for any special malady.

Soon after guaiacum sarsaparilla was introduced, and was used in the treatment of Charles V.'s gout. Vesalius speaks highly of its virtues (1542), and calls it a "Divine remedy in syphilis." Sassafras was also early introduced into Europe, and is spoken of by Nicolas Monardis, who died in 1588, when 95 years old.

Many other writers are cited by Dr. Finckenstein, but we think we have said enough to direct attention to a book which to those interested in such matters contains a mine of information. The author speaks strongly, and evidently feels strongly; he evidently looks upon the doctrine that syphilis came from America as a rank heresy, to be combatted to the best of his ability. And that his ability and learning are not small, the present volume is ample proof.

THE WEEK.

TOPICS OF THE DAY.

The Court of Examiners of the Society of Apothecaries have published two regulations of no small importance to the cause of Medical education which are to come into force at the end of the summer session of 1870. If recent discussions on Medical training and revelations of Hospital management have proved anything, it is that the resources of our Hospitals are not utilised for the purposes of clinical instruction as they ought to be. Under the present system it is quite possible that a student shall have "walked" a given Hospital during the prescribed Medical Sessions, that he shall have had his schedules regularly signed by the Hospital staff, and that he shall finally present himself for examination before one or other of the licensing boards without ever having made a physical examination of a patient's chest or an analysis of urine. Clinical examinations can put but a partial check on this evil, and, at the best, they only expose deficiencies, and do not supply a remedy. In addition, therefore, to the clinical examinations which they instituted three years ago, the Court of Examiners have determined to demand from every student who presents himself for his final examination proof that he has filled the office of clinical clerk under one of the Physicians of a recognised Hospital during the term of six weeks at least. We believe that this will prove one of the most important improvements in Medical education that have been made of late years, and we hope that the example that has been set by the Apothecaries' Society will be followed by other examining boards. At first sight the period named as a minimum may appear short, but we understand that it has been fixed after a careful consideration of the resources of some of the Hospitals, and of the number of students who will require clerkships. It is also believed that the out-patient as well as the in-patient departments may be beneficially utilised for the purpose. The other regulation is also an exceedingly good one. The Court of Examiners, fully aware of the abuses to which the lecture system is open, have resolved that all students shall produce evidence of having been examined at the class examinations instituted by their respective teachers in the various branches of Medical science. Both these regulations, as we have said, will come into force at the end of the present academical year. It is plain that if these measures are honestly carried out by the lecturers and Medical staffs of the London Hospitals, a very effectual impetus will have been given to Medical education, and the Profession will have to thank the Society at Blackfriars for another added to the long list of efforts it has made to raise to the highest possible mark the training of the English general Practitioner.

As we stated last week, the Royal College of Physicians have not hesitated to declare their adhesion to the scheme of a joint and single examination for each division of the United Kingdom. At a meeting of the Fellows of the College on Wednesday resolutions in favour of the measure were adopted, and a committee was appointed with power to confer with the Universities and Corporations on the subject. This committee consists of the President, the Treasurer, the Senior Censor, Sir Thomas Watson, Dr. Burrows, and Dr. Quain. The following were the resolutions passed:—

"1. That the time has now arrived when, full liberty being left to the universities and corporations to deal as they please with their honorary distinctions and degrees, an examining board should be formed for each division of the kingdom, before which every person who desires a licence to practise Medicine, Surgery, and Midwifery should appear, and be examined on all subjects that may be required by the Medical Council. Any higher distinctions or degrees he may wish to take should come after, and should be optional.

"2. That every person examined and approved by the aforesaid Board of Examiners in either division of the kingdom should receive a licence to practise Medicine, Surgery, and Midwifery, and should be entitled to register under the Medical Act as a Licentiate in Medicine, Surgery, and Midwifery.

"3. That the course of study required, and the number and nature of the examinations to be undergone, be as nearly the same as possible in the three divisions of the kingdom.

"4. That, inasmuch as the licence would confer the same rights and privileges of practice, whether granted in England, Scotland, or Ireland, the fees for the examinations and licence should be the same in each division of the kingdom."

In the election for the Universities of Aberdeen and Glasgow, Mr. Gordon polled 2120 votes, Mr. Smith 1616, giving a majority for Mr. Gordon of 504. The result, which, we believe, depended mainly on the Medical votes in the two Universities, affords the strongest inducement to Medical candidates to come forward at any future election. It is clear that the two seats for the four Scottish Universities might be filled by Medical men, who would prove a valuable reinforcement to the small band of Medical men at present in the House.

One of the most important scientific communications received of late years by any learned society is the report on the recent deep-sea explorations, made to the Royal Society on Thursday last week by Dr. Carpenter. Our space will not allow us to make an analysis of it, but we may mention one or two of the startling facts which the deep-sea dredging has brought to light. The explorations have been conducted on board H.M.S. *Porcupine* by Dr. Carpenter, Professor Wyville Thompson, and Mr. Gwyn Jeffreys. In the first place, this and former explorations have fully proved contrary to all preconceived opinions that life exists in wonderful variety and exuberance at enormous ocean depths, and that the temperature of the deep sea presents the most remarkable variations in degree.

"More remarkable still, it was found that a difference in bottom temperature between 32° and 47° existed at points only eight or ten miles distant from each other, beneath a uniform surface temperature of about 52°, and that where this was the case in the cold area the bottom was formed of barren sandstone mingled with fragments of older rock, and inhabited by a comparatively scanty fauna, of an arctic or boreal character, while in the adjacent warm area the bottom surface was cretaceous, and the more abundant fauna presented characteristics due to the more temperate climate."

It is easy to see how this discovery gives to the winds many of our cherished ideas with regard to the succession of strata and of geological periods.

"The upheaval of a few miles of sea bottom subject to these conditions would present to the geologist of the future two portions of surface totally different in their structure, the one exhibiting traces of a depressed, the other of an elevated temperature; and yet these formations would have been contemporaneous and conterminous. Wherever similar conditions are found upon the dry land of the present day, it had been supposed that the high and the low temperature, the formation

of chalk and the formation of sandstone, must have been separated from each other by long periods, and the discovery that they may actually co-exist upon adjacent surfaces has done no less than strike at the very root of many of the customary assumptions with regard to geological time."

Well might Sir Charles Lyell call these discoveries almost revolutionary in their character. It has been hitherto the custom to talk and write about the dark caves and recesses of ocean, but all this must be expunged from scientific writing and left to the poets. From the most profound depths—more than two thousand fathoms, nearly the height of Mont Blanc—animals of high organisation, *and with perfect eyes*, have been brought to the surface by the dredge. Sir Charles Lyell suggested that the light which these creatures evidently enjoy must be a phosphorescent one. Over the whole of the warmer areas explored, the bottom was found to be covered with globigerina deposit—animals actively engaged in chalk formation. In the colder areas these are not found, but there we have beds of volcanic sand, with whole nations of echinoderms. Besides, from these great depths the dredge has brought up delicious sponges and foraminifera, zoophytes, molluscs, annelids, and crustaceans. One hundred and twenty-seven species of molluscs not previously known to exist in British seas were made captive, and many of them belong to new species. Dr. Carpenter promises shortly to exhibit to the Fellows of the Royal Society specimens of all the treasures of the deep which are thus wonderfully brought to light.

A despatch has arrived from the Governor of Bombay stating that a satisfactory letter had been received from Dr. Livingstone, dated Ujiji, May 13, 1869. Six months ago, therefore, the great traveller was safe.

We are glad, for the sake not only of the overcrowded patients in the St. Pancras Infirmary wards, but also for the sake of the public and both parties of belligerents, that the Poor-law Board have refused to postpone the removal of the sick to the Highgate Infirmary, where they require the guardians to have wards for the accommodation of 170 patients immediately prepared. This seems to be the only mode of settling the interminable debates which the affairs of St. Pancras have engendered, and, as the Poor-law Board have determined that the new Infirmary is to be used, although for a much larger area than St. Pancras, it is much better for all parties that there should be no further delay.

The Poor-law Board have appointed Dr. John Henry Bridges to a temporary Poor-law Inspectorship in the metropolitan districts. Dr. Bridges fills the place of Dr. Markham, who has been compelled, by ill-health, to take a six months' holiday.

From the address of Sir Roderick Murchison at the Geographical Society on Monday last we are sorry to gather that the funds for the Faraday monument in St. Paul's Cathedral are not yet forthcoming. It is a burning shame to the present Government, and to Mr. Lowe in particular, that a monument to the greatest scientific worthy that England has produced in the present generation should not have been erected at the cost of the nation. But this is no reason that subscriptions should be lacking to do honour to the memory of Faraday. Men of science are not rich, but, as was said in reference to Sir Walter Scott, if everybody who has learned from Faraday was to give sixpence, his monument might surpass in magnificence any shrine in old or modern Europe.

Scarlatina is slightly on the decrease. The number of deaths registered last week was 208.

A gentleman has written to the *Times* to say that he has been cured of incipient rheumatic fever by having been in the Midland Railway accident on the 17th inst. Certainly there are wonderful stories of the curative effects of fright in cases where the limbs have been set fast by rheumatism and other diseases. But in this case we have only the patient's own and not a Medical diagnosis, which considerably diminishes the value of the story.

The Soho-square Hospital for Women has been accused by a Sister of Mercy of extracting as much as six guineas per week from a lady "in straitened circumstances," a patient in the new wing. The Chairman of Committee writes indignantly to deny the charge, but allows that the terms for admission vary from one guinea to three and a half guineas per week; and the public are exhorted to subscribe to pay off the debt on the new wing, *because it is a charity*.

THE MEETING AT ST. BARTHOLOMEW'S.

We give in another column a condensed account of the meeting at St. Bartholomew's, and of the statement made by the governing body in reply to charges of mismanagement. It is remarkable, after such a *couleur-de-rose* account as was given by the Treasurer of the state of the Hospital, that a set of resolutions should be proposed which seem to admit the charges made against the management; but the explanation is easy. Mr. White alone is responsible for the statement he made; the resolutions were drawn up by the House Committee. But is not Mr. White sole ruler of the institution? It is true that there are four almoners and a House Committee, but the latter never interfere, practically or personally, in the affairs of the Hospital. There is no ground for thinking that there is any corruption or wilful mismanagement; but it is evident that the Treasurer is not strong enough for the place, that he is too much of an autocrat, and that any future Treasurer must have this absolute power curtailed. Notwithstanding all that Mr. White stated, it is clear to every one that the Hospital requires much reform. This is more particularly the case with regard to the casual patients, who are admitted indiscriminately, and in such numbers as to render a proper attendance impossible within the time allotted for that purpose. Mr. White denies this, and produces evidence in favour of his denial, but it is well known that, as a rule, the out-patients of a large Hospital are not properly examined, and this applies more particularly to St. Bartholomew's. What may be the remedy for this it is difficult to suggest. Classification is now on its trial; the Treasurer thinks it will fail. We shall see. It remains for the Medical staff to determine what shape the inquiry shall take. We trust that it may be a full and satisfactory one.

MEDICAL AFFAIRS IN EDINBURGH.

Dr. Pettigrew has been unanimously elected to the office of Pathologist at the Royal Infirmary. Among the more recent changes it may be mentioned that Dr. Grainger Stewart has been appointed Junior Physician, and Dr. Claud Muirhead and Dr. Thomas R. Fraser Assistant-Physicians, whilst the services of Dr. Sanders, now Professor of Pathology in the University, are still retained in connexion with the Medical Hospital. Mr. Spence ceases to be Senior Surgeon, but he is still to have wards, and is to continue to render important service to the Infirmary. Mr. Lister succeeds Mr. Syme in his wards. Dr. Joseph Bell and Dr. John Duncan have been appointed Assistant-Surgeons. Mr. Annandale, the former Assistant-Surgeon, has been promoted. Mr. Syme is to be Consulting Surgeon. The Executive Committee of the New York State Agricultural Society have conferred upon Dr. Andrew Smart its diploma, as a testimony to the learning, ability, and sagacity evinced by him in his investigations of the pathology of rinderpest, particularly in his microscopic investigations of its lesions, and in the plan of treatment so judiciously recommended. The annual dinner of the Royal College of Surgeons was held on Thursday evening, Dr. Gillespie in the chair. Sixty gentlemen were present, including many distinguished visitors.

RELAPSING FEVER.

We understand that at the meeting of the Harveian Society of London to be held on Thursday, December 2, Dr. Broadbent will read a paper on "Relapsing Fever." The subject is one of special interest at the present moment, and Dr. Broadbent has had unusual opportunities of studying the disease in his capacity of Physician to the Fever Hospital. The officers of the Society have informed us that they will be glad to see any member of the Profession, although he may not belong to the Society, on the occasion. We have received several inquiries as to the published accounts of this fever, and we would strongly urge all interested in it to hear Dr. Broadbent on the subject, for thereby they will be saved both time and trouble. The meetings of the Society are held at the Stafford Rooms, Tichborne-street, Edgeware-road, at 8 o'clock p.m.

WELL-EARNED PROMOTION.

The War-office *Gazette* of the 23rd inst. contains the following:

"General Order by his Royal Highness the Field Marshal Commanding-in-Chief.—Her Majesty has been pleased to approve of the promotion of Staff Assistant-Surgeon Robert Waters, M.D., to be a Staff Surgeon, in consideration of his highly meritorious service during the recent epidemic of cholera at the Gambia.—By command, W. Paulet, Adjutant-General."

Dr. Waters entered the service on January 19, 1860, having gained a very high place at the final competitive examination at Netley. He has since seen a large share of tropical service, and had entered on his third year on the Gold Coast when the epidemic of cholera, during which he so much distinguished himself, broke out. His zeal and ability were so marked that a considerable sum of money was voted to him by the colonial authorities, with a special declaration of their approval. We are now glad to see that departmental promotion still further rewards him.

COMMITTEE OF THE BRITISH ASSOCIATION ON THE TREATMENT AND UTILISATION OF SEWAGE.

At the Norwich meeting, a committee of the British Association was appointed to consider how best to treat and utilise sewage, and a small sum of money was granted for the furtherance of this design. By the time the Association had reassembled at Exeter, so much information had been collected, and the prospect of doing good was so great, that the committee was reappointed, and an increased sum of money placed at their disposal. This, nevertheless, only seemed to bring them face to face with the real difficulties in their way. So many experiments, gaugings, and observations—so many careful chemical analyses have to be made before any salutary end can be attained, that the committee, unable to fall back on the body of the Association, which is far too poor to admit of any great pecuniary outlay, are now forced to appeal to the general public for help to carry out their researches. They are willing to do what they can themselves; but apparatus such as they require is costly, and, at the same time, absolutely necessary.

"It is suggested that the subscriptions of towns of different populations might be graduated somewhat in the following proportions:—Where the population does not exceed 10,000, £5 5s.; between 10,000 and 25,000, £10 10s.; between 25,000 and 50,000, £21; between 50,000 and 75,000, £30; between 75,000 and 100,000, £50; above 100,000, £100.

"All public bodies subscribing not less than £5 5s. will have the benefit of the information from time to time, as the results of the inquiry partake of a conclusive character, and will receive a copy of the Report of the Committee when published.

"The following are the names of the committee:—Richard B. Grantham, Esq., M. Inst. C.E., F.G.S., Chairman; J. Bailey Denton, Esq., M. Inst. C.E., F.G.S.; J. Thornhill Harrison, Esq., M. Inst. C.E.; Benjamin H. Paul, Esq., Ph.D., F.C.S.; Professor Wanklyn, F.C.S.; William Hope, Esq., V.C.; Professor Williamson, Ph.D., F.R.S.; Professor Marshall, F.R.S., F.R.C.S.; Professor Corfield, M.A., M.D.; M. C. Cooke, Esq.; and Sir John Lubbock, Bart., F.R.S., Treasurer.

HONORARIUM.

The Emperor of the French has addressed a very cordial letter to Dr. Ricord, thanking him for his attention. This friendly missive was enclosed in a gold snuff-box ornamented with diamonds valued at 20,000 fr. The messenger who carried the present took back the answer that the autograph would have been prized just as much without the elegantly jewelled envelope. The eminent teacher, observer, and Surgeon was born in Baltimore, Maryland, where he passed the first ten years of his life.

FROM ABROAD.—CASE OF LETHARGY—SCARLATINA IN PARIS AND LONDON—A NEW FUNCTION FOR THE CERVIX UTERI.

Under the title "Melancholic Stupor of a Lethargic Form," M. Legrand du Saulle has recently published, in the *Gazette des Hôpitaux*, full details of a remarkable case that came under his care at the Bicêtre, and concerning which many erroneous statements had prevailed in Paris. Della F., an Italian, 32 years of age, employed in a business house in Paris, was admitted August 31, 1868, having during three months previously exhibited the most exaggerated religious scruples and devotion, until at last he completely neglected his affairs, and exhibited unmistakable signs of insanity. He was very anxious to die, but feared being damned; and the chaplain of the institution, having been allowed to have free access to him, was so imprudent as to confess him, and administer extreme unction as to the dying. From that time he fell into a state of deep sopor, his pulse varying between 62 and 54, and his respiration oscillating between 38 and 48. He assumed the position of one dead, but was really semi-conscious, for when it was removed, he always replaced the sheet of the bed over his head, so as to cover it after the manner of a corpse. We cannot follow the details of the case, which are minutely given, and it will suffice to say that no means employed had any effect upon the lethargy, and that he lived till April 12, his state of unconsciousness lasting more than seven months, during all which time he was fed through the œsophageal tube. M. Legrand du Saulle pays a deserved tribute to the care and dexterity of the eleven *internes* who successively undertook the passage of this—altogether between 700 and 750 times—by mentioning that at the autopsy not the slightest abrasion from its use was discovered in the nares, pharynx, or œsophagus.

The somewhat dependent condition of the Hospital Medical officers in Paris is shown by the fact mentioned that an animal magnetiser, whose attention had been drawn to the case by the reports current concerning the "Bicêtre sleeper," was allowed to try his hand at awakening the patient, not with the approval of M. Legrand, but at the request of M. Husson, Director of Medical Assistance. Again, when M. Legrand made an application that M. Montméja, the celebrated Medical photographist, should be allowed to take a photograph of the patient, he received, after waiting three weeks for an answer, a refusal! The picture of the man in the corpse-like attitude he constantly maintained, believing himself, since the extreme unction, to be dead, could only be taken after death had really occurred. The details of the autopsy are given at great length. The chief points observed were (1) the excessive decoloration of both the white and grey substance of the brain, the whole mass seeming as if it had been washed, the vessels being scarcely apparent, even in the grey substance of the striated bodies, the protuberance, and the cortical substance; (2) some of the convolutions were atrophied in isolated portions, furnishing true umbilical depressions in the general contour of the cortical substance; (3) in the midst of the cortical substance, amidst the general anæmic condition, existed small islets of partial vascularisation, completely separated from each other, and comparable in appearance to the spots of rubeola on the skin.

In his monthly review of the prevalent diseases in Paris, M. Besnier says that in the month of October there were received

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in the Paris Hospitals but thirty cases of scarlatina, of which only two proved fatal; and he refers to former reports in proof of the remarkable benignity of this disease in Paris, at the same time that it showed such virulence in London and other capitals. The entire Hospital mortality from this disease, which was only 35 in 1866, descended to the extraordinarily low figure of 8 in 1867! While, during 1866, in Berlin, with a population only of 658,251, there were 264 deaths from scarlatina, and Vienna, with its 590,000 inhabitants, had 396 deaths, Paris, with its 1,825,274, only furnished 82 deaths. London, with a population not double that of Paris, had 1885—*i.e.*, twenty-three times a greater number than Paris. During three weeks of the present year 678 deaths from scarlatina were reported in London, Paris registering during the same period but 19 deaths; and in the last week, when this paper was prepared, there were 229 deaths from scarlatina in London to 1 in Paris.

"Never, as we have before said," writes M. Besnier, "could a more striking confirmation be furnished of the fact we are incessantly endeavouring to bring into prominence—viz., the inferiority of the part played by *contagion* properly so called, as compared with *epidemic influence*, in the development, transmission, and propagation of the most contagious epidemic diseases. The contagious germ exists in Paris as well as in London, in the midst even of a still denser population, and consequently more apt to the generality of transmissions. It is incessantly deposited in reserve not only in the children's asylums, but also in the general Hospitals; and, in order to become developed, it needs only one condition, absolutely unknown in its nature—the epidemic influence—without which the contagion becomes reduced to proportions which scarcely exceed those which we actually admit as regards typhoid fever and erysipelas. It is plain, then, that if contagiosity, in general, is a characteristic inherent to a certain order of diseases, the degree in which the contagious property is exerted has nothing absolute beyond the 'epidemic influence,' to which are closely subordinated the fecundity of the contagium and the individual receptivity."

M. Besnier states his great desire to obtain more precise information concerning the epidemic which now prevails in different parts of Britain. What are the forms assumed by the disease, the classes especially attacked, the age and sex of the patients, the proportion of deaths to cases, the course of the epidemic in civil and military populations, in Hospitals, barracks, schools, etc.? Are foreigners as readily attacked as members of the Anglo-Saxon family? What relations have been observed between scarlatina and other diseases? Finally, what are the medicinal agents employed? and what prophylactics have been found of avail?

M. Desprès, Surgeon of the Lourcine Hospital, at the last meeting of the Académie de Médecine, read a memoir entitled "An Investigation into some Points of the Anatomy and Physiology of the Cervix Uteri, the Glands of its Mucous Membrane, and a Function of the Cervix unconnected with Delivery." The following are his conclusions:—1. The cervix uteri contains glands distributed in bunches or ramified tubules, having their seat partly in the muscular substance of the uterus, like the prostatic glandules in the midst of muscular fibres. 2. These glands secrete a clear, viscid, albuminous liquid, analogous to the prostatic liquid, which issues from the cervix in an intermittent manner, giving rise to ejaculation on the part of the female. This "uterine liquid" issues slowly from the cervix, remaining within its cavity and at the os uteri. It has hitherto been improperly regarded as a variety of catarrhal fluid. 3. The object of ejaculation in the woman is to furnish a vehicle for the spermatozoa in order to insure their safe arrival within the cavity of the uterus. 4. These glands of the cervix become obliterated during pregnancy, and constitute cysts or Naboth's ovules. But delivery replaces matters as they were by rupturing the cysts during its progress or during the subsequent retraction of the uterus. 5. The cervix of the uterus is erectile, entering into the condition of erection simultaneously with the other erectile female organs, and partially opening to enable the uterine fluid to issue.

THE

MANAGEMENT OF ST. BARTHOLOMEW'S HOSPITAL.

On Monday last the Council-room of St. Bartholomew's Hospital was crowded with governors, presided over by the Prince of Wales, to hear a statement from the Treasurer, Mr. Foster White, with respect to some serious charges made against the management of the Hospital. These charges were, in substance, that, firstly, the customary introductory lecture had been suppressed in consequence of a quarrel between the Treasurer and the Medical staff; secondly, that the in-patients were treated in a niggardly way, and that the expenditure upon them was less than that of the London Hospital, a comparatively poor institution; thirdly, that the casual patients had increased very considerably of late years, and yet the management had done nothing to provide for their accommodation and treatment. It was complained that the waiting and consulting rooms were deficient in accommodation; that the Medical staff was so limited that they could not, by any possibility, properly attend to the patients, and that in some cases a "doubtful dose of medicine" might be administered from the "brown jug," and serious consequences might ensue. Fourthly, that the nurses were too few in number, and cruelly overworked; that they slept in cupboards under the stairs, and that there were not sufficient beds for them. These charges had been made in an unequivocal manner, and with "sensational" touches, which had aroused the sympathy and indignation of the public. The Treasurer, in his somewhat laboured, egotistical, and over-oratorical speech, replied to all these charges, but he admitted the Hospital was by no means perfect. But he contended that the governing body were most anxious to make it as perfect as possible, and were taking steps to remedy the defects which he acknowledged existed. In reference to the first charge, he emphatically and indignantly denied that any disagreement existed between the Medical staff and himself, and said the introductory address was dispensed with in accordance with a decision of the Medical officers come to the year before, and with which he had nothing on earth to do. With respect to the second charge, he asserted that the in-patients of St. Bartholomew's cost considerably more than those of the London Hospital. And what was the course pursued by the assailants of the Hospital when this had been demonstrated to them? Why, they turned round and abused the management for being too extravagant! As regarded the third charge, Mr. White entered into particulars to show what had been done to meet the call upon the institution by the increasing crowds of "casual" patients. A large and commodious waiting-room and consulting-rooms, framed according to the wishes of the Medical officers, had been erected at a very great cost. In 1868 four new Medical officers had been appointed, and provided with every accommodation, and these four men acted where one had acted before. For the first year all went on well, no complaint having reached him either from the Medical gentlemen or the patients. But on the retirement of three of the Medical staff by rotation, their successors shortly after their appointment wrote him a letter to say that the work imposed upon them was more than they could accomplish. He found, on applying to the three gentlemen who had retired, that they had found no difficulty in doing their duties fully and satisfactorily. That was his answer to the complaint. With respect to the "brown jug" and "the doubtful dose of medicine," he charged the writer of this statement as guilty of "a foul and most unjust aspersion," and explained that in so large an institution they were obliged to manufacture medicine in great quantities. But he contended that it was dispensed with care, and in no "doubtful doses." In the casual rooms a system of classification of the patients had lately been adopted; he had not much faith in its usefulness, but the result of the plan would shortly be announced. The

charge as regarded the nurses he met by saying that there were eighty-three nurses, and they had eighty-three beds, and, on the average, each nurse had 700 cubic feet of space in her bedroom. He admitted that three out of the eighty-three bedrooms had been circumscribed in the formation of the new wings of the Hospital. All the bedrooms were not such as he could wish, but it must be recollected the buildings were erected 140 years ago. However, they were seeking for a plan to improve these rooms. Mr. White then entered into the question of the under-payment and overworking of the nurses. He contended that there was no foundation whatever for this charge. They had lately, at great cost, relieved the nurses of many menial duties, such as scrubbing the floors; they had one day to themselves in every three weeks, and every third Sunday. In addition to food their pay was eight shillings a week, and after two years' service this was increased by ninepence. They rose from nurses to be sisters, and each nurse had eight hours' sleep every day, and, in cases of emergency, extra were engaged. With respect to the mortality amongst them, it had been thirty-four in the last sixteen years, and twenty-seven of these had died from fever. A nurse never remained on duty when she showed the slightest indisposition. Mr. White then alluded to the call which had been made upon the managing body by the Medical officers for the establishment of a special ward for the treatment of ophthalmic cases; but this he did not entertain for a time, because it involved an outlay of £5000. Yet the ward was now begun. They had, however, made special provision for the treatment of diseases of the ear, of deformities, and of diseases peculiar to women. They must work gradually, improve gradually. It was an error to state that these improvements had been forced upon them by pressure from without; they had been meditated for some time, and steps taken to carry them out with as little inconvenience as possible to the patients. Mr. White then entered into an elaborate defence of himself against the attacks made upon him, in the course of which he said he received not a farthing for his services, and that the income of the Hospital was not, as had been stated, £48,000 a year, but £33,000. He concluded by moving the following resolutions:—

"That it be referred to the House Committee to inquire and report to a court to be specially summoned—firstly, what measures can be adopted for the purpose of providing better sleeping accommodation for the nurses; secondly, whether it is expedient to adopt any and what steps in order to diminish the labour of the nurses and afford them longer periods of rest; thirdly, whether the arrangements lately made for the purpose of securing the more effective relief of casual patients are sufficient, and, if not, what further provision should be made for that purpose; and, fourthly, what course can be adopted with a view to provide a convalescent Hospital in the country for the in-patients of this institution."

Mr. White assumed that his answers to the charges made were complete. But there was no discussion, and consequently none of his statements were sifted. The real questions at issue were left very much in their original positions. That the Treasurer fenced with his critics was evident to the meeting. All admitted his benevolence and disinterestedness as treasurer, "acting without any emolument whatever;" but he failed to show that the work could not be better done by a competent paid officer, who might, by judicious management, give thrice his salary to the institution. He failed to show that, under a better system, the "casuals" might not be better attended to, and improper persons excluded from the casual wards. He did not succeed in showing that the nurses had not been subject to occasional overwork—nay, he begged the question throughout, and so overloaded "facts and figures" by oratorical displays, that he wearied his audience.

What is wanted at St. Bartholomew's Hospital is a treasurer with limited power, but with energy and time to devote to the really responsible and laborious duties of the office. Mr. White is Treasurer of Christ's Hospital, and in business; it is idle to suppose he can fill the office of Treasurer of St. Bartholomew's satisfactorily.

THE REGISTRATION OF DISEASE.

We think it right to sketch summarily the history of plans proposed and measures attempted within the last thirty years to register cases of disease and accident among the poorer classes of society. This subject, it must be recollected, was by no means a new one even fifty years ago. Not to mention curious proposals published more than a century since, the Reports of Willan in 1801, and of Bateman in 1819, on the diseases of London in connexion with the state of the weather, are models of enlightened observation and truthful record.

In the General Sanitary Report of 1842, and in the evidence of Dr. Southwood Smith before the Health of Towns Commission in 1843, suggestions were first made for the aid and supervision of Medical relief afforded to the poor, including scientific records and periodical reports of the cases of sickness attended by the Union Medical Officers, as essential to any effective sanitary organisation.

In the striking report of Mr. Baker, now Inspector of Factories, on the condition of Leeds, published by the Poor-law Commissioners in 1843, may be seen the following suggestions for the registration of sickness treated in Medical charities:—

"Of what immense advantage," he says, "it would be to have every Medical charity placed under statistical regulations and responsible to the Home Office for their returns of cases admitted within their walls! It is remarkable that it has not been long ago thought of sufficient importance to place them all under one kind of statistic discipline, embracing every particular connected with the inmates, both as to sex, disease, residence, local causes, wages, labour, etc.—facts which would be useful beyond measure to the legislature, the philanthropist, and, above all, to Medical science. An aggregate detail of such cases would form a table of which it would be idle to calculate the value. In the House of Recovery at Leeds, for instance, till within two or three years, there has been no correct record kept of any case, and in many instances no record at all, either of the residences or the localities of fever. And yet how essential it is that both these should be correctly stated, and how useful it would be to trace each case to its origin, and develope the causes which are so fatal to human life! Such a universal register would, in a few years, render a first-rate service to everything relating to longevity, whether as connected with trades or occupations, or local influences or climate; and, as it would be quite inexpensive, the opportunity is lost without excuse."

The evidence taken by a committee of the House of Commons on Medical Poor Relief in 1844 contains proposals by Mr. Rumsey for the uniform registration of sickness affecting the pauper and labouring classes; the returns from all sources affording Medical aid at the public cost, or by associated effort, to be made periodically, and to be revised and published by authority; and all this with the double object of aiding the Medical officers in their performance of duty and of supplying necessary information to boards and officers of health in the administration of preventive measures. He said (Evidence, 9155):—"A great mass of valuable facts, most important to the welfare of the sick and the progress of Medical knowledge, is lost to the country from the want of a well-regulated system of reports under Medical inspection." He also quoted a letter written shortly before that inquiry by the late Dr. Walker, of Huddersfield, who proposed that to some Medical authority acting in every district of the kingdom, regular returns of sickness attended by the union Surgeons should be sent for examination; and that from these documents, aided by the returns of hospitals and dispensaries, that officer should draw up periodical reports of the health of the district. Dr. Walker also wished that the officers of Medical charities, as well as union Medical officers, might be instructed to observe the same nomenclature and form of registration."(a)

Thus it appears that, more than a quarter of a century ago, the requirements of this subject were explicitly laid before the Government and Legislature. How long a time is required in this country for the plainest principles to make even a slight impression upon the minds of those who direct public action! How large the opportunity for a succession of labourers in the field of social improvement! How little each seems to accomplish in his day!

Some returns, resulting from what must have been a laborious and extensive inquiry, were laid before the above-mentioned Parliamentary Committee(b) by Mr. Rumsey, showing that a very large proportion of the sick poor (in towns an immense majority) who were supplied with Medical attendance, were relieved from other than Poor-law sources—*i.e.*, from Medical charities, dispensaries, provident societies, clubs,

(a) See "Health and Sickness of Town Populations." Pp. 20-22. London: Parker. 1846.
(b) *Ibid.* Appendix.

etc., etc.—and that any public registration of sickness ought ultimately to include returns from at least all those institutions which are maintained at the public expense.

Again, Mr. Liddle, who has acted so long and so ably as Medical Officer of Health in Whitechapel, contributed an excellent paper in January, 1848, to the earlier "Journal of Public Health" (vol. i. pp. 92-95), in which he put forth a practical scheme, with tabular forms, for the regular registration of cases of sickness by Union Medical Officers. These deserve particular notice at the present time.

Without venturing to assign priority to any individual, when doubtless many minds were simultaneously directed to the same object, we have now mentioned Southwood Smith, Walker, Baker, Rumsey, and Liddle, who were doubtless among the "first to broach the idea of utilising these records of disease"; and we now proceed to notice later efforts.

A co-operative record of meteorological observations, with notes of prevailing diseases, appeared in the *Journal of the British Medical Association* in 1853. This scheme had been ably advocated by the editor, Dr. Cormack, as also by Dr. Moffatt, Dr. Richardson, Dr. Burder, Dr. Barker, and others. The series of "Medico-Meteorological Observations" commenced in October, 1853, and was regularly published in that journal for about three years. But these reports, though valuable in many respects, were in no sense a registration of sickness, nor did they profess to be such. They contained only the briefest reference to prevalent maladies in those districts from which meteorological reports were forwarded. In 1855, however, a somewhat nearer approach to a registration of disease was made in the *Sanitary Review*, under Dr. Richardson's direction. This enterprise was supported, with comparative success, by many earnest provincial contributors. An interesting account of its objects, progress and results is to be found in two papers by Dr. Richardson, one of which was published in the *Epidemiological Transactions* of 1858, and the other in the *Transactions of the Social Science Association* for 1861. But it must be said of these returns, valuable as was the information they afforded, that they were simply local notices of epidemic visitations recorded by gentlemen whose respective spheres of observation do not appear to have had any defined limits. The number of the cases of any disease seen by the single observer is rarely given. For some time only sixteen kinds of disease were noted, a few others being occasionally added at a later period. With the exception of four or five returns from the Epidemiological Committee of the East Kent and Canterbury Medical Society, the observations were merely those of individual Practitioners. The severity of the epidemics, as measured by their mortality, is very rarely recorded; nor, of course, are any means afforded of determining the ratio of the sick to the population or to the class.

Other published plans and proposals which marked the year 1855 may be traced, in great measure, to the impulse given to the observation of the zymotic class of diseases by the establishment of the Epidemiological Society in 1850. Three of these deserve special notice:—1. A paper by Dr. Druitt(c) on the daily registration of facts by Medical Practitioners, not only for their own instruction and advantage, but also "to form the basis of an annual return to the authorities appointed to superintend the public health." The same idea had led Dr. Hartshorne, of Philadelphia, about the same time, to devise for the use of private Practitioners a very simple tabular form of record, which was adopted by the Medical Society of the State of Pennsylvania, and recommended by its Academy of Natural Sciences. 2. A register of cases of disease observed in two of the London Hospitals, by Dr. Barnes,(d) with remarks on the etiology and character of the current diseases, and on the importance of publishing a periodical register of prevailing sickness. This very instructive and philosophical paper ought to be consulted by all who now take an interest in this question. 3. Dr. Richardson read a paper at the Epidemiological Society on March 5 of the same year, "On the Importance of recording the Progress of Epidemics, and on the best means of accomplishing this Object in England and Wales." We do not find that this paper was printed at the time, but doubtless it formed the basis of that, to which reference has already been made, in the *Epidemiological Transactions* of 1858.

Moreover, the subject was treated at length in Mr. Rumsey's "Essays on State Medicine"(e) 1856—those on sanitary inquiry and administration having been, as we are informed, submitted in a separate form to the General Board of Health in 1855.

(c) *Sanitary Review*, vol. i. p. 15.
(d) *Lancet*, Sept. 8, 1855.
(e) See especially remarks in p. 105 *et seq.*, and in pp. 278, 279.

In the essay on the Medical care of the Poor in England appears the following passage:—

"The hard-worked and well-informed Medical Practitioner, toiling in a populous district under a board of guardians, can think only with vexation of time and labour now wasted in mere pencraft upon bundles of ruled paper, which serve no higher purpose than that of economical checks on poor-rate expenditure.

"How would his toil be lightened if he knew that his little spring of facts and observations ever ran on to swell the mighty river formed by four thousand such contributions, and that the benefits which Medical science might confer upon his countrymen would be increased, perhaps a hundredfold, by the collection of those returns, their careful analysis and comparison, and their general publication, all which might be secured by that complete and effective organisation to which he would then belong."

In a future paper it is proposed to notice the practical efforts which have been made subsequently to the publications to which we have now called attention, and then also we may review the progress and present aspect of the question.

SMALL-POX IN INDIA, AND AS IT MIGHT BE IN ENGLAND.

By W. J. MOORE, L.R.C.P.,
Surgeon Rajpootana Political Agency, and Superintendent-General of Dispensaries and Vaccination in Rajpootana.

The *Medical Times and Gazette* of September 18, 1869, p. 355, contains an account of a woman bringing her child, "covered with sores," which she attributed to vaccination, for exhibition before the magistrates at Bow-street. Dr. Seaton reported the malady thus shown to be "eczema," a skin disease which, we all know, when latent in the system, may be developed into activity by very many and different causes. It is not, however, to discuss this question I now venture to make this communication, but to endorse your remarks on the case, which read as follows:—

"There is no doubt that eczema does occasionally follow eruptive fevers of the varioloid group. We have lately had an opportunity of seeing at one of the metropolitan Hospitals a case of unmanageable chronic eczema which followed confluent small-pox. It is only by impressing on the public mind the horrors of unmitigated small-pox—which, thanks to vaccination, the present generation can scarcely realise—that people will be induced to put up with the minor and occasional evils of vaccination."

It is, indeed, fortunately quite true that the people of England cannot now conceive the effects of unchecked small-pox, and therefore as unfortunately correct that they are quite unable to estimate the blessings of vaccination. But those whose lots are cast in other lands may do both. During the present extraordinary anti-vaccine movement at home, it appears to me that some account of variola as it occurs in a country where vaccination is not practised, may prove of utility. Last year a wide-spread epidemic of small-pox visited India, and especially the native states of Rajpootana. The latter countries embrace an area of some 120,000 square miles, with a population estimated at 10,000,000. Many of the native princes maintain vaccinators, but the number of operators, some forty to fifty, is totally inadequate to produce any appreciable general result. With the exception of the Bontpoor State (area about 2000 square miles), situate in the north-east of Rajpootana, the whole of the extensive province last named may be regarded as practically without vaccination. During last season—1868-69—I marched, on duties connected with the inspection of the Medical institutions and of the vaccination where existing, upwards of 1000 miles. I had, therefore, when in the different cities and villages, every opportunity of noting the ravages of unchecked small-pox; and I only wish those at home now joining in the sceptical cry against vaccination could have witnessed what I saw. Knowing small-pox only as it occurs in Great Britain or in the Continental states, where the disease, even in epidemic years, is the exception, the anti-vaccinationists would have been somewhat astonished to find it, as I did, the rule in every household. There are numerous records, both Medical and lay, the veracity of which cannot be questioned, showing the effects of small-pox in Great Britain in former years, when, as Macaulay states, the plague was less prevalent and fatal; and as it was previous to the introduction of vaccination in England, so it is now where vaccination has not been systematised in India. I confess there are no means, in the absence of recorded vital statistics, of estimating correctly the mortality from small-pox

in such districts in this country, but I have reason to believe the death-rate of those attacked is not less than in other countries: (a) and when it is recollected that all are so attacked, the enormous mortality from this one cause becomes apparent. It is, indeed, quite exceptional to find any person, excluding the few vaccinated, who has not suffered from variola.

During the recent epidemic, on visiting various towns and villages, I was literally surrounded by cases of small-pox. Those suffering from the malady in a minor degree were in the streets, generally children occupied in their accustomed play, or, if too ill, lying neglected on the ground; and these represented but a portion of the whole, the remainder, unable to leave their dwellings, awaiting death in the dark unventilated structures used as houses by the natives. Any person cognisant of the after-results of small-pox will at once perceive the amount of resulting suffering which must occur among those recovering from the immediate disease. The consequent effects on the eyes, the ears, the skin, the limbs, the joints, the general constitution of the poor, the ill-nourished, and the exposed, at least equal in gravity the direct consequences of the disease. Roughly speaking, from calculations based on marking the people passing through the streets of such cities as Joudpoor and Pallee, 10 per cent. have either totally lost the sight of one or both eyes, or have received greater or less permanent injury to the organs; and of these affections the great majority may be traced to small-pox. Similarly, affections of the joints, particularly contractions of the limbs, abscess, skin diseases, such as eczema, and other constitutional ailments arising from the same cause, are still more common. Lastly, from special inquiry I believe nearly 80 per cent. of the population are more or less "pitted" by small-pox. Unchecked variola is indeed a worse enemy than cholera. The latter is not always present, its epidemic bursts of violence are generally temporary, and its remote results scarcely appreciable. Small-pox is never absent, although more intense at some periods than others, and the secondary results are almost as destructive as the disease. Yet it is this terrible malady which the anti-vaccinationists would again permit to stalk unchecked among the population of England!

With those who so perversely ignore the broad facts of small-pox being now comparatively unknown in various European countries, and of its decline being in exact ratio with the extension and spread of vaccination, no other arguments will probably have much weight. Otherwise, instances of the vaccinated in a family alone escaping the disease, of vaccinated children lying in the same bed with small-pox patients yet not taking the malady, of whole villages where the population were vaccinated remaining unaffected with variola all round, of extensive districts similarly protected, triumphantly proof against the epidemic. But such instances of the value of vaccination—to be found in numbers in Indian official records—would simply supplement those series of facts adduced by various authors—Seaton, for example—and which it is difficult to suppose those condemning vaccination are acquainted with, and which they certainly cannot have studied.

In a paper entitled "Marwar, the Land of Death," (b) being a topographical account of that semi-desert region, I remarked: "The people firmly believe variola to be under the control of the goddess Matha, in whose honour temples abound throughout Marwar, and fairs are even held at Joudpoor. Near the latter city is a space of ground filled with trees, called 'Kagli ka Bagh,' and containing the 'Setla Deir' (or small-pox god's shrine). In the month of March a *mela* is held here in honour of Matha, and thousands of women and children attend with offerings for the goddess. The declivities of most of the numerous conical hills present either a reddened stone or temple devoted to Matha, with most probably an attendant Brahmin priest. Nearly every village has its goddess of small-pox in the immediate locality, and a large piece of ground is esteemed as holy, and called 'Matha ka Than.' . . . The pitting produced by small-pox is by some considered rather an addition to female beauty than otherwise, as black patches on the faces of English belles in former years. Moreover, others imagine an attack of small-pox not proving fatal demonstrates the favour of the goddess on the fortunate individual."

The senseless procedure of these ignorant people does not appear less devoid of intelligence than the conduct of those who, with the advantages of education and of residence in a more civilised land, would now deliver up their country to the ravages of unchecked small-pox, who would see Englishmen die from the malady as of old, who would permit its after results to affect the eyes, the skin, the joints, the limbs, the constitution of Englishmen as it now does in India, who would in their own or their children's persons become fresh centres of infection and of danger to their fellow-creatures.

Englishmen cannot be too thankful they live under a government able and willing to frame laws which protect the general public from the dangerous views of the obstinate, the prejudiced, the silly, the monomaniacal, and the insane.

(a) The death-ratio from small-pox in the London Hospital for fifty-one years was 35 per cent.—*Seaton.*

(b) *Indian Annals of Medical Science*, vol. xx.

THE LATE EXAMINATIONS AT THE ROYAL COLLEGE OF SURGEONS.

At the last examination for the diploma of Membership of the Royal College of Surgeons, when eighty-six candidates presented themselves, it is deserving honourable mention that only eight were rejected, including one for not completing his examination, and one candidate was allowed to postpone his examination. It may be interesting to note that eighty-two gentlemen were admitted Members of the College during the past week, all of whom were of course examined in Medicine, excepting those already in possession of Medical degrees, or licences obtained from the following institutions, viz.:—The Society of Apothecaries, 23; L.R.C.P. Lond., 5; L.R.C.P. Edinburgh, 4; M.D. Edinburgh, 1; M.D. Philadelphia, 1; L.K.Q.C.P. Ireland, 1; M.B. Edinburgh, 2; M.B. Aberdeen, 1; L.R.C.P. Lond. and L.S.A., 1; L.R.C.P. Edinburgh and L.S.A Lond., 3. At the examinations which have been going on during the present week for the Fellowship of the College, there were for the anatomical and physiological examination twenty-three candidates—viz., 7 seniors, 7 juniors (Members of the College), and 9 who were not Members. Of the seniors there were 4 L.S.A. Lond., 2 L.S.A. Dublin, and 1 L.R.C.P. Lond.; of the juniors there were L.R.C.P. Lond. and L.S.A. 2, M.B. Lond. 1, and L.S.A. 1. The following were the questions on anatomy and physiology:—"1. The tongue:—Describe its attachments, surfaces, muscles, vessels, and nerves; state the special functions of each nerve. 2. Describe the position and structure of the rectum; its relations to the peritoneum, and to other structures with which it is in contact. Mention the muscles which are connected with the rectum and influence its function. State the source from which the bowel receives its supply of blood, and the mode in which the blood is returned. 3. Mention the different systems of vessels by which fluids and solids are supposed to be removed from the tissues of the body and carried into the circulation; and state in what way the removal is supposed to be effected. 4. Explain how the sense of hearing is supposed to be induced in man. Point out the purposes of the various structures and fluids which contribute to form the organ of hearing; and illustrate the subject by reference to the auditory apparatus of some of the lower animals. 5. Describe the anatomical structure of skin, mucous membrane, and serous membrane; and state the particular functions which each is adapted to fulfil. 6. Describe the structure of arteries (large and small), of capillaries, and of veins; mention the nerves which supply these vessels, and the mode of their distribution." For the pass or Surgical and pathological examination, there were 18 candidates—viz., 8 seniors and 10 juniors. Of these, all except 2 had passed Medical examinations, and held the following degrees and licences—viz., L.S.A., 3; M.D. Edin. and L.S.A., 1; L.R.C.P. Lond. and L.S.A., 3; L.S.A. Dub., 2; L.R.C.P. Lond., 1; L.R.C.P. Edin., 1; M.B. Lond., 2; M.D. Edin., 1; M.D. and L.R.C.S. Edin., 1; and L.K.Q.C.P. Ire., 1. The following were the questions for the Surgical and pathological examination:—"1. State under what circumstances and conditions it may be considered expedient to open the trachea. Describe the dangers and difficulties of the operation, the method of performing it, and the after treatment. 2. Name the different causes which may produce obstruction of the bowels within the abdominal cavity (*i. e.* excluding hernia); and describe the post-mortem condition of the intestinal canal above and below the seat of obstruction. State if any of these affections are remediable by Surgical treatment; and if so, describe the treatment. 3. In a case where coma supervenes a few hours after an injury to the head has been sustained, what would be your diagnosis as to the cause of the coma? How might the history of the accident and the symptoms guide you to form an opinion as to the site of the lesion? Under

what circumstances would operative Surgical interference be justified? 4. Describe the conditions (immediate and at a later period) which may probably ensue from a puncture of the femoral artery (say with a penknife) in the middle of the thigh. What treatment should or might be adopted in such a case? 5. Mention the different morbid affections to which the prostate gland is liable; and describe the pathological condition of the organ in each affection. 6. State in what forms of primary or of constitutional syphilis you would give mercury, and under what constitutional conditions you would withhold it. State also in what class of cases iodide of potassium should be preferred." The following were the questions in the Principles and Practice of Medicine:—"1. A person is suddenly seized with violent pain in the abdomen, rapidly followed by sickness and vomiting. What are the various forms of affection which such an attack may indicate? how would you distinguish each form? and what treatment would you have recourse to for its relief? 2. What are the symptoms caused by poisonous doses of opium, belladonna, and aconite; and how would you treat such cases of poisoning, respectively? 3. What are the preparations in the Brit. Pharm. 1867, into which these drugs enter, and the proportions in which they are combined? In what doses and for what purposes would you employ such preparations?"

DR. EVORY KENNEDY ON HOSPITALISM AND ZYMOTIC DISEASES.

During the early progress of the discussion of the Obstetrical Society of Dublin on the subject of Dr. Evory Kennedy's paper "On Zymotic Diseases as more especially Illustrated by Puerperal Fever," we had an opportunity, through the courtesy of the editor of the *Dublin Quarterly Journal of Medical Science*, of presenting our readers with an abstract from the proof sheets circulated for the information of the gentlemen who had taken part in the discussion, or who intended to do so. It soon became apparent that the discussion would assume such an extent as would render it impossible for us, in the limited space at our command, to continue the abstract, but this we regretted the less, as the importance of the questions under consideration, and the ability with which they were treated, assured us that the full report, which has since appeared in the *Dublin Quarterly Journal of Medical Science*, would be studied by all interested in the subject of Hospitalism. This is truly a wide subject, involving, as it does, the relative advantages of large and small Hospitals for general purposes, as well as for the reception of parturient women, of town and country practice as regards the results of operations, and of the various means proposed to insure the maximum of relief to sufferers, with the minimum of mortality among them from causes within our control. There are also important educational considerations which must not be overlooked.

The importance of these questions is only equalled by their difficulty. The elements which must be arrayed on either side, some to remain as permanent factors and others to be eliminated during the process of solution, have latterly concentrated the attention of some of the most profound Medical philosophers of the day. As regards the question of "large" or "small" "Lying-in Hospitals," or "none," the direction which the decision will assume is already evident. It is no new fact that the congregation of large numbers of human beings in the crowded alleys and lanes of our great cities, in schools, factories, and barracks, exerts an influence inimical to health, and that it is only through the exercise of incessant vigilance in the carrying out of judicious sanitary arrangements that we can expect to avert or control epidemic diseases among communities so circumstanced. How immeasurably, then, is the difficulty increased when each individual in a Hospital, already peculiarly susceptible of noxious influences, may become first the subject of communicable disease, and then a fresh centre for its further diffusion! Dr. Evory Kennedy, in the treatment of this part of his subject, appears to us certainly to have established the propositions into which he has divided it. By the tables and curvilinear chart which he has employed in illustration of his ideas, he has shown how almost invariably an increased amount of metria has occurred in the wards of the Rotunda Lying-in Hospital consequent upon or contemporaneously with an increased number of deliveries. He has traced the history of that institution since its establishment—113 years ago—showing that for only twenty years of that period has it been free from metria, and that for twelve years of that twenty it has been only partially free. He considers the contagion of metria to be cumulative in its effects, and to require a longer or shorter time to arrive at its full intensity or saturation, and in this way accounts for the interval occasionally observed between outbursts of the disease and that which he considers to be the most invariable, if not the only known cause, of its development—namely *crowding*—which does not require a large number of patients for the production of its injurious effects, as has been shown by the experience of the Waterford Cottage Hospital and others the returns of which have been published.

Besides its cumulative character, Dr. Kennedy considers the poison of metria to be of a peculiarly obstinate and persistent nature, differing from that of other contagious diseases, which run their epidemic course, and then disappear. In consequence of this persistency, true metria, as regards its appearance in large lying-in Hospitals, has been gradually changing its type from the epidemic or sporadic to the endemic or indigenous form; and, "instead of showing itself at intervals, as do other epidemic diseases, remains constant, and will continue to do so, as long at least as those conditions which generate, cumulate, and develope it are permitted to exist."

In proof of the advancing rate of childbirth mortality observable in lying-in Hospitals being limited to such establishments, and therefore fairly traceable to some causes within their walls, Dr. Kennedy quotes from the last report of the Registrar-General of England, that during the last twenty-one years the average rate of mortality from childbirth in England and Wales was 1 in 200. In the healthier parts of England it was 1 in 232; in Wales, 1 in 164—a striking difference, which is ascribed to the relative civilisation of the districts. During the three last years in England and Wales it was 1 in 223. In contrast with this, the mortality during the last fifteen years in the Dublin Lying-in Hospital of 1 in 31 certainly deserves the appellation of "grim death-rate" which Dr. Kennedy applies to it.

We have now, as fully as can be done in the space at our disposal, given a sketch of the statements advanced by Dr. Kennedy in his original paper, and in his reply to the criticisms to which it was subjected. And so far we must say that we consider Dr. Kennedy to have fairly established his points, but he has not, in our opinion, been by any means so successful in the nature of the remedy which he suggests. In the present state of our social system, living as we do in the midst of difficulties and embarrassments, for the obviating of which the means at our disposal are so limited and imperfect, that expediency for the time being, rather than striving after Utopian perfection, has become in practical matters the chief rule of life, we can hardly hope to attain for parturient women of the lower classes the perfection of isolation which Dr. Kennedy asserts, and which we believe to be the only means of limiting the mortality from metria. Certainly not, so long as attendance on lying-in institutions, either large Hospitals or detached cottages or rooms, be a part of the *curriculum* of Medical education. It must be remembered that a large proportion of the deaths in Lying-in Hospitals arises from the peculiarly difficult and complicated nature of the cases which seek admission, and that, startling as the paradox may appear, the statement of Drs. Bristowe and Holmes is on the whole correct, that a high death-rate indicates, as a rule, that a Hospital fulfils efficiently the purposes for which it was designed, and that a low death-rate, on the other hand, indicates, *cæteris paribus*, comparative inefficiency.

We should, on the whole, prefer the suggestion of Dr. W. S. Playfair, of having lodgings in separate houses in the immediate vicinity of the Hospital, each consisting of two rooms, and each to contain two lying-in women and one pupil nurse, to Dr. Kennedy's plan of a number of detached huts within the enclosed space surrounding the present Rotunda Lying-in Hospital in Dublin. Great advantages would be derived from the facility of changing the rooms as often as may be desirable, and, as Dr. Playfair remarks, such a system might be adopted in connexion with every Hospital where there is a Medical school.

It could hardly have been expected that a discussion such as Dr. Kennedy has been engaged in should have passed off without some instances of warmth of feeling and expression. Such, however, have not been very numerous or of a nature to lead to any permanent ill-feeling between those engaged. Traces of the conflict, however, may still be observed in the book which Dr. Kennedy has just published, containing his original paper and his reply, in an extended form, to the criticisms which he had to encounter. We

think we observe one of these traces in the dedication of the book to the Prime Minister, which we consider, under the circumstances, to have been unfortunate, particularly as it contains a little sting in its opening paragraph in the words "a spirit and an interest known as hospitalism." This imputation of interested motives to his opponents would, we think, have been better avoided. The rather pedantic dragging in of four Greek words—two in the dedication, and two in a note to the introduction, the latter being incorrectly translated—(a) in a work dedicated to the Prime Minister, who is universally admitted to know more than a "mighty little Greek," will hardly give that distinguished statesman a high idea of the scholarship of the author, whatever effect it may produce in his mind on the subject of hospitalism and Hospital endowments. The involved style of the introduction also lays the author open to criticism on his English, and is very different from the fluency and skill with which he can enter upon a *viva voce* discussion.

We observe that the copy of Dr. Kennedy's book now before us is marked as "second edition," and we therefore feel some little surprise that a singular error should have been permitted to appear in his reply to Dr. Kidd in page 52. Dr. Kidd having stated that a change of system in the St. Petersburg Hospital, effecting a certain amount of isolation of parturient women, had resulted in seven years in reducing the percentage of mortality from 3·12 to 2·93, equivalent to ·19 per cent., or 1·9 per 1000—a reduction which Dr. Kidd thought hardly justified all the expense and trouble, besides the injury to the efficiency of the Hospital—on this point Dr. Kennedy joins issue with Dr. Kidd, and quotes against him the opinion of Dr. Mapother, "no bad authority," that "Dr. Kidd did not think the gain of 2 in 34 worth the change made in the St. Petersburg Hospital. Sanitarians are proud of reducing a death-rate by 1 in 1000." Now, although 1·9 per 1000 may be a very considerable reduction in a death rate, and enough to justify a very large expenditure, we commend to the attention of Drs. Kennedy and Mapother, for the third edition of the book, that a saving of two lives in thirty-four is slightly less than 6 per cent. or 60 per 1000. Through a similar error in calculation, curiously enough, Dr. Kennedy, in page 88 of his book, remarking on the Registrar-General's Returns, estimates the reduction of the death-rate from childbirth in England and Wales as 1 in 23, or 4·34 per cent. The actual reduction during the last twenty years from 1 death in 200 cases to 1 death in 223 can, by a simple calculation in proportion, be shown to be only ·11 in 200 cases, or ·05 per cent.

SEDATIVES *v.* BLEEDING.

(*From a Correspondent.*)

The *Journal des Connaissances Médicales* republishes from the *Gazette Médicale de Strasbourg* an article by Professor Hirtz on the use of digitaline in the treatment of febrile rheumatism. This agent is used on the authority of Traube, who believes that the disease may be cut short. The experience of Dr. D'Estelle is also adduced, showing that he used digitalis with great success in thirteen cases. The pulse was reduced in from twenty-four to forty-eight hours, while from thirty-six to sixty were required to bring down the animal caloric. It reduced the pulse in one case from 104 to 32, and the temperature of the body to 93° Fahr. At the Hôpital Lariboisière twenty-four cases have been successfully treated in this way. Nothing is said about fatal results. The dumb millions never speak. In some instances the foxglove produced headache, sleeplessness, and vertigo, and in one example delirium and loss of memory. In all the trials an infusion of the plant was used, the cures having been effected after from three to four grains of the active properties of the drug had been taken. The duration of the disease under this treatment was from five to twelve days. There is nothing new in all this, and it may be well to remind all Practitioners disposed to repeat these experiments that the use of digitalis is apt to be attended by cumulative explosions of a very dangerous character. The same is true of aconite, veratrium viride, hydrocyanic acid, etc. Since the fashion of the day has pronounced against the use of the lancet, the administration of direct sedatives has become far too common, inducing often fatal exhaustion and death before the disease for which they are prescribed has had time to run its course and thereby demonstrate its own chronology. Sedatives strike directly at the vital powers, while bleeding only stops their sources of supply, and carrying either to excess is about the difference between bleeding a man to death and knocking his brains out with a mallet.

(a) Ζυμόω and μιαίνω, notwithstanding the habit of some Medical writers to the contrary, are respectively more correctly translated "I ferment" and "I pollute," than, as given by Dr. Kennedy, "to ferment" and "to pollute."

REPORT ON THE TEACHING OF THE OUT-PATIENT DEPARTMENTS OF THE LONDON HOSPITALS.

King's College Hospital.

1. There are three Assistant-Physicians (Drs. Duffin, Burney Yeo, and Kelly) and two Assistant-Surgeons (Messrs. John Wood and Henry Smith) attached to the out-patient department. Each of these gentlemen attends three days in the week. The hour appointed for seeing out-patients is one o'clock. The length of time occupied by the visit varies with the day, some days of the week being heavier than others. The earlier days of the week are especially heavy. The Assistant-Physicians are generally in attendance for a time varying from two hours to three hours and a half, the Surgeons for a shorter time—viz., one to two hours.

A very singular arrangement prevails at this Hospital in the division of the out-patient work: the senior Assistant-Physician, Dr. Duffin, attends *four* days in the week (one day being devoted to skin cases), and attends *alone*, and one of these days—Monday—is certainly the *heaviest* of the whole week. The other two Assistant-Physicians attend *together* on three days of the week, two of these days—Thursday and Saturday—being certainly the *lightest* days of the week.

The *reason* of this singularly unequal division of labour it is not easy to discover. Would it not be better for each of the three Assistant-Physicians to attend two days in the week, as is the case at other Hospitals?

2. Special branches of practice are represented in the following manner:—

(*a*) Ophthalmic Surgery, and demonstrations with the ophthalmoscope, by Mr. Soelberg Wells, on Tuesdays, Thursdays, and Saturdays, at 1. Mr. Wells also gives a clinical lecture every alternate Monday, at 3.

(*b*) Cases of skin disease are seen by Dr. Duffin every Tuesday, at 1.

(*c*) Diseases of women and children, by Dr. Playfair, on Monday, Wednesday, and Friday, at 12.30.

(*d*) Dental Surgery, by Professor Cartwright, every Friday, at 1.

(*e*) Laryngoscopic demonstrations are given by Dr. George Johnson every Wednesday, at 2.

3. The number of patients seen at each visit varies with the day, and there are always here, as at other Hospitals, a far greater number of Medical than Surgical cases. As many as 200 Medical cases will often be seen during the visit on Mondays, and a number varying from 100 to 150 on other days. The Surgical cases vary from 70 to 90.

4. The number of students attending the out-patient practice also varies considerably, depending greatly upon what may be going on elsewhere. On operation days (Saturday), for instance, scarcely a student will be found in the out-patient rooms; and during clinical lectures, of which there are a great number given at the Hospital, the attendance of students at out-patient practice is thinned. Many more attend the Surgical than the Medical practice. On some days as many as twenty to thirty students may be seen attending the out-patient Surgical practice. About half this number will represent the average attendance on the Medical practice.

On the whole, the students at this Hospital show a great willingness to work in the out-patient department, and were measures taken to promote organised and systematic instruction (and we understand that arrangements which have this object in view are in progress) the attendance of pupils would doubtless be much greater than it now is.

5. A considerable amount of help is afforded the assistant Medical officers in seeing out-patients. An Assistant House-Physician and an Assistant House-Surgeon respectively assist the Physicians and Surgeons in seeing cases. These gentlemen generally possess a Medical or Surgical qualification. In addition to this, each Assistant-Physician has three clerks, and each Assistant-Surgeon *nine* dressers! These offices are all filled up after a competitive examination, and the competition for them is often severe.

6. A considerable amount of responsibility is thrown upon the Assistant House-Physician and Assistant House-Surgeon. We presume that theoretically these gentlemen only act *under the direction* of the Physician or Surgeon whom they may be assisting, but practically they appear to act independently of them, and take old and new, severe and slight cases equally with them, and without any consultation or communication. It results from this practice that cases may and do attend this Hospital for many months together without *once* seeing the Medical officer under whose care they nominally are!

7. As to the nature of the cases seen in the out-patient practice of this Hospital, we may report that examples of nearly every kind of disease, acute and chronic, are, in the course of a year, presented by the patients of this department—overwhelmed, however, in numbers, as in all similar institutions, by trivial and chronic cases, pulmonary and cardiac disease in every form, pulmonary emphysema, with catarrhs and acute and chronic bronchitis, however, predominating—a large number of cases of phthisis, all forms of constitutional syphiliis, dyspepties innumerable, many interesting forms of paralysis, general and partial, progressive locomotor ataxy, progressive muscular atrophy, epilepsy, hysteria, leucorrhœa, disordered menstruation, chlorosis, anæmia, etc. Most of these cases are of the greatest value for clinical teaching, if only properly grouped and classified.

The Surgical cases are equally interesting and valuable for teaching purposes. Diseases of joints, diseases of bones, hydroceles, strictures, hæmorrhoids, fistula, tumours, nævi, ulcers, abscesses, primary and secondary syphilis, hernia, gonorrhœa, the simpler fractures and dislocations—these are the cases most commonly seen, but nearly every form of Surgical disorder may be observed in the out-patient room in the course of a prolonged attendance.

8. As to the amount and kind of teaching attempted in this department, arrangements are in progress for improving and systematising the instruction given in the out-patient rooms, the carrying out of which is delayed by the indisposition of one of the out-patient Medical staff. It is proposed that all those cases which present points of interest, and which can conveniently be utilised for clinical purposes, shall be selected from the general mass of patients; these will be seen by each Physician in turn on one day in the week, which day will be specially reserved for clinical purposes. The Surgical cases afford so many more opportunities for brief commentaries and for direct teaching than Medical cases, that considerable success is found to attend the efforts of the Surgeons to impart instruction in this branch of out-patient practice.

Speaking generally of the out-patient department of King's College Hospital, it seems to us to be characterised by a great deal of activity, and also by a great deal of noise. The manner of seeing patients, in the out-patient Physician's room especially, is somewhat distracting. The Physician and his assistant sit at two small tables only two or three feet apart, and a crowd of patients (we have seen as many as twenty) are admitted into the room at a time, and arrange themselves in two groups around each table. A small torn screen is placed in one corner of the room, behind which patients have to undress for examination. The confusion of voices, shuffling of feet, opening and shutting of doors, and shouting of porters and others, heard from without, render such diagnostic exercises as percussion and auscultation severe trials of patience and acuteness remarkably creditable to those who undergo them.

There is another point which deserves consideration in connexion with this method of seeing patients in groups. Is it altogether decent, in the case of women, to put those questions which it is necessary in many instances to put and to have answered, in the presence and within the hearing of a number of other women? or is it in good taste that long and detailed explanations of cases should be given before a curious and gaping assembly of patients? In most other Hospitals patients are admitted into the consulting-room one by one, or, at any rate, not more than two at a time to each table.

The out-patient staff at

St. Thomas's Hospital

consists of one Assistant-Physician (Dr. Clapton), one Assistant Obstetric Physician (Dr. Gervis), and two Assistant-Surgeons (Messrs. Sydney Jones and Croft).

Dr. Clapton attends on Mondays and Thursdays at 1 p.m. to see male Medical out-patients, and on Tuesdays and Saturdays to see female patients. Dr. Barnes sees diseases of women on Fridays; Dr. Gervis on Wednesdays, and children's cases on Saturdays. Mr. Croft attends on Mondays at 12.30 to see men; on Fridays to see women; and on Saturdays to see cases of eye diseases. Mr. Sydney Jones attends in the same manner on the other days of the week.

2. The average length of time of each attendance of the Assistant-Physicians is an hour and three-quarters or two hours; of the Obstetric Assistant-Physician, three hours on Wednesdays, an hour and a half on Saturdays.

It is somewhat remarkable that at this Hospital the out-patient Surgical visit lasts longer than the Medical. Mr. Croft reports that three hours or three hours and a half is the average time that his visit lasts.

3. The specialities represented at St. Thomas's are few, and greater efficiency in this respect may be looked for when this Hospital is transferred to its new abode.

(*a*) Ophthalmic cases are seen by both the Assistant-Surgeons.

(*b*) Diseases of women and children and vaccination by Dr. Barnes and Dr. Gervis.

(*c*) Dental Surgery by Mr. Elliott.

4. The average number of out-patient Medical cases seen at each visit is about 70, 15 to 20 of these being new cases; diseases of women, on Fridays about 90, on Wednesdays about 130; diseases of children, 90.

A large number of Medical casualty cases are also seen by Mr. Whitfield. The average daily attendance of Surgical cases is 110; on Saturdays (eye cases), 40.

5. As to the number of students attending the out-patient Medical and Surgical practice, it is represented as very variable, as at other schools. Dr. Clapton reports that on one day (Tuesdays) there will be as many as 20 or 30; on other days, 5 to 10. In the room for diseases of women and children the attendance will vary from 2 to 10; in the Surgical room, from 6 to 12, lectures, operations, and other cliniques interfering.

6. No help is afforded the Assistant-Physician in seeing cases except the entry of the cases in the record-books, the examination of urine, etc., by students in attendance.

In the case, however, of the Assistant Obstetric Physician, if he be obliged to leave early or should he be prevented from arriving at the appointed time, the Resident Accoucheur—a qualified pupil and one of the highest prizemen—continues or commences seeing the patients, as the case may be; his action is, of course, thus responsible and independent. On the Surgical side, the House-Surgeon "on minor duty" assists in seeing the old cases. Two dressers also are always in attendance. All minor Surgical casualties are seen from 9 to 12 by the House-Surgeon on minor duty. He is assisted by two out-patient dressers. The House-Surgeon is limited in his prescriptions to aperients. Cases requiring further treatment are referred to the Assistant-Surgeon. No responsibility or independent action is thrown on the House-Surgeon except in the treatment of the minor casualties.

7. All the out-patient Medical officers agree as to the great usefulness of the cases seen in their department for teaching purposes.

Dr. Clapton observes that though many of the cases (and chiefly those seen by right of governors' letters) are trivial in character, yet a large number are interesting and important, especially as they represent such affections as would form the bulk of cases coming under the care of a Medical man in practice—such cases, for example, as nearly every kind of chest affection, struma, rheumatism, catarrh, renal affections, chronic poisoning by metals, chorea, dyspepsia, liver affections, and every kind of dropsy, also the various epidemic diseases.

Dr. Gervis thinks that on the children's days all the cases are important, the demand for letters being considerably in advance of the number granted. On the day for diseases of women two-thirds of the cases are important and interesting.

Mr. Croft remarks that "without training in the out-patient department a student has not been fully prepared for the business of his life." He considers the out-patient Surgical practice as especially fit for brief, but valuable, clinical teaching.

8. As to the amount and kind of teaching attempted and its success. In the Medical department, besides the instruction which is given, as far as possible, in connexion with each case, Dr. Clapton gives a course of clinical instruction every Tuesday, especially adapted for clinical clerks. The subjects are chiefly in connexion with semeiology, the description of the various regions of the body, the sounds of the heart or lungs in health and disease, etc. These demonstrations are illustrated by the mapping out of regions and painting of viscera on a healthy living subject, who is engaged for the purpose. This plan has been found to succeed, and appears to supply a great want. We commend it to general imitation.

Dr. Gervis states that in the obstetric department every new case is used, as far as the nature or the interest of the case

permits, as a means of elucidating diagnosis, prognosis, and treatment. The old cases are attended to more rapidly, and only certain selected ones used for teaching and illustration. As to the Surgical teaching Mr. Croft states "time and circumstances only permit of the briefest instruction to pupils. The dresser, who remains with me, writes notes and prescriptions at my dictation, so long as time allows. I cause the pupils to examine cases and to give their opinions when a suitable case occurs. I have a microscope of my own on the table near me for use when it can be used to advantage. I am convinced systematic teaching might be most successful, as it is in the wards and theatre."

We have omitted to state that Dr. Bristowe takes a class for the study of skin diseases, that Mr. Croft gives special demonstrations during the summer on Surgical appliances and bandaging, in which the students are shown the use of the laryngoscope; and that Mr. Whitfield superintends the instruction of the students in pharmacy and pharmaceutical manipulations.

It is quite unnecessary to offer any remarks on the character of the apartments and the nature of the accommodation provided for the out-patients in this Medical school, as these are but temporary, and will no doubt be replaced in the new Hospital by commodious and perfectly adapted arrangements. As it is, it will clearly appear from the preceding statements that much activity in clinical teaching in connexion with the out-patient department prevails at St. Thomas's even in its temporary home.

FOREIGN CORRESPONDENCE.

FRANCE.

Tent Hospitals.

(*From our Paris Surgical Correspondent.*)

Thanks to the efforts of M. Lefort and the assistance lent him by our Hospital administration (M. Husson), Paris has at last followed the example of Berlin and other cities in erecting Hospital barracks, and, what is better still, Hospital tents. The trial of this latter mode of hospitalisation especially has proved such a success that we doubt not other Hospitals will follow the example given by the Surgeon of the "Cochin."

The enclosure of the St. Louis Hospital contains three barracks; but as these wooden buildings offer many faults—for instance, danger from fire, immobility, want of perfect aeration, inequality of temperature, the absorption of infectious miasma by the wood, etc.—M. Lefort was induced to try canvas, by means of which the above inconveniences have been successfully remedied.

The Hospital tent is situated in the garden of the Cochin Hospital, some 300 yards distant from that establishment. It stands upon a slightly raised platform, made of cinders and old plaster, covered by a layer of gravel from three to four inches in thickness. The platform is surrounded by two wide bituminated gutters, slightly inclined for the reception of the rain-water running from the tent, leading to the sewer of the street at the back of the garden. The tent is twenty mètres long by seven mètres wide; the principal of the skeleton is formed of six square wooden uprights 2·25 mètres above the ground, and giving attachment each to a strong rafter 4·80 mètres long. These rafters cross with those of the opposite side near the top of the roof, so as to form an X, with two very short upper branches for the support of the false roof or lantern. The wooden frame is covered by two sheets of cotton canvas. The outer one, having been dipped into a solution of sulphate of copper, is of a light green colour, transparent, impermeable to water, but permeable to the air. The inner sheet is white and composed of two pieces, one for the ceiling, the other for the walls. Owing to the distance which separates the inner sheet forming the ceiling from the outer one forming the roof, an active circulation of air is kept up during the heat of the day, so that while the thermometer marked 49° Cent. in the sun in the months of July and August last, the temperature inside the tent remained between 24° and 26° C. on an average. This same disposition of the two sheets of canvas, by the mass of air imprisoned between them, also prevents too great a fall of the temperature in the tent at night.

The adjustment of the several parts is as ingenious as it is simple; the arrangement of the canvas on the false roof insures a very liberal aeration even when every other part of the tent is hermetically closed. M. Lefort tells me that eight experienced hands can put the tent up or take it down in little more than half a day. (See Fig. 1.)

This tent contains eighteen beds, nine on each side, which are placed so as to leave room near the centre of each row of beds for the tables, with instruments, bandages, etc.

Of all the grave accidents treated under the tent since the month of May to the end of October, not one single case of erysipelas or purulent infection, that bugbear of Paris Surgeons, has come up; but, on the contrary, rapid cures were noted. This of course, challenges anything of the kind ever observed here.

In front and on each side of the Hospital tent stand two other smaller ones, intended as insulating tents. Their structure, quite simple, is a marked improvement upon the American ambulance tent, which, owing to the inclination of its roof and inner canvas, takes up a great deal of unnecessary space, and which, for the want of openings near the top of the roof, affords but an insufficient aeration; the outer canvas of the American tent, moreover, covers neither the gable ends nor the walls alongside of the beds, and thus leaves the patients exposed to the change of the night air.

The framework of M. Lefort's ambulance or insulating tent (see fig. 2) consists of two vertical poles united at the top by a vertical bar which slides through a sheath, formed by the inner canvas. The cross-bar or compass at each gable end is formed of two pieces which articulate in the middle and slide up and down on the vertical pole like an umbrella by means of an iron ring. In this manner the sides of the tent can be raised to a

Fig. 1.

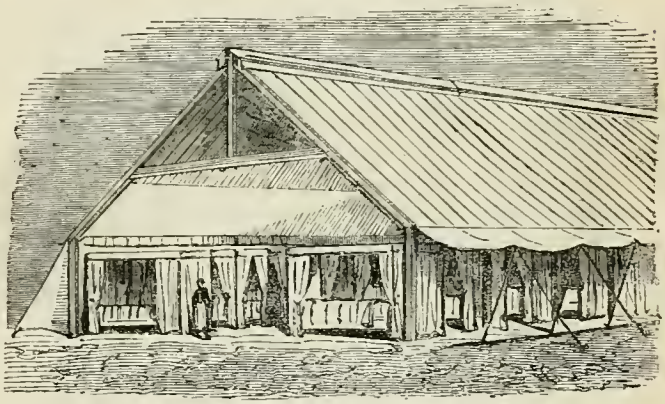
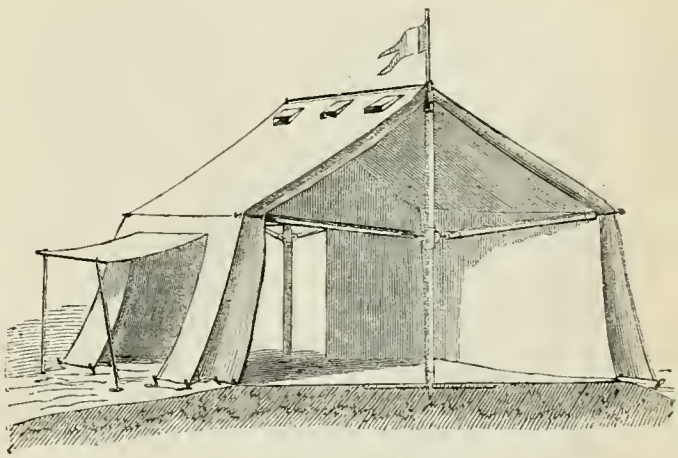


Fig. 2.



vertical line, thereby increasing the capacity of the tent. The canvas being everywhere double, not only assures free circulation in day-time, but also prevents, as in the first, the rapid cooling of the atmosphere in the tent at night.

This insulating tent measures five mètres each way and accommodates five beds. It only weighs 200 pounds, and can be taken down or put up in the course of ten or fifteen minutes.

The quickness with which these latter tents can be hauled and handled, the facility of placing them side by side and thus

converting them into regular "Hospital tents," render them not only valuable adjuncts to a civil Hospital, but also, as M. Lefort remarks, for the wounded in case of a civil war; for, says he, very naively, *il faut tout prévoir*.

GENERAL CORRESPONDENCE.

MATERNITY HOSPITALS.

Letter from Dr. J. Matthews Duncan.

[To the Editor of the Medical Times and Gazette.]

Sir,—With reference to Dr. Charles Bell's statements in your issue of to-day, I need scarcely say, while far from admitting their accuracy, that they do not in any way invalidate my argument. I am, &c.

Edinburgh, November 20. J. Matthews Duncan.

ANTISEPTIC SURGERY.

Letter from Dr. H. C. Cameron.

[To the Editor of the Medical Times and Gazette.]

Sir,—In remarking on a communication in reference to the antiseptic treatment in your last number, you say, "Undoubtedly, also, things formerly deemed essential to this mode of treatment—putty to wit—are now abandoned as useless." Will you allow me to correct what seems to me the mistaken view implied in this statement? What was deemed essential was not putty, but a material which would act as a reservoir of carbolic acid for a considerable length of time, and yet not irritate or stick to the skin—a material which would be impervious to the discharge and shed it into an outside cloth without itself being disintegrated or washed away. Seeing that the antiseptic lac plaster (an elegant preparation some time ago devised by Mr. Lister) fulfils all these conditions more than equally well with the putty, and possesses none of its disadvantages, the latter has very properly been abandoned as less useful. Surely we are not to view any plan of treatment with suspicion because its author makes most important improvements upon it.

I am, &c. H. C. Cameron, M.D.,
Extra Surgeon to the Dispensary
of the Royal Infirmary.

Glasgow, November 22.

ON PROLONGED INCUBATION IN YELLOW FEVER.

Letter from Dr. John L. Paterson.

[To the Editor of the Medical Times and Gazette.]

Sir,—The *Medical Times and Gazette* of November 20 makes a few comments on a case of yellow fever admirably related in a late number of the *Gazeta Medica da Bahia* by Dr. Silva Lima, a distinguished Physician of that place, accepting it, as he had done, as an instance of very prolonged incubation of that disease—an incubation extending to forty-three days.

If by incubation is meant the period elapsing between the introduction of a poison into the system and the manifestation of the symptoms of the resulting disease, I think the conclusion arrived at, contrary as it is to former experience, is also unwarranted by the premises laid down in the case in question.

Suppose twelve persons, unprotected by a previous attack or by vaccination, exposed in an equal degree to the contagion of small pox; they will, if at all, catch the disease at very varying intervals from the time of their first exposure to the infection. Very different would have been the result if these twelve persons had had the virus violently introduced into the system by inoculation. All of them who thus, compulsorily as it were, should come under the influence of the disease—and that would probably be all the twelve—would manifest symptoms of it at a definite period after inoculation, a period varying at most to the extent of but a few hours.

What does this teach us? Simply what we are accustomed to see every day—that innumerable efficient causes may prevent seeds from being sown in congenial soil, or impregnation from taking place, but once such has occurred, the sequence of events is pretty nearly certain and uniform.

Yellow fever is one of the most virulently contagious of diseases—that is to say, of those most certainly affecting persons coming within the range of its diffusibility, a range fortunately very limited, but, to counterbalance that, capable of very great accumulative concentration of intensity; such accumulative concentration being more or less analogous in its effects to those of a saturated as compared with a weak poisonous solution. The toxic principle of yellow fever, whatever that may be, is, moreover, like many other similar poisons, capable of a separate existence, and that, too, under favourable circumstances for a period indefinitely prolonged. We are in this country accustomed to see this daily exemplified in scarlatina and puerperal fever. This undeveloped viability—if you will permit me the expression—is perhaps greater in yellow fever than in any other disease, if we except those transmissible by inoculation. A considerable number of years ago, an officer died in the West Indies of yellow fever; his clothes were sent home to his parents in Cumberland. Soon after receiving them—several months, however, having elapsed since his death—two persons of the family, as well as the Medical man who attended them, died of yellow fever.

In the case of inoculable diseases, we can fix within very narrow limits the period of incubation; the same thing is possible, though perhaps with a less degree of certainty, in otherwise transmissible diseases, by ascertaining the shortest period within which the symptoms manifest themselves after the first exposure to the influence of the poison.

By collating a large number of such observations, we have arrived at the pretty certain average of three days as the period of incubation of yellow fever. It is, therefore, I think, more logical to look upon the forty-three days of supposed incubation, in the case in question, as resolvable into forty days of isolated or undeveloped viability of the poison, retained probably in the clothes of the priest, and the usual three days of incubation.

Even so, the case is doubtless an exceptional one, and possible only under very favouring circumstances. What were these in the present case? We may perhaps never know. Will you excuse me one guess? The priest, in the seminary and in town, would of course wear his priest's habit or tunic; in travelling in the country, as we learn from the case he did soon after his interview with the affected sailors, he would, in all probability, wear, as is usual on such journeys, a lay dress, or at all events an old tunic. Did he, therefore, fold up the one he confessed the sailors in, and the poison along with it, to be worn again only on his return to town?

I am, &c. John L. Paterson.

Guernsey, November 21.

THE ADMINISTRATION OF CHLOROFORM AND ETHER.

Letter from Mr. George Cowell.

[To the Editor of the Medical Times and Gazette.]

Sir,—In the report in your last number of a case of death from chloroform at Oxford, you suggest the substitution of the mixed vapour of ether and chloroform for that of the latter alone. There are, however, difficulties in this which practically lead to its speedy abandonment, and a return to the use of chloroform pure and simple. I would remind your readers of a plan which, I believe, was recommended by my friend Dr. Ernest Sansom. I have constantly found it to succeed most admirably. Chloroform is administered until the amount of anæsthesia required is produced, when ether is substituted, and by it the condition maintained for the necessary time. If the pulse has become soft from the influence of the chloroform, it at once begins to improve on the inhalation of the ether.

I am, &c. George Cowell, F.R.C.S.

Belgrave-road, November 18.

INDIAN MEDICAL OFFICERS AND THE GOVERNMENT.

[To the Editor of the Medical Times and Gazette.]

Sir,—With reference to your admirable leading article on the above subject in the *Medical Times and Gazette* of September 25, you say "the Government of India seem determined to do everything they can to annoy and disgust the Medical officers in their service." This is undoubtedly true, as we all know to our cost. But allow me to ask what can we expect when the heads of our department never take the slightest interest in the welfare of the Medical officers under them; and in this, I believe, they are the only exception. How readily will a general officer invariably protect the interests of a combatant officer! So will civilians stand up for their men. But when our unfortunate service is in question, principal Inspectors-

General think it, I presume, beneath the dignity of their high office to put their pen to paper on behalf of a junior. They know they can easily find a snug berth for a relative or friend in which more than ample compensation can be made for such little grievances as alluded to in your journal, and with great fortitude let the rest of us "go to the wall."

I am, &c. VERITAS.

Bombay Presidency, October 20.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY.

FRIDAY, NOVEMBER 12, 1869.

Mr. ERICHSEN, Vice-President, in the Chair.

DR. HENRY THOMPSON communicated a case of Ascites successfully treated by Copaiba. G. W., a coachman, aged 60, was admitted into Hospital under Dr. Thompson's care on November 30, 1868, with ascites, puffy ankles, pulmonary œdema, and scanty urine without albumen. His health had been good till July, 1868. During the following three months various remedies were employed, quinine and iron amongst others, but his condition became worse and worse, the increase of liquid in the peritoneum being so rapid that paracentesis was three times required. In March the administration of copaiba was commenced, the dose being gradually increased until fifteen minims were taken every six hours. The improvement was immediate. The quantity of urine increased from fourteen ounces daily to several pints, and the belly measurement diminished from day to day. He left the Hospital convalescent on May 10, and is now in good health. In his comment on this case Dr. Thompson pointed out that although the quinine and iron may have contributed to the result, yet improvement commenced before they were given, and considered that the copaiba acted beneficially as a diuretic.

The TREASURER also communicated two cases of ascites with albuminuria similarly treated by Dr. Liveing. In one of these cases the ascites was associated with anasarca of the lower half of the body; in the other there was no anasarca. Both patients had been ill for several months. Here, as in Dr. Thompson's case, the beneficial action of the remedy (which was given alone) manifested itself in increased discharge of urine and diminution of the ascites and dropsy. Both patients left the Hospital with albuminous urine, but otherwise well.

Dr. CLAPTON said the first case reported was similar to one which had come under his own care at St. Thomas's Hospital. A man presented himself excessively distended with fluid; he advised him to come into the Hospital, but the man refused and went home. His case was urgent, and Dr. Clapton supposed he was dead, when one day he made his appearance relieved of his dropsy. When suffering greatly, he remembered the effect of copaiba on himself when suffering from gonorrhœa years before. He purchased a lot of capsules, which he took, and passed in consequence an enormous quantity of urine, so that he got well. To test this mode of treatment, Dr. Clapton gave the drug in five instances; two seemed improved, two injured, and one remained without much alteration. He therefore concluded that the drug was useful in some instances only, but that in most it was useless.

Mr. ERICHSEN had seldom seen copaiba in Surgical cases act violently as a diuretic, although he had sometimes been struck with the quantity of water passed under its influence. In ordinary cases of gonorrhœa it had no such effect.

Dr. POWELL thought, as a rule, diuretics did not affect ascites. Query: Did not the copaiba act directly on the vessels?

Dr. GREENHOW said copaiba was not useful in all forms of ascites, especially heart cases. In one to which he referred of a mixed character, copaiba notably improved the patient's condition.

Mr. J. J. H. BARTLETT described a case of hereditary syphilis appearing after vaccination, complicated with paralysis of both arms. The case appeared to be one of those in which the vaccinal fever raised the disease into activity, which, though present in the system, was dormant. The paralysis was not simply infantile, but was most likely caused by some deposit high up on the spinal cord and on its membranes, and the lesion pressed almost equally on both halves, as both arms were affected. The cases in which paralysis occurs in hereditary syphilis are very rare, for none such are mentioned in their works by Diday or Lancereaux.

Mr. BARWELL thought the case important with regard to vaccination. He had the other day seen a child with a suspicious eruption; but he had also examined all the other children vaccinated from the same infant, and found them all healthy.

Dr. CHOLMELEY pointed out that, according to existing regulations, vaccination was usually performed just at the period when infantile syphilis generally makes its appearance; in other cases vaccination acted as an irritant, causing the evolution of the disease, as was the case with other skin diseases. In the majority of instances the so-called syphilis from vaccination was no syphilis at all, or, being true syphilis, it was coincident, not communicated.

Mr. CALLENDER brought before the Society the history of a case in which colotomy was performed for the relief of cancer of the rectum, which illustrated the advantages gained by opening the colon in cases of this nature, and tended to confirm the statements made by Mr. Curling in the various communications in which he has advocated the operation. The patient, after suffering from symptoms of cancer of the lower bowel, was suddenly unable to pass fæces, and the descending colon was at once opened, with great relief of the urgent symptoms, and with entire removal of the great local pain from which the patient had continuously suffered. Two months after the operation he is quite convalescent. The discomfort from the artificial anus is practically none.

Mr. ERICHSEN thought this one of those cases where Surgery did as much as it could do for human suffering. His attention had been early drawn to the relief afforded by colotomy when he was in Paris. There, as elsewhere, it had been shown to be impossible to overestimate the relief afforded by the procedure. There was no difficulty in the operation itself. In two other classes of cases the operation was more difficult. These were when the colon was contracted, not strictured, and the operation was performed to relieve the pain of defecation. Here the colon was contracted and deep-seated. When the operation was successful the relief was great. Of the third class of cases he had only seen one survive any length of time. These were cases of imperforate anus with absence of the rectum. Here he had never done Amussat's operation with success; but he had seen one which had been done in Mexico. The opening was closed by the pad of a spring truss. The patient was quite comfortable.

In reply to a question, Mr. CALLENDER stated that chloroform had been given, and well borne.

Mr. COOPER FORSTER had performed the operation four or five times. Generally the operation was very easy; once he had found it very difficult where the disease was high up. Had the incision been half an inch higher, it would have cleared the diseased portion. He used the vertical incision, which was more convenient than the horizontal one. In one case of imperforate anus in which he had performed this operation, the child lived a year afterwards. Nevertheless he preferred Littré's under such circumstances.

Mr. ERICHSEN said he understood the merit of introducing the vertical incision was due to Mr. Hilton.

Mr. C. MOORE thought many still shrank from the operation, but when it was performed the relief was very great. He had used the vertical incision, and had never operated with a contracted bowel.

Mr. C. HEATH thought that if the bowel was not distended it was good to adopt Mr. Gowland's plan of injecting water. The operation was thus rendered easier, pleasanter, and safer.

Mr. COOPER FORSTER would like to know about the anti-peristaltic action which took place in the under portion of the gut.

Dr. BURDON SANDERSON said the general notion now was that ordinarily the peristaltic action was downwards, merely because the resistance was least in that direction; and that its direction was regulated by resistance.

Mr. ARNOTT had seen an operation performed by the transverse incision where there was no distension, and, as the incision was small, there was great difficulty in finding and recognising the gut.

A gentleman present referred to a case he had seen where Mr. Bryant had operated by means of an oblique incision. There was some difficulty in determining which was peritoneum and which gut. The rectum had been injected, but the water was returned.

Dr. J. POLLOCK referred to Dr. Brinton's explanation of anti-peristaltic action.

Mr. CALLENDER said there had been a general expression of feeling as to the utility of the operation. If Mr. Paget had been present, he would have referred to a case where he operated, and in which the gut was contracted. They adopted an oblique

incision at St. Bartholomew's Hospital. The rule was to look for the outer border of the quadratus lumborum muscle, and to cut down upon the gut which lay just below.

MEDICAL SOCIETY OF LONDON.

PETER MARSHALL, Esq., President, in the Chair.

MONDAY, NOVEMBER 8.

MR. WILLIAM ADAMS read a paper

ON THE TREATMENT OF HIP-JOINT DISEASE.

The author divided hip-joint disease, as it usually occurs in children from four to fourteen years of age, into three stages—the *first stage* extending from the commencement of the symptoms to the formation of abscess; the *second stage* from the formation of abscess to the bursting or opening of the same; the *third stage*, the complete destruction of the joint, more or less extensive disease of the bone, dislocation, etc. The author referred to the belief that the disease began as a primary affection in the cancellous tissue of the bone, entertained by the late Sir Benjamin Brodie, or in the articular cartilage, the synovial membrane, or the round ligament, and alluded to the difficulty of determining this point from the absence of post-mortem examinations at this period. He believed that hip-joint disease usually commences in the round ligament, as the result of an accident in which this ligament is violently strained or partly torn, and that, from this spot as a centre, the disease extends to the rest of the synovial membrane, the articular cartilage, and, at a later period, to the bone, yet, in some cases, other structures might be primarily involved, the morbid process being then essentially that of primary necrosis affecting the cancellous tissue of the head of the bone. As to *treatment* Mr. Adams referred principally to the first stage. Considering the destructive character of this disease to depend upon a low form of inflammation, chronic in its character, and associated with constitutional debility and a strumous diathesis, Mr. Adams was opposed to the application of leeches, blisters, moxas, issues, the actual cautery, etc., as tending to exhaust the powers of the patient. Essentially, he relied upon rest to the joint, with warmth and moisture constantly applied. He also opposed antiphlogistic treatment internally, and especially the use of calomel, or what is called the alterative treatment, as tending to lower the constitutional powers of the patient, and relied upon tonics, with cod-liver oil, hypophosphite of lime, and iron. With regard to the means of securing rest to the joint—a paramount necessity—Mr. Adams was opposed to long-continued recumbency in bed or on the couch. Complete recumbency he thought necessary only during the more acute symptoms, with severe pain, when he used either the straight splint or the more modern plan of extension by weights attached to the leg, a method first employed by Dr. Henry G. Davis, of New York, as a remedy for the acute pain which occurs in some cases of hip-joint disease, and the complete success of which, in relieving the pain, was confirmed by Mr. Adams's experience. Generally, Mr. Adams employed a leather or gutta-percha splint, of larger size than ordinarily used, and moulded to the side of the body and limb whilst the latter was held in the straight position, so as to overcome all muscular contraction, chloroform being administered, in some instances, whilst this was being done. The first effect of such a splint, when properly made, was generally to relieve the pain, and this it did completely in most instances. The patient was then enabled to move about with the assistance of crutches, and this Mr. Adams considered materially improved the general health, and, in so doing, benefited the disease. He never employed long-continued recumbency.

Mr. Adams's paper brought forward some interesting remarks from Messrs. Bryant, Gay, Bell, De Merie, and Dunn, Messrs. Bryant, Gay, and Bell advocating the passive treatment as recommended by the author of the paper; Messrs. De Meric and Dunn, the active, the latter especially mentioning the actual cautery, which he had found successful in three cases under his care; he had also watched the success of this treatment in the Scottish Hospitals, and in the practice of Mr. Erichsen.

A LABOUR test for able-bodied women in receipt of out-door relief is to be tried in one of the metropolitan unions. It is to take the form of making and repairing such clothing as may be required in the workhouse.

NEW INVENTIONS.

THE PROFESSIONAL AND GENERAL SCRIBBLING PAD.

WE have received a specimen of what promises to be an exceedingly useful invention. Many a one has occasion to use a half sheet of paper, and for this purpose some save up the halves of letters and such like, others cutting a sheet of paper in half or using a special slip prepared for the purpose. This invention does away with the necessity of using such. The pad folds like a book—on one side are several layers of blotting-paper, on the other half sheets of paper bound together as in a blotting pad except at the top. It is easy when a few lines are scribbled to close the book, thus drying the writing, and to separate the half sheet from its neighbour beginning with the top, whereby a fresh surface is exposed. The cost of the pad is a shilling, and it is published by Jarrold and Sons, 12, Paternoster-row.

NEW BOOKS, WITH SHORT CRITIQUES.

An Elementary Course of Theoretical and Applied Mechanics. Designed for the use of Schools and Colleges. By RICHARD WORMELL, M.A., B.Sc., Medalist in Mathematics and Natural Philosophy Lond. London: Groombridge. Pp. 234.

*** This work is one of a scientific series undertaken by Messrs. Groombridge with a special view to the requirements of the University of London. Something of the kind was undoubtedly needed, for there was nothing intermediate between, say, such a work as that of Lardner, which, for such a purpose is nowadays useless, and the treatises of Tait and Steel, Routh, Thomson and Tait, etc., which contain more than is requisite for a mere poll degree. This little work impresses us favourably. The explanations are clear, and, what is of considerable importance, the problems set for home work are numerous and, so to speak, typical. The work is well illustrated, the illustrations being mostly derived from foreign sources. (Of this, by the bye, the author says nothing.) It is further divided into sections, each corresponding with one of the examinations of the University of London, and the work winds up with a list of the questions set in these subjects during several years past both in the B.A. and B.Sc. Examinations.

Handbook of Physiology. By W. S. KIRKES, M.D. Seventh Edition. By W. MORRANT BAKER, F.R.C.S., Lecturer on Physiology and Warden of the College at St. Bartholomew's Hospital. London: Walton. Pp. 838.

*** The first impression conveyed to the mind by the present edition of Kirkes's Physiology is that it is distinctly bigger than was the last; the next impulse is to find out the constitution of the enlargement. Mr. Baker says, "The chief difference, when compared with the previous edition, will be found to consist mainly of additions and rearrangements of old facts, and, it is hoped, a plainer exposition of them." But one great cause of the increased size is the addition of new illustrations. There can be no question of the utility of illustrations in physiological works, and in certain situations they are absolutely indispensable. Take, for instance, the development of the fœtus; who among a thousand could understand the convolutions of the various membranes by a mere verbal description? Mr. Baker did well, therefore, by adding in the previous edition the telling diagrams of Dalton, and we are glad to see further additions of such diagrammatic illustrations, for these are frequently more useful for teaching purposes than the more complicated figures after nature. In a word, we are satisfied that the present edition will preserve the high character the work has hitherto borne as a text-book.

A Manual of Clinical Medicine and Physical Diagnosis. By THOMAS HAWKES TANNER, M.D., F.R.S. Second edition, revised and enlarged, by TILBURY FOX, M.D. Lond., Physician to the Skin Department of University College Hospital. London: Renshaw. Pp. 355.

*** This little work we can honestly recommend not only to the student, but also to the Practitioner. It contains a vast amount of information, as condensed as is possible, and the whole so arranged as to be easy of reference. Certain portions of it, as those referring to Medico-legal practice, to the examinations of persons proposed for life insurance, and the determination of feigned diseases, are more likely to benefit the Practitioner than the student; but the hints as to case-taking,

the various symptoms and signs of disease, and the different modes of physical diagnosis, have a special value to the student. Dr. Tilbury Fox has performed his task well and judiciously, and the portions he has added have not only done much to modernise, but to increase the value of Dr. Tanner's excellent original work. The volume ends with instructions as to the mode of examining chemically the principal fluids of the body. No rose without a thorn. The title-page is faced by a most villanous engraving, supposed to represent various urinary deposits, for which we know not who is responsible.

Entozoa : Being a Supplement to the Introduction to the Study of Helminthology. By T. Spencer Cobbold, M.D., F.R.S., etc.

*** This forms a valuable addition to Dr. Cobbold's previous volume, and embraces a special and general index, together with additions to the bibliography of entozoa, and a record of researches conducted since 1864, when the treatise first appeared. The most important chapters, perhaps, are those upon the history of the discovery of the trichina spiralis, on the successful feeding experiments with it, and on the nature of pseudentozoa found in diseased and healthy cattle.

Myxoma, or Hyperplasia of the Villi of the Chorion. By Alexander D. Sinclair, M.D., Memb. of the Mass. Med. Soc., American Association, etc. Boston: David Clapp. 1869.

*** Dr. Sinclair here records an interesting case which has occurred in his practice. It appears that no case where the hypertrophy of the villi of the chorion has existed to such an extent as in the present instance has been recorded by pathologists, although Virchow has described and figured a very remarkable specimen; but the hypertrophy was very limited in extent, and confined to one of the cotyledons of an otherwise healthy placenta. A microscopic examination of Dr. Sinclair's specimen showed the growths to consist essentially of cells, with here and there an indistinct fibrous appearance. Fatty metamorphosis had commenced in the tissue, and no blood-vessels were found.

MEDICAL NEWS.

University of London.—The following are Lists of the Candidates who have passed the recent Second M.B. Examination for Honours:—

MEDICINE.

First Class.

Baxter, Evan Buchanan (Scholarship and Gold Medal), King's College.
*Thomas, John Davies (Gold Medal), University College.
†Gowers, William Richard, University College. } Equal.
†Stocker, James Reginald, Guy's Hospital. }

Second Class.

Dukes, Clement, St. Thomas's Hospital.
Snow, Herbert Lumley, Queen's Coll., Birmingham, and University College.
Dessé, Ethelrid, University College.
Rayner, Edwin, B.A., Paris, and University College.

Third Class.

Marshall, Henry Flamank, Birmingham General Hospital and Univ. Coll.
Willoughby, Edward Francis, University College.

MIDWIFERY.

First Class.

Thomas, John Davies (Scholarship and Gold Medal), University College.
Baxter, Evan Buchanan (Gold Medal), King's College.
Dukes, Clement, St. Thomas's Hospital.
Stocker, James Reginald, Guy's Hospital.
Rayner, Edwin, Paris, and University College.

Second Class.

Snow, Herbert Lumley, Queen's Coll., Birmingham, and University College.
Gowers, William Richard, University College.
Willoughby, Edward Francis, University College.
Buck, Thomas Alpheus, Guy's Hospital.

FORENSIC MEDICINE.

First Class.

Stocker, James Reginald (Scholarship and Gold Medal), Guy's Hospital.
Rayner, Edwin (Gold Medal), Paris, and University College.
Willoughby, Edward Francis, University College.

Second Class.

Snow, Herbert Lumley, Queen's Coll., Birmingham, and University College.

Third Class.

Buck, Thomas Alphens, Guy's Hospital.
Thomas, John Davies, University College.

Royal College of Surgeons of England.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 18th inst.:—

Baker, Henry Francis, L.S.A., Andover, Hants, of St. Bartholomew's Hospital.
Bird, Thomas, Liverpool, of the Liverpool School.
Gibbings, Alfred Thomas, L.S.A., Chichester, of King's College Hospital.
James, James, Cardigan, of University College Hospital.
Kemmis, Henry Marcus, Dublin, of the Dublin School.
Law, Alfred Roberts, M.B. Edin., Barnstaple, of the Edinburgh School.
Lill, William Frederick, L.S.A., Nottingham, of Guy's Hospital.
Milles, George Ridley, L.S.A., Yalding, Kent, of King's College Hospital.
Palmer, James Foster, Welby, Norfolk, of St. George's Hospital.
Pedler, George Henry, L.S.A., Forest-hill, of King's College Hospital.
Raynor, Arthur, Hull, of University College Hospital.
Smart, David, L.R.C.P. Lond., Cranbrook, Kent, of St. Bartholomew's Hospital.
Taylor, John, L.S.A., Sheffield, of Guy's Hospital.
Taylor, Thomas, Seaton, Sunderland, of the Newcastle School.
Thomas, Llewellyn Morgan, Camberwell, of St. Thomas's Hospital.
Thorne, William Bezly, Leamington, St. Bartholomew's Hospital.
Walford, Edward, Ramsgate, of St. George's Hospital.
Waterworth, Edward Allan, M.B. Aber., Newport, Isle of Wight, of St. Thomas's Hospital.
Webster, William, L.S.A., King's Lynn, of King's College Hospital.
Wood, John William, Douglas, Isle of Man, of St. Bartholomew's Hospital.
Wood, Richard, L.R.C.P. Edin., and L.S.A., Bromsgrove, Worcestershire, of Guy's Hospital.

The following gentlemen were admitted Members on the 19th inst.:—

Bell, William, M.D. Edin., London-street, Fitzroy-square, of the Edinburgh School.
Hoadley, Robert, M.D. Philad., Halifax, Yorkshire, of Jefferson College, Philadelphia.
Hogg, Richard Bowen, L.S.A., Rotherhithe, of Guy's Hospital.
Lloyd, Robert Hodgens, L.S.A., Holloway, of Westminster Hospital.
Roberts, Arthur Copleston, L.S.A., Exeter, of Guy's Hospital.
Robertson, Frederick Marrant, L.S.A., Peckham, of Guy's Hospital.
Tyler, Edward Alfred, L.S.A., High-street, Manchester-square, of the Middlesex Hospital.
Wall, Alfred John, L.R.C.P. Lond., Bessborough-street, W., of St. Mary's Hospital.
Wearne, Walter, L.S.A., Helstone, Cornwall, of Westminster Hospital.

Fellowship Examinations.—The following Members of the Royal College of Surgeons passed the Primary or Anatomical and Physiological Examination for the Diploma of Fellowship of the College, at a meeting of the Court of Examiners on the 23rd inst., and, when eligible, will be admitted to the Pass or Surgical and Medical Examinations:—

Anderson, William, L.R.C.P. Lond. and L.S.A., Derby, diploma of membership dated April 25, 1867, of St. Thomas's Hospital.
Dobson, Nelson Congreve, Bristol, April 25, 1867, of St. Thomas's Hospital.
Horsfall, John, Leeds, May 22, 1866, of St. Bartholomew's Hospital.
Mackenzie, George Welland, L.R.C.P. Lond. and L.S.A., William-street, Lowndes-square, April 28, 1864, of the London Hospital.
Pilcher, Jesse Griggs, L.S.A. Dub., H.M. Indian Army, April 13, 1860, of the Dublin School.
Pilcher, William John, L.S.A. Dub., Boston, Lincolnshire, April 13, 1860, of the Dublin School.
Robinson, John, L.S.A., Midhurst, Sussex, November 9, 1849, of University College.
Rundle, Henry, Plymouth, April 26, 1865, of St. Bartholomew's Hospital.
Ryott, Frederick Elliott, L.S.A., Newbury, Berks, March 26, 1858, of the London Hospital.
Steele, Charles, L.R.C.P. Lond., Clifton, Bristol, November 14, 1860, of the Bristol School.
Thomas, William, M.B. Lond., Birmingham, November 14, 1865, of the Birmingham School.
Watson, James, L.S.A., Army, May 28, of 1858, St. Bartholomew's Hospital.

The following gentlemen, *not* Members of the College, also passed the examination:—

Banks, Wiliam Mitchell, of the Liverpool, Edinburgh, and Glasgow Schools.
Ball, James B., of the University College and St. Mary's Hospitals.
Bovill, Edward, of Guy's Hospital.
Elkington, Ernest Alfred, of the Birmingham School.
Franklin, George Cooper, of St. Thomas's Hospital.
Harrison, Napoleon Augustus Rogers, of Guy's Hospital.

It is stated that five candidates failed to acquit themselves to the satisfaction of the Court of Examiners, and were consequently referred to their studies for six months.

Apothecaries' Hall.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, November 18, 1869:—

Bolton, John George Elliott, Mauritius.
Buchanan, Walter, Chatham.
Joy, Frederick William, University College.
Payne, Martin Henry, Bridgewater.
Sylvester, Henry Thomas, Bath.

The following gentlemen also, on the same day, passed their First Professional Examination:—

Crackle, Thomas Arthur, Guy's Hospital.
Pike, William Royston, St. Thomas's Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Churchill, Frederick, M.B., C.M., etc.—Surgeon to the Westminster General Dispensary, *vice* H. A. Reeves, M.R.C.S., appointed Assistant-Surgeon to the London Hospital.

Foster, Henry.—Dispenser to the Hulme Dispensary.

* Obtained number of marks qualifying for the Scholarship.
† Obtained number of marks qualifying for a Medal.

HOCKLEY, A., L.D.S.—Honorary Secretary to the National Dental Hospital, in place of Mr. R. T. Hulme, resigned.

STEELE, JOSEPH, L.D.S.—Dental Surgeon to the National Dental Hospital, *vice* Mr. R. T. Hulme, resigned.

NAVAL AND MILITARY APPOINTMENTS.

ADMIRALTY.—The following appointments have been made:—John Rodgers, Assistant-Surgeon, to the *Resistance;* John B. Isaac and J. D'A. Harvey, Acting Assistant-Surgeons to the *Ocean;* Dr. Samuel Campbell, Surgeon, to the *Ocean*, for service in the *Sylvia;* William Roche, Surgeon, to the *Ocean*, for service in the *Zebra*, when commissioned; Edward B. Broster, Surgeon, to the *Vestal;* Thomas R. Warren, Surgeon, to the *Adventure;* Dr. James E. Sanderson, Assistant-Surgeon, to the *Royal Adelaide;* Albert A. Mullin, Assistant-Surgeon, to the *Royal George;* Thomas Comy, Assistant-Surgeon, to the *Boscawen;* Joshua P. Courtenay, Assistant-Surgeon, to the *Pembroke*, for service with the Royal Marines at Deal.

WAR OFFICE.—The following appointments have been made:—5th Lancers: Staff Assistant-Surgeon Alexander Neill, to be Assistant-Surgeon, *vice* George Carr Dunn, deceased. 21st Hussars: Assistant-Surgeon Lawrence Corban, M.D., from the 49th Foot, to be Assistant-Surgeon, *vice* John Corbett, M.B., deceased. 38th Foot: Staff Assistant-Surgeon John Henry Hughes, M.D., to be Assistant-Surgeon, *vice* James Edward Clark, appointed to the Staff. 49th Foot: Staff Assistant-Surgeon Charles Wyat Watling, to be Assistant-Surgeon, *vice* Lawrence Corban, M.D., appointed to the 21st Hussars.

MEDICAL DEPARTMENT.—Staff Assistant-Surgeon Robert Waters, M.D., to be Staff Surgeon; Assistant-Surgeon James Edward Clark, from 38th Foot, to be Staff Assistant-Surgeon, *vice* John Henry Hughes, M.D., appointed to 38th Foot.

Staff-Surgeon-Major J. E. Carte, M.B., C.B., has been appointed Medical Officer of the District Military Prison at Aldershott, and has taken over the duties of that establishment from the 13th inst.

BIRTHS.

BELL.—On November 4, at Perry-hill, Kent, the wife of W. R. Bell, M.D., of a daughter.

FALLS.—On November 16, at Bournemouth, the wife of Wm. Stewart Falls, M.D., of a daughter.

LOWNDS.—On November 18, at Egham-hill, Surrey, the wife of T. M. Lownds, M.D., Surgeon H.M.'s Indian Army, of a son.

MARSHALL.—On November 6, at Bedworth, Warwickshire, the wife of Francis Marshall, M.R.C.S. and L.S.A., of a son.

WOODS.—On November 15, at the Royal Naval Hospital, Malta, the wife of Henry C. Woods, M.D., R.N., of a daughter.

MARRIAGES.

CAMERON—CHINERY.—On November 18, at St. Thomas's Church, Lymington, Ewen Wrottesley Hay Cameron, Esq., son of Charles Hay Cameron, Esq., late Member of the Council of India, to Annie Eisdell Chinery, second daughter of Edward Chinery, M.D., of Lymington, Hants.

COLEMAN—JAMIESON.—On November 18, at St. Mary's, Carden-place, Aberdeen, Matthew Owen Coleman, M.B., elder son of Matthew Trollope Coleman, Esq., Surbiton, Surrey, to Elizabeth, younger daughter of John Jamieson, Esq., of Albyn-place, Aberdeen.

CORNWALL—BANISTER.—On October 16, at Dehra, N.W.P. India, William G. Cornwall, Esq., C.S., youngest son of Capt. Cornwall, R.N., of Burford Lodge, Elstead, Surrey, to Emily Gertrude, eldest daughter of Dr. Banister.

CUNINGHAM—BALFOUR.—On November 23, at Pilrig-house, near Edinburgh, Charles Alexander Cuningham, Esq., Lieut. Bombay Staff Corps, second son of Alexander Cuningham, M.D., to Annie Mackintosh, eldest daughter of John M. Baltour, Esq., of Pilrig.

HIRON—SHELTON.—On November 23, at Bath, John Hickman Hiron, M.R.C.S., L.S.A., of Studley, Warwickshire, to Julia, youngest daughter of George Shelton, of Edgbaston, Birmingham.

RICHARDS—RAIMONDI.—On November 20, at the parish church, St. Clement Danes, Henry Hannaford, second son of the late Joseph Richards, Surgeon, to Alice Augusta, second daughter of Willoughby Raimondi, solicitor, of Surrey-street, Strand.

SHIELD—LANCASTER.—On October 18, at the Cathedral, Bombay, John Charlesworth, son of Robert Spencer Shield, Esq., Birkenhead, to Bessie, second daughter of the late Dr. Lancaster, R.N., Liverpool.

WOODBURN—WALKER.—On November 16, at Drumgrange, Ayrshire, John Woodburn, Bengal Civil Service, eldest son of David Woodburn, M.D., H.E.I.C.S., to Isabella Cassels, only daughter of the late John Walker, Esq., Drumgrange.

DEATHS.

BLOXAM, ELEANOR FRANCES ANNIE, the youngest and dearly beloved child of Wm. Bloxam, M.D., at 21, Mount-street, Grosvenor-square, on November 16, aged 4 years.

BRADLEY.—On November 16, at 4, Belitha-villas West, Barnsbury-park, the dearly beloved wife of Charles Lawrence Bradley, F.R.C.S.

EASTLAKE, HENRY EDWARD, M.D., Fellow of the College of Physicians, Dublin, etc., at Paris, on November 17.

FOSS, WILLIAM, Surgeon, at Stockton-on-Tees, on November 16, aged 59.

HAYWARD, JOHN, M.R.C.S.E., at Rushall-cottage, Pewsey, Wilts, after a few days' illness, on November 19, aged 45, highly esteemed and universally regretted.

PENRICE, ANNE, relict of the late George Penrice, M.D. Cantab., at Great Yarmouth, on November 16, in the 83rd year of her age.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

BOROUGH OF IPSWICH LUNATIC ASYLUM.—Resident Medical Superintendent. Applications and testimonials to the Town Clerk's office, Ipswich, addressed to "The Lunatic Asylum Committee," on or before January 15, 1870. The Asylum will be ready for occupation in April or May.

BAGOFORD INFIRMARY AND DISPENSARY.—Assistant Resident Medical Officer; must possess one legal qualification. Applications and testimonials to the Secretary on or before November 30.

BRIGHTON AND HOVE DISPENSARY.—Resident House-Surgeon; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Chairman of the Committee of Management on or before November 29. Election on December 7.

CANCER HOSPITAL.—Chloroformist; must be a legally qualified Medical Practitioner. Applications and testimonials to the Chairman of the Weekly Board, at the office, 167, Piccadilly, W., on or before December 2.

CHARING-CROSS HOSPITAL.—Physician-Accoucheur; must have a degree from one of the universities recognised by the General Medical Council, and be F. or M.R.C.P. Lond. Applications and testimonials to the Secretary on or before the 30th inst. at 2 o'clock.

CHOLSEY NEW PAUPER LUNATIC ASYLUM.—Medical Superintendent. Applications and testimonials to J. T. Morland, Esq., Clerk to the Committee of Visitors, at the Asylum, Cholsey, near Abingdon, Berks, on or before December 16.

EAST WARD UNION.—Medical Officer and Public Vaccinator for the Workhouse at Kirkby Stephen. Candidates must be registered, and possess the qualifications prescribed by the Poor-law Board. Applications and testimonials to Mr. John Whitehead, Clerk to the Guardians, Appleby, on or before December 4. Election on the 6th.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.—Assistant-Physician; must be M.B. or M.D., and F. or M.R.C.P. Applications and testimonials to the Secretary on or before December 15.

LIVERPOOL ROYAL LUNATIC ASYLUM.—Medical Superintendent. Applications and testimonials to E. Gibbon, Esq., Royal Infirmary, Liverpool, from whom further information may be obtained.

RAMSGATE AND ST. LAWRENCE ROYAL DISPENSARY.—Resident Medical Officer; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Secretary on or before December 4. Election on the 6th.

ROYAL SOUTH LONDON DISPENSARY.—Honorary District Surgeon. Further particulars may be obtained of Mr. Hentsch at the Dispensary.

ST. GEORGE'S, HANOVER-SQUARE, DISPENSARY, 59, MOUNT-STREET, GROSVENOR-SQUARE.—Physician-Accoucheur; must be M.R.C.P.L. Applications and testimonials to the Hon. Secretary on or before November 29. Election the next day at 4.30 p.m., when personal attendance will be required.

UNIVERSITY COLLEGE HOSPITAL.—Assistant-Physician. Applications and testimonials to the Secretary, John Robson, Esq., on or before December 1.

WORCESTER GENERAL INFIRMARY.—Resident Dispenser; must be legally qualified to practise as an apothecary. Applications and testimonials to the Secretary on or before December 10.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Isle of Thanet Union.—Mr. Henry Curling has resigned the Ramsgate District; area 3335; population 15,262; salary £75 per annum.

Neath Union.—Mr. John Jenkins has resigned the Glyncorrwg District; population 322; salary £10 per annum.

Selby Union.—Mr. Thomas Percival has resigned the Cawood District; area 12,107; population 3505; salary £25 per annum.

Southwell Union.—The Lowdham District is vacant; area 15,831; population 4082; salary £38 per annum.

Tynemouth Union.—Dr. W. L. Emmerson has resigned the Tynemouth District; area 1825; population 16,560; salary £50 per annum. Also the Workhouse; salary £70 per annum.

Weymouth Union.—The Weymouth District is vacant; area 52; population 3515; salary £45 per annum.

APPOINTMENTS.

Bodmin Union.—Horace V. Sandford, L.R.C.P., L.F.P. and S. Glas., to the Second District.

Christchurch Union.—James Fitz Maurice, M.R.C.S.E., L.S.A., to the Western District and the Workhouse.

Hambledon Union.—Henry Whiting, M.R.C.S.E., L.S.A., to the Haslemere District.

Knighton Union.—John A. T. Cartwright, M.R.C.S.E., L.S.A., to the Brampton Brian District.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—At a meeting of the Council on the 11th inst., Edward James Shearman, M.D., M.R.C.P., of Moorgate, Rotherham, was admitted a Fellow of the College.

SCARLATINA is very prevalent at Greenock.

THE Ashford (Kent) Cottage Infirmary is to be opened for the reception of patients on January 1, and is to be designated "St. John's House."

TWENTY-NINE deaths from measles have occurred in Kilmarnock from the 1st to the 18th inst.; scarlatina has been prevalent there, but is now on the wane.

THE third annual meeting of the St. Andrews Medical Graduates' Association is to be held on December 1 and 2, at the Freemasons' Tavern. The meeting commences at 4 p.m. on Thursday, December 1. At 5, Dr. Richardson, F.R.S., will deliver the anniversary address, "The Science of Cure."

IN Islington two children, Emily and Charles Baronius, have died from eating muscles. At Wolverhampton Hospital, Benjamin Perry died from chloroform administered previously to an operation to his wrist. He had, on two recent occasions, undergone the same treatment.

Medical Reform.—The memorial praying for the reform of the Medical Acts has received the signatures of 9800 Practitioners in all parts of the three kingdoms.

The Middlesex Hospital Medical Society.—The first ordinary meeting of this Medical Society took place on Thursday, November 11, Dr. John Murray, President, in the chair, when Dr. Robert King read an excellent paper on "Cells and Cell Development."

The Dundee Medical Society.—Dr. William L. Gibson, M.D., has been re-elected President of the Society. Dr. William Leavens White, M.B., has been elected Honorary Secretary of the Society, *vice* Charles Moon, M.B., resigned.

The Vaccination Acts.—The Luton Board of Guardians have decided by a majority of one, after an exciting discussion, to enforce vaccination.

Dr. W. S. Aitken, of the Glasgow Infirmary, died on Thursday of typhus fever, caught in discharge of his duties.

Small-pox is more general at Devizes than it has been for many years; several amongst those who have it badly are reported to have been recently vaccinated.

Relapsing Fever.—There have been several cases of relapsing fever in Rose and Crown-Court, High-street, Islington. When Dr. Ballard, the Medical Officer of Health, visited the court on Thursday, last week, he found twelve cases of relapsing fever, nine of which were sent to the Hospital. The population of the court seemed to be in a state of starvation, or semi-starvation.

West of England Sanatorium, Weston-super-Mare.—The first annual meeting of the governors of this institution was held last week. The report was of a highly gratifying character. The total number of patients received had been 227, men 78, women 81, children 68—from Hospitals 59, from private Practitioners 168. The results had been—patients perfectly restored, 133; very much benefited, 42; partially benefited, 20; not benefited, 15; discharged for misconduct, 1; still under treatment, 16. Nine cases were refused as unfit for admission. The total receipts were £3140 10s. 3d., and the disbursements £3103.

Police Diagnosis.—A few days since Francis Ross, a sailor, aged 38, was found by a policeman leaning against a lamp-post in South Town-road, Yarmouth. The man was helpless, and the constable therefore procured assistance and got him to the police-station, where he was duly charged as being "drunk and incapable," and locked up. He was soon found to be dead; and upon the post-mortem examination it was discovered that the poor fellow had died from a rupture of one of the vessels of the heart, and that there was no trace of liquor of any description in the stomach.

The National Cottage Hospital for Consumption and Diseases of the Chest, Ventnor, Undercliff, Isle of Wight.—Mr. Frederick H. Leaf, a member of the General Committee, has offered to be at the cost of the erection of one of the houses of the third pair of buildings. The Committee hope that some equally benevolent person will come forward and undertake to build the other house, so that the pair may be forthwith commenced.

University of Oxford.—The First Examination in the Faculty of Medicine will be held in the Museum on December 7, at 9.30 a.m.; the Second Examination on November 29, at 9.30 a.m. The examiners are—G. S. Church, M.D.; A. G. Vernon-Harcourt, A.M.; R. B. Clifton, A.M.; T. K. Chambers, M.D.; J. G. Ogle, M.D.; T. P. Teale, M.B., Coll. Reg. Chir. Soc.; H. W. Acland, Prof. Med. Reg. The Examination in Natural Science will be held on December 2, at 10 a.m. The examiners are—Robert B. Clifton, Edward Chapman, Joseph F. Payne. Candidates for Honours are requested to attend at the above-mentioned time at the University Museum.

The Medical Officer of Health for Southampton, in his quarterly report from August 5 to November 3, "is not able to speak so favourably as to the healthy condition of the town as on former occasions; but although the death-rate is heavier than I could wish, yet there existed no great amount of epidemic disease. The deaths for the quarter have been 306, which, divided by 13, our population being about 52,000, gives us a mortality of 23·38 per 1000. The deaths from epidemic and contagious diseases during the quarter have been as follows, and although the mortality from some of the diseases, especially diarrhœa and fever, may appear unusually great, the deaths were almost entirely confined to children under 1 year of age and very aged people:—Diarrhœa, 43; gastric fever, 6; typhoid fever, 11; typhus fever, 3; scarlatina, 8; diphtheria, 2; hooping-cough, 5."

North Staffordshire Medical Society.—The annual meeting was held on Thursday, November 18, at the North Stafford Hotel, Stoke-on-Trent. The retiring President, Mr. R. Garner, delivered the annual address. The following officers were elected for the ensuing year:—*President:* Mr. John Alcock. *Vice-President:* Mr. Garner. *Treasurer:* Mr. James Yates. *Committee:* Messrs. Folker, Acton, Greatrex, Spanton, and Weaver. *Honorary Secretary:* Mr. J. M. Taylor. During the past year six meetings have been held, the attendance on which has been somewhat larger than in previous years. The Society now numbers twenty-six ordinary and five honorary members.

The Dispensary System at Colchester.—It is intended to establish a dispensary in this town under the plan proposed by the recent Poor-law Act. The *Colchester Mercury*, in discussing the proposition, argues that it will be of service to the poor, to the ratepayers, and to the union Medical officers. It shows the advantage of the dispensary system in Ireland, and contrasts the condition of towns in which dispensaries have been established with those in which they do not exist. The circumstances are all in favour of the dispensary towns. The *Mercury* thinks the guardians, by the establishment of a dispensary, have a noble opportunity of being economical and saving without being parsimonious and penurious, of doing a graceful act of justice to the Medical officers, and of generosity to the poor, of relieving the ratepayers of a continually increasing burden, and of proving to their fellow-citizens that they can be intrusted with a question involving some consideration for the present, but more for the future, and that they can in no small measure correct the bad working of a bad law.

The Royal Society.—The annual meeting of Fellows will be held, as usual, on St. Andrew's-day, the 30th inst., for the election of Council and officers of the Society, when the following will be submitted:—*President:* Lieutenant-General Sabine, LL.D. *Treasurer:* W. Allen Miller, M.D. *Secretaries:* William Sharpey, M.D., and G. Gabriel Stokes, M.A. *Foreign Secretary:* Professor W. Hallows Miller, M.A. For the other members of Council—Frederick Currey, M.A.; Warren De la Rue, Ph.D.; *Sir Philip De M. Grey Egerton, Bart.; Professor William Henry Flower; *William Huggins; *J. Gwyn Jeffreys; John Marshall; *Augustus Matthiessen, Ph.D.; Captain George H. Richards, R.N.; the *Marquis of Salisbury, M.A.; *Charles Wm. Siemens; *John Simon; Archibald Smith, M.A.; *Professor H. J. Stephen Smith, M.A.; *Professor John Tyndall, LL.D.; and *Professor Alexander W. Williamson. The Fellows of the Society whose names are preceded by an asterisk were not members of the last Council.

Collegiate Proceedings.—From the last published report of the proceedings of the Council of the Royal College of Surgeons there is but little to transfer to our pages not already known by earlier information. At this meeting of the Council a letter was read from Mr. Robert Craven announcing that the Hull and East Riding School of Medicine was closed on July 31 last. The President declared that the vacancy in the Council caused by the resignation of Mr. Joseph Swan would not be filled up until the annual meeting of the Fellows in July next. The following divisions in the Council may be interesting:—On the motion for the confirmation of the previous minutes, it was moved by Mr. Quain, and seconded by Sir William Fergusson—"That it is the opinion of this Council that the resolution that the examination in general education should be entirely left to the national educational bodies recognised by the Medical Council, be not confirmed." On the demand of Messrs. Charles Hawkins and Hewett, the names of those voting for and against it were directed to be entered on the minutes—viz., Minority for the motion, 7: Messrs. Hilton, Quain, Solly, Lane, Birkett, Gay, and Sir William Fergusson; majority against the amendment, 12: Messrs. Thomas and James Paget, Hancock, Curling, Clark, Hawkins, Hewett, Smith, Humphry, Holden, and Erichsen. It was then moved by Sir Wm. Fergusson, and seconded by Mr. Hilton, that the following resolution be not confirmed:—"That it is the opinion of this Council that there should be instituted a single examining board for each division of the United Kingdom, before which every person who desired a licence to practise should appear, and by which he should be examined, and that a diploma from either of such examining boards should entitle the holder to practise Medicine, Surgery, and Midwifery in any part of her Majesty's dominions." The names were again demanded to be taken down by Messrs. Hawkins and Hewett, when the minority for the motion was five—viz., Sir William Fergusson, Messrs. Hilton, Quain, Solly and Gay. The majority against the motion was fourteen

—viz., Messrs. Thomas and James Paget, Lane, Hancock, Curling, Clark, Hawkins, Hewett, Smith, Birkett, Simon, Humphry, Holden, and Erichsen. The Council decided that the examination passed by Mr. S. H. Cartwright when, in 1860, he obtained the Warneford Scholarship at King's College, London, should exempt him from the preliminary examination for the Fellowship.

The Oldbury Club, Birmingham.—A meeting of the Medical Profession was held at the Council Room of the Midland Institute on Saturday last, Dr. Bell Fletcher presiding. The object of the meeting was to obtain an amendment of the Medical Acts, which as at present constituted afforded no protection to the public or the Profession. Mr. Sampson Gamgee moved the following resolution:—"That the Provisional Committee of the Medical Reform Union be authorised to present the Birmingham Memorial to her Majesty's Government in such a manner as they may deem best calculated to secure the object of the memoralists." Mr. Manley was called upon to second the resolution, but objected to do so if the name of Mr. Dempsey, of Oldbury, was retained as one of the executive. Upon this a very irregular kind of conversation took place between Mr. Manley, Mr. Dempsey, the chairman, and others. Mr. Dempsey having stated that he had signed the memorial, Mr. Manley said, "Then I will have nothing to do with it. I am," said he, "not speaking on my own account. It may appear to some that this is a personal matter. It is nothing of the kind. I am speaking the views of a very large proportion of my Medical friends." This announcement was received with applause. After some discussion on the matter, in which several gentlemen took part, the following conversation took place: — The Chairman (to Mr. Dempsey): Did you sign this memorial? Mr. Dempsey: Yes. The Chairman: Then it has this paragraph:—"It is capable of proof that some legally qualified men have lent their names to persons without qualification, to enable them to practise Medicine and Surgery without incurring liability to prosecution. Such a proceeding is regarded as a fraud on the public and the Profession, and it is suggested that, in any future bill, greater powers be given to the General Medical Council to remove from the Register, and deprive of their Professional rights, qualified men who shall aid and abet illegal Practitioners." Mr. Dempsey: I think it is an absurd paragraph. (Laughter.) The Chairman: That is another thing. You have signed it? Mr. Dempsey: Yes. The Chairman: Then that was an absurd thing to do. Do you allow one or more men who are not qualified to practise for you? Mr. Dempsey: He is my assistant, and I have a right to allow him to practise. I have an assistant who is legally qualified. The Chairman: Where does he live, and who is he? Mr. Dempsey: He lives at Oldbury. Mr. Manley replied that the name of the assistant was Holland, and that he had been several times prosecuted and punished for practising, not being qualified. Mr. Dempsey: I have also an assistant who is qualified, and I shall not give him up. We are obliged to have one qualified assistant. Mr. Dempsey soon after left the room, before the meeting was over. It will be recollected that Mr. Dempsey took Medical care of the Oldbnry Clubs when the Practitioners of that neighbourhood had jointly and severally refused to accept the appointment. The payment for attendance, we believe, has been much reduced.

Dublin Obstetrical Society.—The opening meeting of this Society was held on Saturday evening, the 20th inst., in the Hall of the King and Queen's College of Physicians, Dr. Ringland, President, in the chair. In the words of the President of the College of Surgeons (Professor Macnamara), the assemblage exceeded in point of rank and number all previous meetings of the Society. Among those present was the venerable father of the College, Dr. Grattan, admitted Licentiate in 1814, and elected to the Fellowship in 1817. The President, in his address, gave a very interesting sketch of the history of Irish Medicine, more particularly in connexion with the obstetrical branch, in commenting on which Dr. Stokes observed that as Hospitals were some of the first fruits of Christianity, it was remarkable that one of the earliest, the very second of the early Hospitals, was in Ireland, where, at Clonmacnoise, one was founded in the sixth century. At the close of the ballot the following were declared duly elected officers for the ensuing year:—President, Dr. George Johnston; Vice-Presidents, Drs. H. Kennedy and G. H. Kidd; Treasurer, Dr. H. Halahan; Secretary, Dr. Lombe Atthill; Committee, Drs. T. E. Beatty, Churchill, Crouyn, Denham, and M'Clintock. Dr. McClintock then said that the report just read had announced the relinquishment by Dr. Kidd of the office of Honorary Secretary. The resignation of Dr. Kidd had been accepted with much regret by the Council, but they could not ask him to retain it, as he had already performed its duties for eight years, and had been anxious for the last two or three years to give it up, and it was at the sole instance of the Council that he had continued to hold it. Dr. McClintock then in most complimentary terms noticed the services which Dr. Kidd had rendered to the Society, and contrasted its present condition with the state in which it was when Dr. Kidd became its Honorary Secretary. The number of its members had increased sixfold, and its financial position had been improved in a most remarkable and satisfactory manner. Their success arose from the reconstruction and reorganisation of the Society since Dr. Kidd had come into office. It was mainly through the judgment, common sense, and experience of Dr. Kidd that all opposition to the scheme of reorganisation of the Society was overcome, and next to its founder, the Society was indebted to Dr. Kidd for its present flourishing state. Dr. McClintock then formally moved a vote of thanks to Dr. Kidd for his great services to the Society during his tenure of office as Honorary Secretary. The motion was seconded by Dr. Denham, and unanimously adopted. Dr. Kidd, in returning thanks, said that the most important element in the resuscitation of the Society was the formation of a new code of by-laws, which was proposed before he became secretary; and though he had taken an active part in carrying out the proposed plan, the greater portion of the credit was due to him who had suggested it—namely, Dr. McClintock. Dr. Lombe Atthill succeeds Dr. Kidd as Honorary Secretary. On Thursday evening, the 18th inst., the President, Dr. Ringland, received the members of the Society, and a large number of visitors, at a very agreeable *conversazione*, at his residence in Harcourt-street. A deviation from the custom at such receptions was the introduction of excellent vocal music, which proved to be a most pleasing novelty. Among those present were the Right Hon. the Lord Mayor, the Lord Mayor Elect, the President of the College of Physicians, Dr. Banks; the President of the College of Surgeons, Mr. Macnamara; the Vice-President, Dr. Walsh; the Governor, Dr. Shea; and the Deputy Governor, Mr. Harvey, of the Apothecaries' Hall; Sir James Simpson, Bart., M.D.; Sir Dominic Corrigan, Bart., M.D.; Sir William Wilde, M.D., etc.

The Obscurities of Vaccinal Syphilis. — An academician of a mature age, during the recent discussion, made the following pertinent observation to M. Latour:—"I can in nowise understand this sudden explosion of vaccinal syphilis observed only within the last few years, after seventy years during which the virus remained free from any such contamination; nor can I comprehend how it is that these explosions always take place in the country in small centres of population, where syphilis is rare, and that they do not burst out with violence and frequency in large towns, as Paris for example, an active and permanent centre of syphilis.—*Union Méd.*

A Chinese Inquest.—On the third day after death, the body was taken by the police and laid out in the court preparatory to inspection, chairs and a table were arranged to command a view of the body, and at the same time to be sufficiently distant to insure immunity to the olfactory nerves. A small officer sat at the table and took down the depositions of the examinator, some carried pails of water, and others stood with burning incense in their hands, and kept replenishing the incense fire which was placed between the body and the mandarins. The first thing was to fill the body with water, after which it was washed, the epidermis being carried away in the process. As the body lay on its back the examiner commenced his manipulations with his chopsticks, probing the head and face most carefully, and proceeding down the right and left sides of the body in the same careful manner, paying particular attention to the joints of the arm, hand, and lower extremities. The ribs came in for a full share of attention. After satisfying himself on the anterior aspect, the body was turned, and the same processes took place as in front. These washings lasted half an hour, after which the examiner, proceeding to the front of the table, gave in his report which was written down. The mandarins, the son of the deceased, a boy 12 years of age, with the examiner, went over the whole case again, particularly dwelling on the awkward movement of the left hip-joint and on the scratches of the right hand. Before attempting this, the officials, who had before been partaking freely of snuff, now introduced rolls of paper into their nostrils, and with wet towels in their hands, a further prophylactic measure, which they held to their mouths,

proceeded to the side of the body. After satisfying themselves and the son of the deceased, the body was coffined, the necessary certificate granted, and the proceedings terminated. During the examination I had a seat assigned me on the left of the chief mandarin, and was permitted to question the examiner of the corpse. The fracture was through the trochanter major, but he was unable to say whether it was a fracture or dislocation, his opinion inclining to the latter. Of the five men who were the occasion of this man's death, it may here be added that the principal was strangled, three banished for a number of years, and one for life.—*The Fifth Annual Report of the Peking Hospital, by Dr. John Dudgeon.*

MEDICINE IN CHINA.—The report of the Foochow Native Hospital and Dispensary for 1868 is, on the whole, highly satisfactory. Subscriptions have been forthcoming on a liberal scale, and the institution has continued to receive the grant of H.M. Government. During the year about 4600 Chinese have been attended at the Dispensary, each of whom, the statistics show to have applied for relief rather more than twice on the average. Numerous in-patients have also been admitted, many of whom have been supplied with food, etc., at the expense of the institution. The following extract from the report of the Medical officer, Dr. Beaumont, is curious and instructive:—"The lepers of this place improve under Medical treatment, but they do not attend for a sufficient length of time to enable any definite conclusions to be drawn, and the recorded experience of those Physicians who have elsewhere practically studied this disease, should deter us from being sanguine as to the permanence of the relief apparently afforded. Having discovered that some of the patients used for burning in their lamps the cod-liver oil obtained from the Hospital, I now prescribe this remedy in the form of an emulsion, which, being non-inflammable, cannot be thus fraudulently employed. We have fortunately had no pyæmia, and there has been an almost uniformly good recovery after Surgical operations. The Chinese assistants deserve praise for the excellent manner in which they have fulfilled their duties."

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

L. Von, Great Malvern.—Will our correspondent think well upon the possible dangers of carbolic acid if extensively applied to the whole surface of the skin?

C.—An apprenticeship is not required.

Nota Bene.—Professional education dates from the entrance of the pupil to a Medical school.

L. (*Lincolnshire*) is entitled to a fee of one guinea for every day he may attend the assizes, and also reasonable travelling expenses.

York.—He must be registered, or the certificate will not be received as a legal document.

F. B.—The contract is binding.

CARBOLIC ACID IN NICARAGUA.

Valle-Menier (Nicaragua), September 3.

My dear Doctor,—At the commencement of 1867 the cholera began to spread rapidly in this country, and did not decline until it had decimated, during fifteen months, all the "pueblos" one after the other.

I wrote to M. Menier, who, always full of kindness towards us, sent me from England 600 bottles of liquid carbolic acid, with which I caused all the corridors and interiors of our houses to be watered every day (in the proportion of a tumbler full of acid in a garden can of water), and we have had the happiness to be without a single case to deplore amongst our population, which is never less than 300, whilst at Nandaime, an Indian village half a league from the Valle-Menier, several inhabitants were every day interred.

I do not know if I ought to attribute this result to the properties of carbolic acid which you praise so much, but what I am sure of is, that the period of my water coincides with that of the disappearance of intermittent fever, that dreadful scourge which attacks us four or five times yearly, and that all fleas, chiques, flies, etc., prolific vermin, which multiply indefinitely under our beautiful sun, have disappeared completely from here.

One becomes quickly accustomed to the odour of this acid, which, after all, is an agreeable one; this is at least our experience here.

In agriculture carbolic acid renders me great service by driving away a particular species of ants which lodges itself in the porous wood of the chocolate plant after the pruning of the trees.

I mix a very small quantity with ochre ground in oil, and apply this odorous colour with a brush, and the wound thus treated cicatrises healthily and quickly.

The odour of the acid drives away the ants, and the colour permits the water to slip off, which would otherwise rot the tree, and leave a hole therein. (Signed) A. SCHIFFMANN.

To Dr. Quesneville, Paris.

Philo.—It may be spelt either way.

Alumnus.—It will mainly depend upon the result of the preliminary examination.

B. D.—He can register the qualification; but it will be necessary for him to make a distinct application to the Council on the matter.

A QUESTION FOR MR. GASKOIN ON THE ANTIQUITY OF SYPHILIS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Amongst the canons of the ancient Catholic Church there is one—the 17th of the canons of the Synod of Ancyra in Galatia, held A.D. 315—which has been thought to testify to the existence of syphilis, or, in plainer terms, to the existence of some unclean malady communicable by sexual intercourse. It stands thus in the "Clergyman's Vade Mecum," vol. ii. p. 65 (London, 1710):—"The Holy Synod has charged that they who are guilty of bestial lusts, and have the leprosy that infect others, should pray amongst them who stand exposed to the weather"—that is, should not be admitted within the church porch.

The learned author doubts whether the word λεπρώσαντας refers to persons affected with cutaneous disease, and affecting others with that disease; or whether it is used metaphorically, in the sense of moral infection. But it is only by collecting and comparing every passage relating to this deeply interesting subject that the truth can be arrived at.

I am, &c. S. T. P.

Lex.—Mr. Dalrymple is a member of Parliament. You will find a short biographical notice of Mr. John Dalrymple in the *Medical Times and Gazette*, vol. xxv. p. 471, and in the same volume, at p. 68, you will find our observations on the vote by proxy.

A Candidate.—Unless already in possession of a Medical degree or licence, you will have to undergo an examination in Medicine for the Fellowship of the College of Surgeons.

Portrait of Hewson.—With reference to a notice on this subject in a recent number of the *Medical Times and Gazette*, we are reminded by an old correspondent that there is one prefixed to the edition of his works by Mr. George Gulliver, re-engraved from an old copy in the possession of our correspondent.

PORTRAIT OF HEWSON.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I observe, among the Notes and Queries of the *Medical Times and Gazette* for November 13, that "A Collector" is anxious to find a portrait of Hewson, whose researches on the blood are so worthy of remembrance. If there be any portrait, I think it will be found at Hexham, his birthplace. I well recollect his sister there; and were application made to Thomas Jefferson, Surgeon, at Hexham, the oldest Practitioner in the place, some information on the subject might be obtained.

I am, &c. WILLIAM TURNBULL, M.D.

Huddersfield, November 20.

County Administration Bill (119).—The following draft of a statement relating to the position of gentlemen practising in the lunacy Medical service, is submitted for publication as the basis of a petition to the Legislature:—

"1. That the lunacy Medical service authorised and consolidated under the Lunatic Asylums Act of 1853 forms a public department of officers employed by the State, and provided for out of the public rates and taxes.

"2. That the Medical officers of public lunatic asylums in England have not the same rights and privileges as their brethren who have the charge of the sane poor in the workhouses and elsewhere under the Poor-law Amendment Acts.

"3. That three members of a committee of visitors delegated by the sessions have the power of removing the Medical officer, and of appointing some other person in his place, as in their discretion they may think fit (16th and 17th Victoria, cap. 97, section 55), there being no provision made for an appeal to the Secretary of State, the Lunacy Commissioners, or the Poor-law Board.

"4. That no distinction in this respect is made between the chief Medical officers of asylums and the servants employed therein; that this omission is derogatory to them as members of a liberal Profession, subversive of their legitimate authority as skilled advisers of the committees, and engenders a sense of inferiority and subjection.

"5. That the dependency occasioned by uncertainty of tenure and want of recognised public status is unjust to the individual officer as it is detrimental to the public service; and that it is unreasonable to combine the responsibility of an officer with the insecurity of a servant.

"6. That the Court of Common Pleas having ruled that officers of public institutions occupy them as servants and not as lodgers or tenants, thus disallowing their claims for the franchise and depriving them of civil and municipal rights, the assistance of Parliament is imperatively called for.

"7. That as it is proposed to perpetuate this condition of things by transferring the power of dismissal of the Medical officer to a secret and delegated committee, under the County Administration Bill, it is prayed that no Medical officer of any asylum maintained out of the public rates shall be liable to dismissal without the authority of the Secretary of State being first obtained, and that after an impartial inquiry into the officer's alleged incapacity or misconduct."

MEDICAL CERTIFICATES.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In your paper of the 13th inst. my attention has been called to a paragraph amongst the leading articles relative to the loose mode in which certificates of death are granted by Medical Practitioners.

I can fully bear out the facts, so far as my observations have extended in this country, that not only are certificates of death given without the actual personal knowledge of the party certifying them, but also that the date of the "last visit" (when not known), and the durations of the "primary" and "secondary" diseases respectively, are put down, in most cases, at random. In like manner the certificates of vaccination are frequently granted without being personally aware whether or not the vesicles

are "successful," in number of instances patients at a distance merely sending word that the vaccination has taken effect, and upon that knowledge the certificate is signed. As Medical men in country districts are not paid extra for the trouble of vaccinating a child if they have presided at its birth, it follows that they will not put themselves to extra trouble for the benefit of the State. You will thus observe that registration, as at present practised, is done in a slipshod sort of way, and cannot be taken as an authentic guarantee of the facts of the case.

In order that registration may be more efficiently done, and that it may truly represent what was intended, I am of opinion that there should be a certifying Surgeon for districts (who also might be registrar), and who, in cases of death, should personally visit the body—the information of the decease being communicated to him by the nearest relative, and by the undertaker who may be employed to conduct the funeral, and that he should make the necessary inquiries from the friends as to the age, etc., filling up the schedule, and asking them to transmit it to the Medical man who had been in attendance, with the request that the cause of death may be filled therein, and returned to the registrar within a prescribed number of days—the onus of getting the cause of death filled in and the transmission of the certificate to rest with the friends of the deceased. The duties of the Medical attendant would only be limited to the certifying the illness, and the visiting Surgeon from personal observation that death had occurred.

As regards vaccination, I think some such mode should also be adopted. Let parents have their children vaccinated by whatever Medical man they choose, but make it imperative that the Government inspector be made aware of it, so that he may call or have the child brought to him for inspection, and the certificate from him to be the only legal one. I have been told of Medical gentlemen who have given the certificates signed at the time of the vaccination, with a request that the friends fill in the date if they (the vesicles) should happen to be "successful." In the event of there being Practitioners of "State Medicine," might not this form one of their duties? I hope you will bring this matter before the Profession in order that it may be fully ventilated and remedies suggested, for I am fully persuaded that, unless Medical men are adequately paid for their trouble, or some such mode adopted as suggested above, the registration of vaccination and deaths will be, so far as facts and truth are concerned, "a dead letter." I am, &c. A Practitioner in Scotland.

November 20.

COMMUNICATIONS have been received from—

Mr. G. Cowell; Mr. W. J. Moore, of Rajpootana; Veritas; A. D. O.; Mr. F. A. Bulley; Mr. G. Gulliver; Dr. J. W. Cousins; Dr. Finckenstein; Dr. Matthews Duncan; Dr. Gibson; Mr. Edwin Van Millingen; Dr. Shearman; Mr. T. H. Brocklehurst; Mr. C. West; Dr. W. Turnbull; Quibens; Mr. Hockley; Dr. J. L. Paterson; Dr. F. R. Fairbank; Dr. H. C. Cameron; A Practitioner in Scotland; Mr. E. L. Copeman; Dr. Wilhelm Waldeyer; Medicus; Mr. W. Richards; Mr. James Wilson; Mr. T. Stokes; Dr. H. MacCormac; Mr. T. Bryant; Dr. Swete; Dr. Sutton; Mr. Wanklyn; Assistant-Surgeon Alcock; Dr. Rumsey; Dr. G. Whyte; Mr. J. Chatto; A Subscriber of Three Years; Islington Gazette.

BOOKS RECEIVED—

Bert sur la Respiration—Thorburn on Vaccination—Philadelphia Half-Yearly Compendium of Medical Science, part 4—Dublin Quarterly Journal of Medical Science, No. 96—Norris on the Value of Perchloride of Iron in Post-Partum Hæmorrhage—Squarey's Administration of Chloroform and Nitrous Oxide—People's Guide to the New Law of Bankruptcy.

NEWSPAPERS RECEIVED—

Philadelphia Medical and Surgical Reporter—Edinburgh Daily Review—New York Medical Gazette—Aris's Birmingham Gazette—Colchester Mercury—California Medical Gazette—Birmingham Daily Gazette—Scotsman—Medical Press and Circular.

VITAL STATISTICS OF LONDON.

Week ending Saturday, November 20, 1869.

BIRTHS.

Births of Boys, 1092; Girls, 1093; Total, 2185.
Average of 10 corresponding weeks, 1859-68, 1983·0.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	945	914	1859
Average of the ten years 1858-67	727·5	696·3	1423·8
Average corrected to increased population	...	...	1566
Deaths of people above 90	...	1	1

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-cough.	Fever.	Diarrhœa.	Cholera.
West	463388	...	7	15	...	10	9	5	...
North	618210	3	8	43	2	14	13	4	...
Central	378058	...	1	15	...	4	5	2	...
East	571158	1	16	69	1	24	14	9	...
South	773175	2	18	66	4	17	13	9	...
Total	2803989	6	50	208	7	69	54	29	...

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	30·044 in.
Mean temperature	45·8
Highest point of thermometer	58·8
Lowest point of thermometer	28·9
Mean dew-point temperature	45·8
General direction of wind	W.S.W. & S.W.
Whole amount of rain in the week	0·10

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, November 20, 1869, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the year 1869.	Persons to an Acre. (1869.)	Births Registered during the week ending Nov. 20.	Deaths. Corrected Average Weekly Number.	Deaths. Registered during the week ending Nov. 20.	Temperatur of Air (Fahr Highest during the Week.	Temperatur of Air (Fahr Lowest during the Week.	Temperatur of Air (Fahr Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3170754	40·7	2185	1462	1859	58·8	28·9	45·8	0·10	10
Bristol (City)	169423	36·1	141	76	*89	55·5	30·0	45·7	0·09	9
Birmingham (Boro')	360846	46·1	229	175	163	58·8	31·1	46·6	0·14	14
Liverpool (Boro')	509052	99·7	437	295	286	56·3	38·1	47·4	0·17	17
Manchester (City)	370892	82·7	230	210	*237	55·3	33·0	45·8	0·17	17
Salford (Borough)	119350	23·1	91	60	64	55·7	31·9	46·1	0·21	21
Sheffield (Borough)	239752	10·5	153	126	144	57·0	34·5	46·7	0·04	4
Bradford (Borough)	138522	21·0	105	71	64	50·6	34·5	48·2	0·01	1
Leeds (Borough)	253110	11·7	232	129	138	58·0	35·0	48·9	0·18	18
Hull (Borough)	126682	35·6	103	59	72	55·0	29·0	43·5	0·00	0
Newstl-on-Tyne, do.	130503	24·5	101	69	68	...	...	...	...	...
Edinburgh (City)	178002	40·2	117	86	111	57·7	34·0	47·8	0·40	40
Glasgow (City)	458937	90·6	326	268	320	...	...	...	...	...
Dublin (City, etc.†)	320762	32·9	142	158	139	61·0	32·5	48·6	0·32	32
Total of 14 large Towns	6546587	35·5	4592	3244	3754	61·0	28·9	46·8	0·15	15
Paris (City)	1889842	...	...	...	900 Week ending Nov. 13.	...	...	...	...	...
Vienna (City)	605200	...	...	...	310	Week ending Nov. 13. ...	...	40·3	...	...

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 30·044 in. The barometrical reading increased from 29·76 in. on Sunday, Nov. 14, to 30·35 in. on Thursday, Nov. 18.

The general direction of the wind was W.S.W. and S.W.

Note.—The population of Cities and Boroughs in 1869 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous.

* The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

† Inclusive of some suburbs.

APPOINTMENTS FOR THE WEEK.

November 27. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m. King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 1½ p.m.

29. Monday.

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 1½ p.m.; St. Peter's Hospital for Stone, 2½ p.m.

Medical Society of London, 8 p.m. Mr. Spencer Watson, "On a Case of Traumatic Cataract with Glaucomatous Symptoms." Dr. John Cockle, "Further Notes on Pulsating Tumours of the Neck."

30. Tuesday.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.

December 1. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.

Society of Arts, 8 p.m. Meeting.

2. Thursday.

Operations at St. George's, 1 p.m. Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

Harveian Society, 7½ p.m.: Special Council Meeting. 8 p.m.: Dr. Broadbent, "On Relapsing Fever."

3. Friday.

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

ORIGINAL LECTURES.

LECTURES ON EXPERIMENTAL AND PRACTICAL MEDICINE.

By BENJAMIN W. RICHARDSON, M.D., F.R.S.

ON ARTIFICIAL RESPIRATION.(a)

Gentlemen,—I ask your attention to-day to the study of artificial respiration, the principle and the practice. I can indulge little on this subject in matters of history. Vesalius inflated the lungs of animals for the purpose, as it would seem, of re-establishing the action of the heart when respiration has ceased, but the attention of the Profession was most forcibly called to the process in the second half of the seventeenth century by the great physiologist Hooke, who showed before the Royal Society the experiment of restoring the motion of the heart in a dead animal by means of inflation of the lung. The experiment at the time was startling to the beholders, and was instructive in more directions than one. By it Hooke illustrated prominently the restoration of the action of the heart. He illustrated further the fact that in the transit of the blood from the right to the left side there is change from the arterial to the venous colour, when the lungs are undergoing inflation with air; and, lastly, he illustrated that actual inflation of the lung was not necessary if air were admitted in current, for he proved that if the surface of the lung were pricked with a lancet the blood which exuded was of arterial hue so long as air was being passed into the lung by the act of inflation. It is remarkable how soon these experiments and provings of Hook passed out of recollection. William Hunter lectured on the lungs precisely as though he knew nothing about their function, and the practical process of artificial respiration up to which the researches of Hooke directly led was apparently not brought into use until long afterwards. Fothergill, I rather think, was the first advocate of the process, his recommendation being for mouth-to-mouth inflation in the case of persons who were drowned. In time the process began to be studied by the Royal Humane Society, and we are much indebted to that society for the efforts they have from time to time made to bring the method towards perfection.

But even now the subject is little understood. The operation of inflation, the instruments required, the method of procedure have received little attention; and, in fact, I know of no work in which anything like a true and comprehensive article upon artificial respiration is to be found. For this reason the value of the process has been held in little repute on the one hand, while, on the other hand, it has been praised in terms of laudation which are absolutely absurd. I wish in this place to give to the process its just value.

Inventions of Methods.

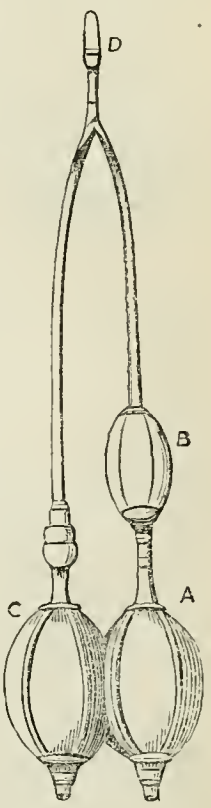
The interest taken by the Royal Humane Society to perfect artificial respiration led both directly and indirectly to the invention of easy and ready methods of carrying out the process. John Hunter was an early inventor. He constructed a double-acting pair of bellows, of which I have made a model. These, which we may call Hunter's bellows, act remarkably well; but they are clumsy, and could never be brought into use as instruments to be applied at a brief notice according to the daily wants of the Practitioner. The construction is simple enough. A common pair of parlour bellows are divided in the middle of the chamber by a diaphragm of wood, so that, in fact, two distinct chambers are formed, each of which, however, communicates with one common exit tube or pipe. The upper part of one of these chambers has an opening into the air, valved in such way that when the bellows are opened the air rushes into the chamber and charges it with fresh air. The upper part of the opposite chamber has also an opening into it, but this is so valved that air can only escape from it when the bellows are being closed. The exit or common tube is, lastly, valved in such a manner that the air from the chamber which fills with common air escapes by it when the bellows are being closed, while it admits air freely into the other chamber when the bellows are being opened.

In using these bellows, the nozzle of the exit tube is placed in the nostril, and the bellows are worked in the ordinary way. Each time the bellows are expanded one of the compartments is filled with atmospheric air, the other with air derived from the cavity of the lungs. Whenever the bellows thus charged are closed, the pure atmospheric air is forced into the lung, and the impure air derived from the lung is driven into the outer atmosphere. In most of my earlier experiments I used these bellows, and with many satisfactory results. A pair of bellows similar to those invented by Hunter were afterwards brought out in France, and were called the "adnoptic bellows." They were, I believe, for a time adopted by the Humane Society. About thirty years ago Mr. Read, the Surgical instrument-maker in Regent-circus, Piccadilly, invented a very ingenious apparatus for artificial respiration. In principle this apparatus was similar to the bellows of Hunter, but, instead of ordinary bellows, two brass syringes were employed, from one of which air was driven into the lung, while into the other air was received from the lung, both actions being produced by a single motion of the hand. Mr. Read's apparatus was remarkable for the precision with which it worked, for, the pistons being graduated, absolute measured quantities of air could be introduced into and removed from the lung at pleasure. At a meeting of the Westminster Medical Society, the late Dr. Snow allowed his mouth and nostrils to be closed entirely so that his respiration might be sustained by the pure action of the syringe. The objection to the apparatus was its size; it could not be rendered portable for the common uses of the Practitioner.

Owing possibly to the difficulty of making a portable instrument, the adoption of bellows and syringes fell into disuse. They have been supplanted in later times by the method known as the "ready method" of Dr. Marshall Hall and by the more recent method of Dr. Sylvester. The systems of these observers are too well known to require description at length. In Dr. Marshall Hall's plan a gentle movement of the body, from the front of the chest to the side, empties and resupplies air. In Dr. Sylvester's plan a movement of the arms from and to the side fulfils the same purpose. It is to be admitted at once that by either method sufficient air is introduced into and removed from the lung to represent natural respiration perfectly, while no mechanical injury can readily be inflicted on the lung structure. Further it is to be admitted that, in cases where no other means are at command, they are excellent methods, and one or other should always be resorted to. At the same time they are both open to an objection: they interfere with the movements of the heart. I find by experiment, that is to say, and the point will be better illustrated further on, that when the heart is brought down to a very feeble action, from suspension of the respiratory power, the slightest thoracic pressure is sufficient to arrest action altogether.

Recognising this difficulty, I have myself within the last few months constructed successfully a pair of bellows which act as well as the Hunterian model, and which have this advantage, that they can be carried in the pocket, and are, in fact, as portable as need be. The bellows consist, as you will see, of two india-rubber hand bellows, which may be joined together or may be separated according to choice. I usually have them joined. The bellows terminate in one common tube, which we will call the nostril tube, and each bellows contains four cubic inches of air. The bellows are so valved, that when, after being compressed together, they are allowed to expand, the one fills with common air, and the other, when the nostril tube is inserted in the nostril, is filled with air from the lung. During compression, after filling, the air in the bellows containing pure air is driven into the lung, while the air in the bellows containing impure air is expelled into the common atmosphere; one bellows is, in fact, exhausting, the other supplying. To the supply bellows is added a small bag or reservoir, very elastic; this prevents undue tension of air upon the lung.

Fig. 1.



A, Feeding bulb.
B, Reserve chamber.
C, Exhausting bulb.
D, Nostril tube.

(a) Delivered on Tuesday, November 2.

In applying these bellows I proceed in the following way:—I introduce the nostril tube into one nostril, so that it shall fill the nostril completely; then I close the other nostril with a grasp of the finger and thumb, and having carefully closed the mouth, I commence to inflate. If the chest of the subject be small, as, for instance, the chest of a newborn child, I work both bellows at the same time; but if the chest be large—the chest, for instance, of an adult man—I make five consecutive strokes with the bellows which fill the lung, and then three consecutive strokes with the bellows which empty the lung. In this way natural respiration is very carefully imitated; the lung can be filled and emptied ten times in the minute, and no danger of mechanical injury from the action is incurred.

Value of Artificial Respiration.

The value of artificial respiration has been very differently, and I think very imperfectly, estimated. Some have considered it nearly useless, unless it has been applied immediately after the cessation of respiration. Others have assumed that it may be successfully employed several minutes after respiration has entirely ceased; the actual truth lies nearer to the first proposition; but even that, I find from experiment, may be exaggerated. Success or failure of success depends, in fact, on several circumstances, which require to be enumerated in detail, and which are best considered by naming the causes which lead to failure. Firstly, then, if, from the mode of death, the heart has failed simultaneously with the respiration, a lapse of a very few moments suffices to render the process useless. I have, like Hook, seen the motion of the heart restored by inflation of the lungs, but never after a full interval of thirty seconds of cessation on the right side. Secondly, even where the action of the heart may be continued, if, from the cause of death, the vessels of the pulmonary tract have undergone contraction, the process is of little avail. Now, in death from some common agents this contraction occurs; in death from chloroform, for example, we have constant evidence of the phenomenon, the lungs being left white and practically bloodless. Thirdly, before the action of the heart has positively ceased, the blood on the right side may have undergone coagulation, upon which the propelling power of the heart is exerted upon a mechanical obstacle, and by necessity artificial respiration utterly fails. Fourthly, the blood, though it may circulate, may be in a condition unfavourable to oxidation, even in presence of air, and again artificial respiration may be useless, however promptly applied. Lastly, in some forms of death there seems to occur a sudden and fatal change in the nervous centres, with the intimate nature of which we are as yet altogether unacquainted, but which determines as faithfully as when the medulla oblongata is mechanically injured. Thus, *in limine*, the value of artificial respiration is considerably limited. To insure its success, there must be motion of the heart, open pulmonary vessels, fluid blood, and natural condition of nervous centre.

Modes of Death Favourable and Unfavourable to Artificial Respiration.

Great differences in the success of the process of artificial respiration follow on difference of mode of death. This fact might be inferred from the conditions necessary to success which have been stated above, but we have to turn to the details of practice to become fully alive to the whole of the truth in this respect. If you were to put in my hands half a dozen or more fluids or vapours by the action of which the animal life might be suspended, I could predict with much certainty in how many cases the application of artificial respiration would be efficacious in restoring life. I will enumerate briefly some of the observations which seem to me to be clear on the point now in question.

I notice, then, at first, that artificial respiration is most successful when the agent which causes death by arresting the respiration is negative in its action. Thus the agents in form of gas or vapour from which recovery is most easily effected are nitrogen gas, hydrogen gas, nitrous oxide gas, marsh gas, and vapour of methylic ether. After these come heavy carburetted hydrogen, carbonic acid, and vapour of common ether. From death after the inhalation of any of these substances, recovery (as a general rule) may be secured if the natural respiration has not ceased longer than from 90 to 110 seconds before the artificial respiration is commenced.

The reason why respiration is readily restored after death from the administration of the agents I have named is, I think, clearly from the circumstance that the agents are more or less truly inert. Received into the lung, and finding their way by diffusion into the blood, where they replace a portion of the gases belonging to the blood, they inflict no more injury than such displacement; they do not stimulate muscular action; they cause no contraction of vessel; they do not by their presence produce any disorganisation of blood; and they cause no molecular change in nervous centres. When, therefore, they destroy life, the process of destruction is due to changes incident purely to prolonged arrest of function, not to any chemical change excited by the direct action of the agent upon the structures with which it may come into contact. The immunity from death which occurs so repeatedly in the human subject subjected to the influence of nitrous oxyde gas, may be traced in this way to the negative action of the gas; the gas does not combine, it does not disorganise, it does no more harm than the process of arresting respiration, for a brief period, by the gentle application of a garotte.

The success of artificial respiration, even in those cases most favourable to its application, is not, however, uniform, but is modified by various accompanying circumstances: for example, an animal with a loaded stomach, and, on the other hand, an animal long deprived of food, will in either case recover much less readily than will another animal of the same kind whose stomach is not distended, but who has recently had food, or is not exhausted from the want of it. Again, a young animal will recover more readily than one of middle age, and one of middle age more readily than one of advanced age. Further still, if the artificial respiration be carried on at a very low or at a very high temperature of air, the success will be less perfect than if the temperature were at 60° or 65°. Lastly, and this is a very interesting fact to remember, the perfection of result will be influenced in no small degree by the period of time that has been employed in producing the death. The rule in this respect is sharp, well defined, and it is to this effect that, no mechanical injury being inflicted on the lung, the rapidity of recovery is in proportion to the rapidity of the process of death. Hence for skilful experimental illustrations of the value of artificial respiration, the experimentalist cannot in reason bring natural respiration too quickly to an end. If he cause the time of death to be prolonged, he will have much less chance of restoring respiration naturally, and when he has restored it he will find the animal recovering very slowly. I see some new research as lying open based upon this curious observation—a research which may tend to illustrate the lingering effects of slowly developed diseases—but I am not prepared to dwell on this subject now.

Other negative agents than gases, I mean such agents as water, when by immersion in them respiration is brought to a standstill, lead to increased difficulties. Whether this be by the entrance of a little of the fluid into the bronchial passages or by the pressure of the fluid on the body I am not quite sure, although I incline to the former view. At all events, I find that after drowning artificial respiration is much less efficient than it is in the cases I have cited above, unless the temperature of the air used for artificial respiration be considerably raised, say to 100° or 120° Fahr.; then not unfrequently, recovery is rapid, from the circumstance, as I imagine, that the elevated temperature leads to quick evaporation of the water with which the bronchial surface is unnaturally charged. The observation suggests an important rule bearing on the treatment of the drowned—namely, that attempts to restore respiration should, whenever practicable, be carried on in a warm air. All receiving-houses for the drowned ought to be provided with a special room where the temperature of the air is raised and maintained at 120° Fahr.

Vapours and gases containing chemical elements which do more than simply replace air, which produce direct or indirect functional disturbance, are more serious obstacles to the success of artificial respiration. All the chlorides are in this way specially injurious, and the proportion of injury bears relation to the amount of the injurious agent present in the compound. Thus, keeping to the chloride series, chloride of methyl gas, while it is more determinate towards fatal action than any of the gases I have previously named, is less serious than bichloride of methylene vapour; while the bichloride vapour is less dangerous than that of chloroform, and chloroform vapour is less than that of tetrachloride of carbon. The increase of danger from these substances is easily traceable. They not only cause insensibility, but they excite muscular contraction, and, what is more, they excite muscular contraction of blood-vessel, so that mechanical resistance to the circulation of the blood is a result. The extreme pallor of the lung after death from chloroform is a striking demonstration of the truth thus noticed.

When more active chemical agents than the organic chlorides are brought to bear on the respiration and produce arrest, the

consequences are still more serious. I refer to such agents as the vapours of nitric or hydrochloric acid, for now, in addition to the muscular contraction, there is change induced in the blood—that is to say, the process of coagulation is quickened, and even before respiration has actually ceased, a fatally obstructing coagulum of blood may be deposited in the heart or in the pulmonary circuit.

I have not time to dwell longer on the various details which favour or oppose the success of artificial respiration. If I have succeeded in laying down general principles, I am content; the details will occur to you all.

Mode of Application of Artificial Respiration.

I will now proceed to demonstrate, by one or two experiments, the best and most successful mode of applying artificial respiration. For this purpose we will subject an animal to the action of methylic ether gas, will allow it to go to sleep, and then to inhale the gas until all respiration has ceased. We will also so time the inhalation that the cessation of respiration shall occur within four minutes from the commencement of the inhalation. (The experiment was performed.) The animal has now ceased to breathe. I take then the pocket bellows and introduce the nostril tube into one nostril; next, seizing the side of the bellows which empties the lung, I make one or two strokes so as to empty the lungs of their contained air, and this done, I grasp both bellows and commence to fill and empty the lung very gently, watching the effect produced upon the chest. (The process was continued for three minutes.) In this case I have no response, and my experience tells me that I shall have none. I have either by a little haste inflicted some mechanical injury on the structure of the lung, or I waited too long before I commenced the artificial respiration, so that the right side of the heart had time to become arrested. We will therefore, repeat the observation on another animal, taking care, after the respiration has ceased, to begin our efforts towards restoration of life more speedily, and be more carefully delicate in manipulation. (The experiment was repeated as proposed.) Now, the respiration having again ceased, I will, as before, first empty the lung, and then alternately empty and fill with air. (The artificial respiration was continued for about a minute and a half, when the animal recommenced to breathe naturally.) The animal, you will observe, of its own volition, has made an inspiration, and now my efforts must instantly be brought to a close. I withdraw the nostril tube, and leave the animal to its fate: the result in nearly every case will be perfect recovery. (The animal in this experiment continued to breathe as in sleep for some minutes, and before the close of the lecture had recovered. In both cases a rabbit was the subject of observation.)

Reviewing this last experiment, let me particularly call your attention to two practical facts applicable to all cases where the artificial method is resorted to, whether the subject be a man or a lower animal. The first fact is, that the introduction of air, after the emptying of the chest, cannot be too gentle; the second, that so soon as the natural respiration is set up, the artificial respiration must be allowed to cease.

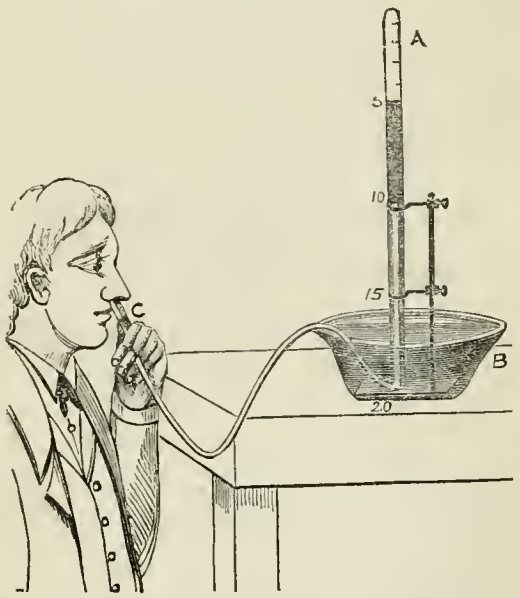
The demand for attention to these two details is based on the consideration of what I have elsewhere called the balance of the respiratory and circulatory systems. I mean by this the balance of pressure between the blood impelled into the pulmonary circuit by the right side of the heart and the air drawn into the air-passages of the lung by the action of the inspiratory muscles. In health this balance is perfect, and the integrity of the vascular structure of the lung depends upon the continuance of this perfection. If we break this balance by cutting off the supply of blood through the pulmonary artery, the respiratory movements remaining in full power, the result is undue pressure, or rather unresisted pressure, of air and emphysema. If, on the other hand, we break the balance by cutting off suddenly the supply of air, the motion of the heart continuing the same, the lung is left to the unresisted pressure of blood, and the result is congestion of lung. When Hooke's famous experiment is under observation both these conditions of lung from rupture of balance can be demonstrated perfectly to the eye. When, then, from accidents leading to arrest or suspension of the respiration, the power of the heart is reduced to the lowest, when the organ all but ceases to beat, it is necessary to restore the respiration with so much gentleness that the two systems shall be restored. Press air forcibly into the lung at this moment, and rupture of the vascular structure is a necessary consequence. The point of practice, in brief, is simply to fan the little remaining current of blood which is making its way over the pulmonary surface for aeration, and so soon as ever the muscles of the animal take on the merest action, so as to continue the process, to let them do the work without any artificial aid; they will assuredly be equal in power to the embarrassed heart, and the two powers will soon be working upwards and in harmony.

The whole meaning of artificial respiration, the whole value of it, may be truly and yet simply illustrated by the experiment of putting out and relighting a lamp. I take here the microscope-lamp, known usually as the Queen's reading lamp; I place a damper on the chimney when the light declines; I wait some seconds, and then, removing the damper, drive a little air through the chimney—and see, the flame revives. I repeat the process of nearly extinguishing the flame, and once more I give air; but this time I give the air more determinately, and the result is utter failure, so that now I have put out the lamp altogether. Childish as this experiment may be, it is one which should never be forgotten when artificial respiration is under practice; the remembrance of it tends to subdue the desire to effect more than is required.

Quantity of Air Required.

It is a point of some moment to know the quantity of air which it is necessary to force into the lung at each movement by artificial respiration. I have therefore paid some attention to this subject, and I find that for a man, the vital capacity of whose chest shall be, say, 376 inches, the supply of air required for keeping up the residual air and for supporting natural respiration is from twelve to fifteen cubic inches only. Here is an apparatus I have constructed for determining the amount of air which is removed and re-supplied by each completed respiratory movement of my own chest. The instrument consists of a tube closed at one end and

Fig. 2.



A, Tube. B, Reservoir for water. C, Nostril tube.

immersed in a reservoir of water at the open end. The tube is half filled with water, and is graduated into spaces of five cubic inches each. I place these two tubes firmly in my nostrils and close my mouth, so that no air can enter or come from my lung except through the tubes. I conjoin the tubes and connect them with another tube, which passes into the measuring chamber. I breathe now in the ordinary way, without effort, and, as you will see, I displace, in expiration, barely thirteen cubic inches of water, and take up in inspiration barely fifteen cubic inches of air. Fifteen cubic inches of air for the adult man at each inspiration is, therefore, a sufficient quantity for sustaining natural life, and it is sufficient to introduce into the lung at one time for the purpose of artificial respiration. With the small bellows which I have placed before you, three cubic inches of air can be put into the lung by one stroke of the receiving bulb: it is necessary, consequently, in using them on adults, to keep the nostril which is not occupied with the tube closed, and to close the mouth. Then, by making five strokes of the receiving bulb, the chest will be gently and efficiently charged

with air. Three strokes of the emptying bulb may now be made, and the nostril being unclosed for a moment, the process of refilling with pure air may again commence. Thus in the minute the chest may be charged with pure air ten times; more is not demanded. In the case of young children both bellows may be worked at the same time, exactly as I worked them in the process of restoring to life this small inferior animal.

Before I conclude the present demonstration I should like to point out that artificial respiration has yet to be carefully studied as a means of cure in many other cases than those which are cases of accident and emergency. There are some very important known facts which prove that artificial respiration may be applied successfully for keeping the animal organism alive for considerable periods of time, when but for this aid it would inevitably and rapidly die. The experiments of Morton and of Marshall Hall relative to the value of artificial respiration in poisoning from woorara are in point on this subject, as are also the suggestions of Brodie relative to the application of the process for the recovery of persons who are under the influence of a poisonous dose of opium. Here, moreover, is another relative fact which I can demonstrate very easily by experiment. I let two animals of the same size sleep nearly to death in air charged with the vapour of chloroform. I then let one sleep actually to death in the vapour; the other I make breathe the same air, but I supply the air artificially through the bellows, and this animal does not die so long as I am supplementing its respiration. If I were to stop for half a dozen seconds, the heart probably would stop, and there would be death, for the muscles of respiration are dead already. But with the artificial assistance I could sustain action for many minutes, and, what is more, I can, under these circumstances, on withdrawing the chloroform and supplying pure air only, bring back the natural respiration and bring back life.

Practical truths such as these may be applied to our daily work with the greatest success now that the means of success are so conveniently at command. In all cases of administration of chloroform or other anæsthetic we may, armed as we now are, command immediate danger and remove it. Finally, in slower disease, where death is near, say from severe spasm of the chest or from bronchial spasm, or even from failure of respiratory power, we may often save life by calling into play this simple artificial aid.

ORIGINAL COMMUNICATIONS.

CLINICAL SURGERY.—No. V.

ON DISEASES OF THE KNEE JOINT.

By THOMAS BRYANT, F.R.C.S.,
Assistant-Surgeon to Guy's Hospital.

(*Continued from page 596.*)

PART I.—SECTION 2.

OF DISEASES OF THE KNEE-JOINT IN WHICH RECOVERY TOOK PLACE WITH A MOVABLE ARTICULATION.

CASES OF ARTICULAR OSTITIS OF THE KNEE ENDING IN RECOVERY.

CASES of traumatic as well as of idiopathic synovitis having been given, with others of the pulpy disease, to illustrate the clinical symptoms by which these diseases are to be recognised, and the treatment that should be pursued, I propose now to quote some few examples of articular ostitis of the bones entering into the formation of the knee-joint, confining my attention to such cases as underwent recovery with a sound joint.

One remark must, however, be made respecting these cases, and that is, that the epiphysis of the femur is, as a rule, involved with the epiphysis of the tibia. The patella seems to be affected very rarely; indeed, this bone, with its special synovial joint, is often excluded from disease where the larger synovial cavities and epiphyses are extremely affected. On the other hand, we occasionally find the patella involved in disease where the large joint is free. A typical case of this affection will be given with an illustration as we proceed.

Case 13.—*Expansion of the Epiphyses of Knee-joint—Recovery.*

Alfred N., aged 9, a delicate-looking boy, was brought to me at Guy's Hospital on May 10, 1866, for some affection of his right knee. It had been coming on for ten months. Pain in the part of a dull aching character was the first and only symptom, the pain at times being more severe. It was always worse after he had been running about. In three months the parents noticed the joint was larger, and since then both symptoms had increased.

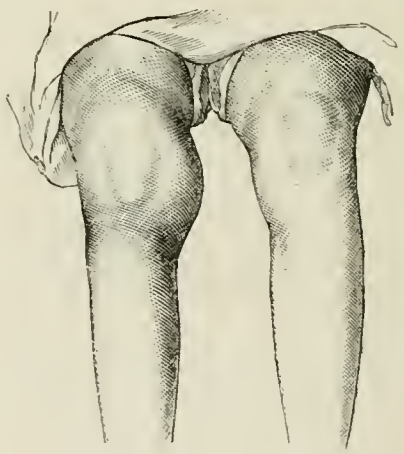
When seen, the epiphyses forming the right knee were generally much enlarged. They were as large as those of an adult. There was no effusion into the joint, and all its movements were perfect and painless. Pain was excited at once when the boy stood or walked, or upon firm pressure being made over the bone. The soft parts were healthy. The right knee measured nearly eleven inches, the left nine inches and a quarter.

Absolute rest was ordered, the child on no account to put the foot to the ground, although he might move the joint. Fomentations were advised, with water-dressing. Tonics also were given.

In three months, there was much less pain in the joint, and firm pressure could be borne. In another four months all symptoms of disease had disappeared. In August, 1868 (twenty-seven months after his application), both knees were of the same size.

Case 14.—*Articular Ostitis—Expansion of the Epiphyses of the Bones entering into Formation of the Knee-joint—Recovery.*

Fanny R., aged 8, came under my care at Guy's Hospital on February 25, 1867, for an enlargement of the right knee-joint. It had been coming on for three weeks after a blow, and was associated with pain of a dull aching character, and periodical heat in the part. When seen the joint was clearly larger than its fellow from expansion of the articular extremities of the bones, more particularly of the femur; it measured eleven inches, against nine and three-quarters on the sound side. There was no effusion into the joint or thickening of the soft parts over the bone. The drawing well shows these points. The



Drawing illustrating the local appearances of the knee-joint, the subject of articular ostitis or expansion of the epiphyses.

joint moved smoothly, without pain; but firm pressure over the bones caused pain. The joint was hotter at night than the sound one. The child was directed to abstain from walking or standing. Fomentations to the joint were advised, and tonics ordered. In six months the symptoms were much improved; the joint was much smaller, and could be manipulated firmly without pain; all excess of heat had been absent for several weeks, and the aching pain had ceased. In another six months the child was declared to be well. The epiphyses were still, however, larger in the affected limb than in the sound one; but free use of the limb could be made. No relapse took place.

Case 15.—*Expansion of Epiphyses of Knee from Articular Ostitis.*

Anthony T., aged 16, came under my care at Guy's on January 30, 1868, for an enlargement of the right knee-joint. It had been coming on for three or four years, and commenced with pain. Swelling subsequently followed, or rather enlargement, and this steadily progressed. When seen the epiphyses of femur and tibia were much enlarged. They formed two globular masses. There was no effusion into the joint, and all its movements were complete. Walking, however, or firm pressure over the bone, excited pain. At times the joint became very hot. The right knee measured thirteen and a half inches, the left twelve. Fomentations were ordered, and directions given that the weight of the body should not be supported by the limb. Tonics were given. On April 22 the

parts were much improved. There had been no pain in the joint or extra heat for one month. On July 10 no signs of active disease could be seen. The epiphyses were still large; but it was clear that some years must elapse before complete recovery was secured. This boy was seen six months subsequently, and was still well. His sister had been under my care for disease of the knee in 1865.

Case 16.—*Articular Ostitis—Expansion of the Articular Epiphyses of Bones of Knee-joint—Recovery.*

Frederick T., aged 4½, came under my care at Guy's Hospital on March 25, 1867, for some affection of his right knee. It had been the seat of a constant aching pain for many months, but the parents thought little about it, regarding the pains as growing pains. For the last few days, however, they had observed that the joint looked larger than the other. When he came under observation the right knee was clearly much enlarged, but not from effusion into the joint or about the joint. The articular extremities of the bones were much expanded, the condyles of the femur being particularly so. There was increase of heat about the part, and towards night the mother stated the joint "burned." The articulation moved freely and smoothly. Firm pressure over the bone caused pain. Fomentations were ordered and tonic medicine, the child being directed not to stand or walk. No splint was requisite. In two months all increase of heat had subsided, as well as the pain, and by August 15 the knee had clearly somewhat diminished in size, and there were at that time no symptoms of disease. On October 10 the child was quite well. On June 15, 1869, no change for the worse had taken place.

Case 17.—*Chronic Inflammation of Epiphyses entering into Formation of Knee-joint—Recovery.*

Clara C., aged 8, came under my care on May 30, 1859, for a disease of the left knee of two years' standing. When first seen the joint was much enlarged, evidently from expansion of the bones entering into its formation, but there was no effusion into the joint or evidence of any synovial disease; the joint moved freely. Firm pressure over the bones caused pain, and walking was attended with a limp. Rest was ordered, but no splint. Tonics were given, and the joint was strapped up with Scott's ointment. She remained under my care for one year and a half, and was discharged cured, the joint at this time having been restored to its normal size. Movement of the limb was allowed from the first, but the patient was not permitted to bear her weight upon it.

Remarks.—These cases of articular ostitis are only a few out of many that I might extract from my note-book to illustrate the early stage of the disease with its clinical symptoms, and the good effects of early treatment. It will be observed that in every instance local pain of an aching character was the earliest symptom, and that this pain in the majority of cases had lasted for many months before any perceptible change in the formation of the joint was observed by the patient or his friends. It is true that a Professional eye would probably have noticed some change at an earlier period had attention been drawn to the part, or had a comparison been made between the sound and affected joint. Still it was certain that no such alteration in size could have existed as we have already shown occurs in synovitis or in the pulpy disease. The great clinical fact remains therefore to be remembered that in articular ostitis an aching pain, often miscalled "growing pains," is the first symptom of the affection. The attention of the Surgeon having been directed to a joint in which this local pain has existed for many months, it will be well, perhaps, to consider briefly the local changes he may expect to find, for it is without doubt in the knee that they are seen to the greatest advantage, and that they can be made out with the greatest facility. The affected joint, as has been already mentioned, should invariably be compared with the sound one. When articular ostitis exists, to the Surgeon's eye it will be readily made out that more or less expansion of the epiphyses exists. This expansion may be so slight that measurement will hardly make out the increase, yet to the eye it will be clear and evident. In other cases it will be so great that the circumference of the joint may be two inches or more greater on the affected side than natural. The skin over the bone at the same time will be natural, and there will be no indications of effusion within the synovial cavity, the local changes clearly being confined to the bones entering into the formation of the joint. It should be mentioned, however, that to the hand the affected knee will feel hotter than the sound one, and that although there will be no pain on superficial pressure, deep pressure will excite suffering. The joint at this stage of the disease will move smoothly and freely, no signs of joint mischief existing. The symptoms, however, are enough to show that, if neglected and not arrested, the worst form of joint disease will, sooner or later, show itself; for suppuration of the joint, the result of articular ostitis, is, without doubt, the most intractable form of joint mischief the Surgeon has to deal with.

Treatment.—What is the treatment that should be employed in the early stage of this disease?—that is, when simple expansion of the bone, with pain and heat, are the only local symptoms. How is joint complication to be avoided? The cases I have given tolerably clearly indicate the answers to these questions. Walking or standing is positively to be interdicted; anything like pressure between or upon the affected bones is to be forbidden, for it not only excites pain, but it keeps up the disease. This point of practice is most essential. Fomentations with warm water, applied two or three times a day, and dressings of the joint with strips of bandage dipped into warm water, are also valuable local applications. They give comfort to the patient, and help recovery. They are the only local means I now use as long as extra heat exists in the affected joint. Blisters, moxas, or any counter-irritants I rarely employ, having found greater benefit from the practice I have just mentioned. When heat has gone and local pain disappeared, when clinical evidence tends to show that all inflammatory action has subsided, and the results and products of inflammation alone remain, pressure on the part as applied by strapping seems of great use. It not only gives comfort to the patient, but appears to help the absorption of the inflammatory products and the subsequent cure of the disease. During this time constitutional treatment is not to be forgotten. Tonic treatment is, as a rule, needed, and in children the phosphate of iron, in the form of the syrup, combined with cod liver oil where it can be taken, is a favourite recipe. Where the appetite is bad quinine may be given, or any other form of tonic medicine. Good food should always be administered and pure air inhaled, the iodine in a perforated box being employed where the rooms are close and confined. Mercury is never needed as far as my own experience has gone.

Cases illustrating the Existence of Two or More of the Affections that have been just described.

In the preceding pages uncomplicated cases of synovitis, of pulpy disease of the synovial membrane, and of articular ostitis have been freely quoted, each affection having its own local characteristics and manifesting its presence by tolerably definite clinical symptoms. Each case was uncomplicated with any other affection, and happily ran its course, guided by Surgical treatment, to a successful issue. It must not, however, be thought that this uncomplicated condition always exists, for it unquestionably does not; daily practice too often proving that inflammation in one tissue, if not arrested in its early stage, will surely, sooner or later, involve another, and that when the disease is allowed to progress or cannot be stopped, all the tissues of a joint will become diseased, if not disorganised. It may, however, be stated that simple chronic synovitis may continue for many years without causing much material change of structure in a joint, although in acute synovitis the most rapid disorganisation we ever meet with is a common result. Also that in the pulpy disease of the synovial membrane the cartilages may disappear and the bone become exposed; yet these changes will only occur when the pulpy tissue is breaking up and suppuration has taken place, the surface of the bone when affected alone showing evidence of disease.

But when the bones are primarily affected, when articular ostitis has gone on untreated or uncontrolled, the synovial membrane will at some period of the affection show evidence of disease. It may be simply by excess of effusion into the synovial cavity, or it may be by the exudation of plastic lymph into the synovial membrane itself. When these complications occur the disease assumes a most serious aspect, for in too many cases it indicates the progressive nature of the affection, and forebodes a breaking up or disorganisation of the joint. These points will, however, be illustrated at a later period.

What I propose now to do is to quote one or two cases in which disease spread from the bones to the synovial membrane. In one case chronic synovitis manifested itself, in another the pulpy synovial disease. Yet in both a good recovery ensued, the joint recovering its normal conditions.

Case 18.—*Articular Ostitis of Knee, with Subsequent Synovitis.*

Louisa N., aged 9, came under my care at Guy's Hospital in 1864, with chronic expansion of the epiphyses of the right knee. It had been gradually coming on for about a year, pain of an aching character being the only symptom

complained of. There was no effusion into the joint, although the articulation measured 1½ inch more than the left. By rest, fomentations, and tonics, all heat, etc., subsided in about six months, and after two years there was little difference to be seen between the two joints. Too much exercise, however, upon it brought on a swelling, which was clearly a synovitis of a chronic nature, and this proved very difficult to deal with; indeed, at the present time there is fluid in the part, but no osseous enlargement.

Case 19.—*Disease of the Knee-joint—Articular Ostitis and Pulpy Disease of the Synovial Membrane—Recovery with a Good Joint.*

Emma H., aged 7, came under my care at Guy's Hospital on March 27, 1865, with a disease of the right knee-joint of six months' standing. It had come on with pain and limping after fatigue, and had enlarged only for about two weeks. It was hot at night. When seen, the joint was clearly enlarged. It measured in circumference nine inches and three-quarters, while the sound joint measured only eight and a quarter. The bones were evidently much expanded, and there was some little thickening of the soft parts over them. There was no effusion into the joint.

Fomentations and tonics did good for a while; but some slight relapse occurred, without any assignable cause, on June 12. This, however, readily subsided, and everything went on well towards recovery. On November 12 the report states that there had been no increase of heat for three weeks, and the joint appeared to be nearly well.

The parts were ordered to be strapped up. From this time, with one or two slight relapses, everything progressed slowly but satisfactorily towards recovery. On May, 1866, the joint measured only nine inches, this being nearly one inch less than it had been. All signs of synovial disease had disappeared, and the movements of the joint were perfect. The muscles also were in a good condition.

In March, 1867 (two years after her first application), this child was brought to see me, and she was quite well, the parent stating that for the last four months the limb appeared like the other.

Remarks.—The two cases I have just briefly detailed illustrate very well the point I wished to bring forward—that articular ostitis uncontrolled may be followed by synovitis either of a simple kind or of the pulpy description. In the first case, the clinical history clearly indicated that the bone was the tissue primarily involved, for pain in the part and limping, without apparent enlargement of the knee, had existed for some months, and the swelling when it appeared showed itself somewhat rapidly. The bones were clearly made out to be enlarged, and the synovial membrane thickened, when the patient came under observation. In the second case the articular ostitis had existed for many months under my own observation, and a chronic effusion into the knee-joint took place. The articular ostitis subsequently disappeared, the bones becoming of their normal size; yet the synovitis remained, and was very troublesome. In both cases, however, the integrity of the joint was preserved, and a good recovery followed.

SCIATICA: ITS IMMEDIATE RELIEF AND RAPID CURE BY HYPODERMIC INJECTION OF MORPHIA.(a)

By HENRY LAWSON, M.D.,
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The history of sciatica is, it must honestly be confessed, the record of pathological ignorance and of therapeutical failure. It presents to us a blurred page whereon we find traced the results of confused reasoning, incomplete generalisation, hasty observation, and unphilosophic methods of treatment. From the circumstance that the affection itself is rarely fatal, it has failed to arrest the entire attention of the great masters of our art, and because of the fact that the patient who is afflicted with it loudly demands relief, its treatment has seldom been pursued with that persistence in any one remedy which is so essential to the drawing of just and reliable conclusions. Being a disease in which a symptom is essentially the leading feature, so far at least as our knowledge yet extends, it has been often confounded with other maladies, such as rheumatism and morbus coxæ, and, being connected with a supposed degenerate condition of the nerve-trunks, it has been, with questionable justice, grouped with that vague class of diseases, neuralgia. Hence the reason why we so frequently hear of obstinate sciatica, for it cannot be hoped, so long as no definite method is followed in either the study or the treatment of disease, that much in the shape of useful therapeutical result is likely to be achieved. In sciatica, more perhaps than in any other malady of equal gravity, therapeutists, it seems to me, have erred in not confining their treatment to the simple phenomena of the disease. Notwithstanding the one or two autopsies which are reported in our annals, and which throw a very uncertain light on the pathology of sciatica, indicating that there is an alteration of the neurilemma of the nerve, I think it will be admitted by those who wish to see Medicine based on a solid foundation of fact, that there is no convincing evidence as to the actual state of the sciatic trunk in this affection. I do not fear any contradiction in asserting that even now we know nothing of the pathology of sciatica. It is clear, then, that if this be so, any special line of treatment on *à priori* grounds of this kind has the doctrine of chances quite against its success. To my mind, it is no less clear that, in reference to the etiology of sciatica, we experience nearly an equal difficulty in laying down anything like a clear and comprehensive statement. And this, I opine, is true whether we regard the disease from the standpoints of sex, age, temperament—if I may be permitted the expression—state of nutrition, or occupation of the sufferer. I am disposed to conclude provisionally, from a large number of cases *pur et simple*, that sciatica is a somewhat special affection, and that its only relation to what are generally regarded as neuralgic diseases, such as the tic douloureux, etc., lies in the circumstance that in the two cases pain in the direction of nervous trunks is experienced, for in neither origin nor character of pain nor in the results of treatment can I see anything to warrant the association of sciatica with what is generally known as facial neuralgia.

These, then, being my opinions—and they are opinions based on no hypothesis—it will be readily understood by those who admit them why the subject of this paper has till of very late years proved one of the most torturing and intractable maladies in the long category of human ailments. To be brief, the simple fact that all we really *know* of sciatica—to wit, that it is a pain in the course of the sciatic nerve—has been ignored is the reason why the disease has been so long deemed incurable. Men have had an abhorrence of what they call treating symptoms, and thus, forsaking the substance of unquestionable phenomena for the shadow of hypotheses evolved out of their moral consciousness, they have failed to cure a disease whose cure is now among the certainties of therapeutics. In my belief, the symptom of sciatica is, so far as we now know, the whole disease, and by arresting this symptom we remove the affection. I should be very sorry for a moment to allege dogmatically that sciatica is "nothing more than pain";(b) but the pain is all that we recognise of the disease, and I *know* that by removing the pain we in due time, with the utmost certainty, cure the disease, whatever its hidden nature may be.

It may be as well, perhaps, at the outset to explain both why I have taken up sciatica as a subject for a communication to our leading Medical journal, and why I have expressed such very decided opinions as to the fallacy of the method of treating it hitherto in vogue, and the vast importance of attending to one symptom—that of pain. I must mention, then, that I am myself an old sciatica sufferer, and that in my own person I have supplied what I believe to be the most obstinate and dangerous case of this affection that I am acquainted with. I shall give the details of my case among the records of typical instances at the end of this paper, but *en passant* I may mention that the pain along the course of the sciatic persisted for more than six months; that it first reduced me to the employment of crutches, and then absolutely prevented locomotion; that the

(a) It may be as well to state that in advocating the method of treatment described in the following article I lay no claim whatever to originality. I merely give the results of my experience of a remedy which is as simple as it is effective. The application of the syringe to the hypodermic method we owe, I suppose, to Hunter and Wood. The hypodermic administration of morphia in sciatica was urged by Dr. Blakiston in these pages nearly fifteen years ago. It is too much the custom now-a-days to father upon a writer the discovery of a remedy or plan which he has merely taken secondhand from another, but which he may have been more successful than his predecessor in popularising; and writers themselves too frequently encourage the mistaken inference. This has happened so often of late that one almost despairs of that moral regeneration in Medical writers which leads to the discrimination between reticence and candour.

(b) *En parenthèse*, I may remark that pain must, upon all physical grounds, be the expression of some minute abnormal molecular (possibly undulatory) change in the tissue. Anything, therefore, which removes the pain without production of other disadvantageous results must be beneficial. To argue, then, against the treatment of a symptom as unphilosophic is, it appears to me, to reason from premises which are not only unsound, but are clearly refutable.

limb became permanently flexed and terribly wasted; that nearly every remedy in the Pharmacopœia, and many out of it, were tried in vain; and that at last, under the advice of Mr. Ernest Hart, subcutaneous injection of morphia was attempted, and with the most signal and immediate success. Indeed, I am not outstepping plain matter of fact when I assert that to the method of treatment proposed and most patiently carried out by that gentleman I owe my restoration to health. For six months I had hardly known what sleep was, notwithstanding the administration of opiates three and four times a day. Appetite was utterly lost; physical power was prostrate; mind, through long suffering, was enfeebled to that degree that I look back upon that period of my existence with astonishment and horror. I was, indeed, fast sinking into the grave, a victim to what the philosophy of modern Physic styled a symptom, and which it was not considered necessary to deal with in any but a secondary degree. Five minutes after the first injection of morphia I experienced the only case I had known for nearly seven months, and I need not say that by a continuance —necessarily protracted in so grave a case—I was in a few months restored to perfect health. From that moment I determined to seek out cases of sciatica, and afford to the suffering that blessed relief from pain which only those who have gone through many dreary nights of sciatic agony can realise. I have now accumulated over thirty cases of true sciatica; and while I have found other remedies do less or more benefit to the patients, I have never found any effect a cure and remove the pain except the salts of morphia, administered hypodermically and locally. They have never failed. In some instances they require to be maintained and persevered in; but they give instantaneous and effectual relief. They never impair nutrition —indeed, they promote it indirectly, and in recent cases they effect a cure so rapidly that the result seems almost like a charm to the pain-worn patient. I trust, therefore, that those who may at first sight think that my observations savour too much of confidence and are devoid of requisite caution, will remember that the circumstances of my own sufferings have led me to give concentrated attention to sciatica, and have taught me the necessity for, as the lawyers would say, "confining myself to facts," which perhaps in the case of any other affection I might have failed to do.

General Characters of Sciatica.

In describing the general characters by which the affection may be recognised, it is as well to begin with those which force themselves on the attention of the patient, and which are sometimes called symptoms. I prefer to speak of the features of the disease in this way, as I think the term "symptoms" has many objectionable qualities which render it inexact; and I have no desire to coin a new word, seeing the lamentable superabundance of unprecise technicalities with which the accepted terminology of Medicine hampers scientific progress. The indications, then, of disease which manifest themselves to the patient are primarily pain; stiffness, soreness or tenderness on motion or pressure, loss of muscular power, permanent contraction of limb, coldness of surface, and apparent anæsthesia, may all or any subsequently present themselves in cases of true sciatica; but pain is the chief, and in acute cases generally the sole peculiarity. In most works in which sciatica is dealt with, it is included under the head of neuralgia, and the general description of the pain is one of those specialisations which are so much to be regretted. Writers have had before their mind the type of neuralgia proper —tic douloureux—and out of this special form they construct the definition of sciatic pain. I call attention to this because it is not only an error in fact, but because it leads often to mistaken diagnosis. It is not at all true, save in rare cases, that the pain of sciatica is intermittent in the accepted sense of the word; nor is it correct to say, as some writers do, that it is a sharp, acute, thrilling pain like that of facial neuralgia. It is nothing of the sort. The pain in sciatica is, in bad cases, of great severity; but it is a constant, heavy, absorbing pain—a pain on which the mind of the patient is unceasingly fixed—a pain which renders any prolonged posture quite impossible, and which is relieved, but only temporarily so, by change of position, and most distinctly when the patient is recumbent, by flexing the whole limb. It is not a pain which compels the patient to rush from one side of his chamber to another in a state bordering on frenzy; but it is one which makes him peevish and irritable, which precludes him from any continuous occupation, whether of work or pleasure, which is, so to speak, perpetually gnawing at him, and which completely deprives him of appetite. It is a pain which, as the patient will tell you, runs along down the thigh — in one or two cases I have seen the direction reversed—but if you question him you will find that its course is not the rapid, darting, shooting current of neuralgia, but is simply a pain which extends with moderate rapidity from one point to the other. But it is always a constant pain. It will often be found that it is severe to a degree that is intolerable, and sometimes it may seem even endurable, but these alternations, if they exist at all, will be found most irregular, and they are most commonly absent. As to the starting-point of the pain, there is no rule to be laid down. Mostly the upper third of the sciatic is the part complained of, but now and then the pain is at first located in the knee, or even in the ankle or calf, and sometimes it begins almost at the ischiatic notch. In all cases, however, of pure sciatica, it is sure to be found after a while distinctly along the course of the sciatic nerve, beginning at a point about midway between the sacro-iliac synchondrosis and the great trochanter, and extending along the outer side of the thigh to the knee-joint. It may at first seem to the Physician, from the replies of the patient, that the pain is worst at night, but a little careful observation will dispel the idea. I would dwell on this fact, because in a large number of gonorrhœal and syphilitic cases the pains are decidedly more "racking" at night than in the daytime, and should be distinguished from those of sciatica, if only for the reason that they are relieved by iodide of potassium, while the pain of sciatica certainly is not. I have, indeed, seen a case of sciatica rendered materially worse by the administration of the iodide, which was given on a confused notion of the pathology already alluded to. It will soon be learned, at least from an intelligent patient, that the circumstance of his being left to the sole contemplation of his sufferings is the reason why the pain appears greater at night. If he lies down on a sofa during the daytime and tries to sleep, he will, as might be imagined, complain that his pain is worse than it was before, while he was even partially diverted by conversation. If the pain has existed for some days, the patient will be found much lamed, and probably will be compelled to use a stick in walking. He will complain of pain in moving the limb, and will be found walking on the toes in order to admit of that flexion of the limb which appears to give relief. Should this state of things have continued for a fortnight or so, the flexion will have become permanent, extension will be impossible on the part of the patient, and forcible extension will be attended with much pain. If the case be an old chronic one, extension can only be effected gradually. Any attempt to straighten the limb would, I feel assured, be attended with rupture of tissue of a serious nature.

Besides this peculiar pain—which, by the way, unlike that of facial neuralgia, comes on at first somewhat gradually, and by no means very severely—and the lameness already described, there are various other characters, which, though unperceived by the patient, are perceptible enough to the Physician. These are tenderness of particular parts on pressure, wasting of the muscles, coldness of the surface of the extremity, slight anæsthesia, and, in very rare instances, possibly complicated with other nervous diseases, hyperæsthesia also.

Of all these the most frequent, as they are the most readily recognised, are the tenderness and the wasting. Whatever may be the significance of tender points over the ver cbræ in neuralgia proper, it must be confessed that in sciatica, as a rule, this tendency to exhibit spinal points of tenderness is not shown. In some few cases where the pain is almost confined to the upper third of the nerve, and where the most sensitive part is apparently the point of exit, there certainly is found tenderness in a well-marked degree over certain lumbar and sacral vertebræ. In the majority of cases, especially where the disease has not had a career of many months' duration, no vertebral soreness or "tenderness on pressure" can be detected. But it seldom happens in decided cases of this disease, in which the pain has lasted for some days, that tenderness in the direction of the nerve does not exist. If the Physician follows out the course of the nerve from above downwards, pressing firmly with his thumb, he will soon come to a point where the patient cries out that he is "hurt." As I have already said, this will commonly be in the upper third of the course of the nerve, and will lie along a line of from two to four inches. In some cases, however, and particularly in those of long standing, the whole course of the nerve will be found very tender on pressure.

Wasting of the limb is only found in protracted cases, where there has been lameness for a long time. In these it is exceedingly distinct. It is necessary to bear in mind the fact that the atrophy is the sequel to disuse of the limb, because it helps us to avoid some of those enticing, but dangerous, speculations anent the relation of the nutrition of the limb to the condition of the nerve. I have no desire for a moment to deny that the nutrition

of the muscles of the thigh may be dependent on the influence of the sciatic nerve, but I think it is more in consonance with physiological fact and clinical experience to regard the nutrition of the muscle as the concomitant condition of its exercise. In cases of sciatica with lameness the muscles sometimes for a whole year or more are allowed to fall into disuse, and they waste away. In other cases of sciatica there is no wasting worth mentioning. The question is one of no mean import, since the hypothesis to which I object is urged in support of one still more visionary—viz., that sciatica is an affection of the central nervous system.

Leaving theory aside, it will be seen in well-marked cases that there is very great flattening of the buttock of the affected side, and the whole of the flesh of the thigh will seem flabbier and distinctly thinner and less rounded in outline than that of the healthy limb. The patient should be made to lie upon his belly, and the difference between the two sides will then be apparent almost at a glance. In cases in which the wasting has not advanced very far the first thing which will strike the eye of the observer is, not the diminution of the muscle, but the apparent increase of the bony prominences, and especially of the *sacro-iliac synchondrosis* (a point of utmost importance in diagnosis, as I shall show when on this part of the subject); but a little trouble in comparing the "processes" and handling the flesh of both sides will leave no doubt in the mind of the Physician.

Anæsthesia is also a sign of the disease present in cases of some duration. It is never marked in pure cases to any absolute extent, but if we take compass points and compare the cutaneous sensibility of the two limbs we shall obtain a well-drawn balance of sensibility on the part of the unaffected thigh. This indication is, if I mistake not, also urged by "central mischief" theorists in support of their doctrine, but I cannot see upon what grounds it is employed; there is clearly diminished circulation in the whole limb, for reasons already stated, and I think we have in this condition a sufficient explanation of the phenomenon without evoking the grave hypothesis of degeneration of structure in the cord.

Temperature is another point deserving of notice of the student of sciatica, though, of course, it is of little value as a sign of this affection. If a delicate thermometer graduating fractions of degrees be carefully attached to the surface with adhesive plaster, and in this way the temperature of the two limbs be taken, the temperature of the suffering limb will be observed to be lower by some fractions of a degree than that of the healthy one. This, again, is adduced in favour of central mischief, but, as I have said, it finds a sufficient explanation in the disuse, diminished circulation, and hence generally decreased nutrition of the whole extremity. It is not met save in those cases in which the pain of locomotion is so great that the leg is kept as far as can be in constant rest.

(*To be continued.*)

REMARKS SUGGESTED BY A CASE OF ENCEPHALIC HÆMORRHAGE.

By Dr. CLIFFORD ALLBUTT,
Of the Leeds Infirmary, etc.

In a large number of cases of encephalic hæmorrhage, I have had my attention called to certain common symptoms of it which are, it seems to me, very hard to explain. They are not hard to explain on the conceptions of apoplexy which are passing away,(a) but they are hard to explain on those new conceptions of it which I hold in common with most modern authors, and which Dr. Jackson has so well set forth in "Reynolds's Medicine." I shall best propose the question by some allusion to a case of apoplexy which I am now attending occasionally.

Mrs. ——, aged 58, of somewhat full habit and lax fibre, but otherwise seeming healthy, had complained to Mr. S. Hey, during the past two or three years, of symptoms denoting mal-nutrition of the brain. Her urine was not albuminous, but her heart sounds suggested vascular degeneration, to which Mr. Hey attributed her symptoms. They passed off under appropriate treatment, and she seemed healthy until a few days ago. She then was seized with ordinary right hemiplegia with complete aphasia, the clot being of some size, but exercising no great pressure upon the hemispheres. At the moment when I now write, she has just safely weathered the reaction which Dr. Hughlings-Jackson would call "cerebral fever." Her pulse was full, bounding, and running up to 120, more or less, and her temperature ranged (at highest) about 102·5°. This state of danger we modified by repeated small doses of digitalis and the usual diet and regimen.

This case showed very remarkably how necessary it is, in taking the heat of a hemiplegic patient, not to place the thermometer in the axilla of the palsied side. Though the increased temperature often seen in freshly palsied parts is, I think, noticed by careful writers, yet it is not generally mentioned even in recent text-books, and it is not well enough known to insure the practice of taking the heat on the sound side. In our patient the temperature in the axilla of the palsied side has been from 1° to 2° F. higher than on the sound side; on my last visit we found the temperature thus:—Palsied side, 100·2°; sound side, 98·6°. The day before Mr. Hey tells me the difference was slightly greater. Had we not been aware of this, and had we taken the temperature on the palsied side, we might have been far misled. The radial pulse on the palsied side is softer and fuller, and the right cheek flushes. I shall discuss these and the many kindred facts of vascular paralysis at another time. Allow me now to ask why Dr. Hughlings-Jackson is so anxious to restore the expression "cerebral fever" to common use. Fever is a state of body sometimes arising after a disturbance of the whole body, sometimes arising after a disturbance of some part or parts of it; it may result, say, from the absorption of scarlatinal poison, or, on the other hand, from injury to any such parts as the leg, lung, or corpus striatum. But, so far as I am aware, the quality of the fever, as fever, is uninfluenced by its mode of origin, and it consists universally, as I take it, in a very few definite phenomena of which elevation of temperature is the chief. Whether it follow a general or a local disturbance, therefore, its nature is the same. But it may be urged, the phenomena of the fever remaining essentially the same, their modes of appearance may vary; for instance, the heat curves of fever following an injury to the leg may be constant, and different from the heat curves of fever following an injury to the lung, and both these may again differ constantly from another uniform set of curves which indicate the fever following an injury to any part of the encephalon. Were this the case, it might be said that such terms as leg fever or encephalic fever conveyed accurate and distinct impressions—impressions more adequate and more definite than the word fever taken alone. But I have yet to learn that such is the case; indeed, I know that lesion of the same part of the encephalon may give rise to fevers describing very different curves, while fevers of like curves may equally follow encephalic injuries and injuries elsewhere. Hence the adjective "cerebral" conveys to my mind no distinct or useful qualification of the word "fever" in any case; on the other hand it is obviously of great inaccuracy in another way, when applied to the fever following encephalic injuries not cerebral—following, that is, injuries of the cerebellum or of the great central ganglia, as in the present case. I never, therefore, agreed with Trousseau's attempt to revive the old French term cerebral fever for the reaction following encephalic lesions, as for similar reasons I should refuse to praise any leading English Physician who should endeavour to restore the old-fashioned English term "pleuritic fever" for the reaction following mischief in the pleura. So much in the way of a little quarrel with my generous and learned friend Dr. Jackson. The next, and, indeed, the chief question I wish to discuss in reference to the present case of Mr. Hey's, is that of "premonitory symptoms." They differed little from such symptoms in other cases, and for this reason I wish to consider them. For three or four days before she was struck down, this lady had exhibited evidences of failure in the very parts which are now stricken. For instance, she misused words, and stopped in the middle of sentences. It is clear that she did this, but no one could recall examples of it; indeed, it unluckily happened at this time that she was alone at home, with the exception of her household servants. However, she certainly wrote a letter to her husband three or four days before her attack, which consisted of four or five lines, not one word of which could be deciphered. The direction was legible and correct, except that she omitted the initials of her husband's christian names, the surname being written alone. It seems probable, too, that at this time, three or four days before the fit, she was occasionally weak in the right arm, for the domestic who was in the habit of bringing the post bag to her noticed on one morning that she made no attempt to use her right hand, but unlocked the bag clumsily with her left hand. Some peculiarities of manner and certain

(a) On the supposition, that is, of determination of blood to the head, and the like.

unusual actions were noticed by other servants, and discussed by them, though they were stupid enough not to send for her Medical adviser.

At length, about five days after the first symptoms of failure, she was found in the early morning lying on her bed, hemiplegic and speechless. There was no conclusive evidence as to the time she had lain there. Now it seems to me almost a new inquiry when I ask what was the state of this poor lady's brain during those four or five preceding days, but can any question be more important, whether we ask it as pathologists or therapeutists? What is the explanation of "premonitory symptoms of apoplexy?" I do not mean such premonitory symptoms as mere dizziness, etc., which are of a general character, and may well denote some general disturbance in the encephalic circulation, but such special symptoms as language failure, transient hemiplegia, etc., which seem to denote loss of function in certain definite masses of nerve tissue. How is it that these masses were so curiously arrested as if by a sense of their coming injury? Say that their nutrition had long suffered by means of the diseased artery which was about to break; still how curious that such a "softening" and parting of fibres should, in this as in so many other cases, synchronise with the coming destruction by hæmorrhage! Can it be that before a massive hæmorrhage there ooze little preliminary bleedings into the tissues? I scarcely think we have much evidence of this; hæmorrhage enough to injure speech, destroy writing, and cause transient palsy, must be something large enough to amount to an apoplexy, and to give alarm in a lady who had many people about her. Moreover, such repeated hæmorrhages, however small, must have had something of an ingravescent character about them, which was not the case here. I have two suggestions to make: one is that the vessel, before bursting, may, in cases with "premonitory symptoms," become bulged aneurismally,(b) and so for a day or two exercise an intermitting pressure upon surrounding parts; the second, and on many grounds the more probable one, is that a somewhat sudden closure or plugging of the artery, with consequent arrest of distal nutrition, not infrequently accompanies the giving way of the coats of the artery, and thus precedes the final rupture externally. It may be that some obstruction in the artery, such as the displacement of a bit of atheromatous or calcareous stuff, is often the actual cause of a hæmorrhage by damming up the current in a diseased vessel, which then yields at its weakest point, such point in too many cases being not the plug.(c) The immense importance in therapeutics of such questions as I have now raised, makes but another example of the bearing of a true pathology upon successful treatment. If this poor lady had been seen by Mr. Hey at the very first moment of functional failure, might she not have been spared the subsequent hæmorrhage, or spared at least much of its violence?

REPORTS OF HOSPITAL PRACTICE

IN

MEDICINE AND SURGERY.

ST. MARY'S HOSPITAL.

TWO GUNSHOT ACCIDENTS TO THE EYE IN TWO MEN—VISION LOST WITHOUT THE EYEBALLS HAVING BEEN DAMAGED EXTERNALLY.

(Under the care of Mr. HAYNES WALTON, Surgeon to the Hospital, and Surgeon in charge of the Ophthalmic Department.)

Two cab-drivers, accidentally shot about their faces with small shot, at a pigeon-shooting ground, by the discharge of the same gun, were admitted into the Accident Ward of St. Mary's Hospital. Each man had shots about the sides of his head and face, and each had an eye wounded. Some of the shots were at once removed from both patients. In one of the men, aged 30, a shot had passed through the upper eyelid, and must have struck the outer part of the eyeball, but there was not any wound. The conjunctiva, ocular and palpebral, was red, and the vision was nearly destroyed. In the other the lower eyelid had been drilled, but the shot had merely struck the sclerotica, marking it, but it had not entered; the surface of the eyeball was red, and sight seemed to be entirely lost. In both cases the pupils were clear and the irides active. The patients were kept in bed, and local cold applications ordered, with the occasional addition of opium to allay the pain.

We gathered from Mr. Walton's remarks upon his visit that these were just the cases of which it used to be said that vision was lost from concussion of the retina, but that in fact it was due to some mechanical alteration within the eyeball; that there was no such thing as concussion of the retina without injury to that membrane any more than there was concussion of the brain without some injury to it or its coverings, which was readily discoverable when there was an opportunity afforded for the search. He had never seen vision destroyed or much damaged from a blow on the eye, or in its vicinity in the face or head, without being able to discover some displacement of parts within the eyeball, or effusion of blood, or laceration or inflammation of the intra-orbital structures, and one or more of these he would no doubt find in each of these cases. In a few days, when the eyelids were less swollen, and the conjunctivitis diminished, the patients were taken to the ophthalmoscope room, their pupils dilated, and the eyes carefully examined.

The younger man's sight had improved, inasmuch as he could now see objects which were placed in a certain direction. Mr. Walton at once diagnosticated detachment of the retina—a condition which was confirmed by the ophthalmoscope. The greater portion of the retina on the outer side of the eyeball, corresponding to that part of the eye which was struck by the shot, was detached, and the vitreous humour was a little hazy.

Within the eye of the other patient was detected a large clot of blood lying not far behind the crystalline lens, and which in all probability proceeded from the ciliary region. It is just here that blood is generally effused when it is extravasated from a blow on the eye.

These cases possess value as showing how much damage may accrue to the eyeball from a blow on its surface, although the sclerotica be not penetrated. They also show the great importance of examining the eye, in every case of injury in which there is impaired vision, for diagnosis as well as for prognosis.

The patient with the detached retina is irrecoverably damaged. Some German authorities say that when the retina is slightly detached by some traumatic cause it may fall back into its place, and leave vision scarcely affected. If this happens at all, it can be only quite exceptional, and when but a very little is separated. Detachment from idiopathic disease always increases.

The patient with extravasated blood was recovering his vision from day to day as the clot was absorbed. Such cases do recover. Both men left the Hospital prematurely, and have been lost sight of.

INFLAMED IRREDUCIBLE UMBILICAL HERNIA IN A FEMALE.

(Under the care of Mr. HAYNES WALTON.)

When a patient is brought to a Hospital with a large umbilical protrusion, much inflamed, and very tender and painful, and with a history of vomiting, there is almost sufficient evidence of a strangulated hernia. Nevertheless, with all these symptoms, strangulation may be absent.

A middle-aged woman was carried into the ward, with an umbilical hernia as large as three fists, apparently made up of twisted lobes—a character of these herniæ—with a somewhat constricted base, and with the symptoms mentioned above. Of the history very little could be learned, but it seemed probable that there had been a rupture for many years, a part of which sometimes returned into the abdomen.

When Mr. Haynes Walton had examined the case, he declared it to be one of inflamed irreducible hernia. He came to this conclusion because the inflammation evidently had its origin in the hernia, and there was not any abdominal peritonitis (although this would have soon followed); because, although the patient had been sick, it was for once only, and then merely the ordinary stomach contents were brought up; and because there had been a small fluid evacuation not long since. He pointed out that an umbilical hernia of such a size was scarcely ever seen save in very large and very fat women, whose bellies were enormous, and he alluded to the general tendency displayed by the contents of these herniæ—chiefly omental—to become adherent. This was the third case of the kind which Mr. Walton had met with lately, the two others having occurred in private practice. They were all so exactly alike that the description of one would serve for all. He dwelt particularly upon the importance of making a correct

(b) I do not refer to the "miliary" aneurisms of M. Charcot. I have failed in all cases to find them, and Dr. Sankey, who is so excellent an authority on such matters, tells me he has not found them. At the same time M. Charcot's statements must have very great weight with all pathologists.

(c) There was no hypertrophy of the heart in the present case.

diagnosis, because operations in these cases are so frequently fatal. The coverings under the skin are very thin, consisting merely of peritoneum and a layer of fascia, and recovery after a whole year's been opened is almost unknown. In the present case a large number of leeches were applied to the swelling, which seemed worth mentioning. Ice was kept constantly to the part afterwards. Slight purgatives were given, and the patient kept in bed in order to relax, as far as possible, any tension of the abdominal parietes. The enormous abdomen was, with the same object, supported on either side. More leeches were applied a second time, and the ice kept on more or less constantly during three weeks. In two days from the commencement of this treatment the active symptoms had abated. There was no longer pain, the tenderness was much lessened, and the swelling was perceptibly reduced. Improvement was noted from day to day. When the patient left the Hospital at the end of a month, there was left a hard thick mass projecting a couple of inches, which seemed to seal up the abdominal aperture. The bulk of the tumour, which had presented a twisted appearance, had completely subsided, and left a purse-like mass of contracted skin. The hernia must have been purely omental.

MEDICAL COLLEGE HOSPITAL, CALCUTTA.

CASE OF GUNSHOT FRACTURE OF THE THIGH—RECOVERY.

(Under the care of Professor PARTRIDGE.)

W. A., a Mohammedan lascar, aged 25, admitted into the Medical College Hospital on February 11, 1868, with a gunshot fracture of the right femur. About eight p.m. on February 10, twenty-four hours before his admission into Hospital, while carrying a message from the tug steamer to which he belonged to the telegraph office on Saugor Island, he tripped against the string of a tiger trap, such as is often set across the jungle paths of the locality; the ball, an ordinary musket ball, passed through the right thigh, fracturing the bone about the junction of its middle with its lower third, and afterwards traversed the soft parts of the other limb anteriorly, without, however, touching the bone. At the time of his admission he was in an extreme state of prostration, partly from the hæmorrhage and shock of the accident, and partly from the fatigue of the voyage up the river, a distance of upwards of eighty miles. On introducing my finger into the wound in the right thigh, I found a nearly detached fragment of bone, which I removed; it embraced the whole thickness of the shaft of the femur, and measured about three inches in length. I could not detect any other loose fragments, nor did the ends of the bone appear to be splintered longitudinally; the great vessels were uninjured, and the contusion of the soft parts appeared to be confined to the track of the ball. Under these circumstances, I determined to endeavour to save the limb. As a temporary arrangement an ordinary long splint was applied, the wound being previously dressed with carbolic oil; a stimulant mixture was ordered to be administered every two hours, and nutritious food to be given at short intervals. On the 13th the ordinary long splint was replaced by an interrupted long splint, leaving the site of the fracture easily accessible. For some days there was considerable local pain and swelling, great restlessness and high fever, the pulse rising to 136, and the temperature in the axilla to 102°; under the influence, however, of diaphoretics, morphia at bed-time, and occasional aperient enemata, these symptoms began to subside, and by the 18th of the month the greater part of the sloughs had separated, and the wounds were assuming a healthy appearance; by this time the pulse had fallen to 96, and the temperature to 100°. The wounds were dressed with carbolic oil, and the track of the ball syringed twice daily with a lotion containing two drachms of carbolic acid to the pint of water. A slight superficial bed-sore made its appearance about this time on the right buttock, but, being carefully attended to, did not spread. During March the patient continued steadily to improve, his appetite returning, the pulse falling to 96, and temperature to 99°, and the whole track of the ball becoming clean and granulating. In April the wound on the inner side of the thigh nearly healed, but the wound on the outer side had to be enlarged to give free exit to a local collection of matter. The pulse during this month fell to 72. In May a loose piece of bone was discovered; chloroform was administered, and the fragment removed. From this time he rapidly improved; union began to be established between the fractured ends of the bone, and the discharge from the wounds rapidly diminished. In October an ordinary long splint was substituted for the interrupted splint, as giving more steady and equable support. By December the union of the fracture was complete; in January the splint was removed, and on February 3 the patient was discharged in excellent health, with a useful though necessarily much shortened limb.

I am inclined to attribute much of the success in the treatment of this case to the steady use of disinfectants in the dressings; the track of the ball, whilst permeable was carefully washed twice daily with a watery solution of carbolic acid, and the wounds were throughout the treatment dressed with a mixture of carbolic acid and oil.

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Medical Times and Gazette.

SATURDAY, DECEMBER 4, 1869.

THE STATISTICAL METHOD, AND SOMETHING BETTER.

In another column of this day's *Medical Times and Gazette*, in the course of a review of Mr. Swain's excellent work on the knee-joint, will be found some observations on statistics, which we should be very glad to see enlarged and illustrated by further examples. Let us at present draw attention to the twofold division of the subject which our reviewer has laid down. The enumeration of facts is one thing, the drawing of inferences another. The enumeration is a thing which ought to be done in every practical art, in faith that, as time advances, plenty of valuable inferences will come out self-evident from a number of instances so large that all variations and errors shall neutralise each other. But it is certain that the accuracy and extent of the numbers collected in any statistical inquiry are by no means a necessary guarantee of the soundness and relevancy of the inferences which may be attempted to be drawn from them.

It is always a misfortune when statistics are appealed to prematurely. In the infancy of any art or condition, whilst instances are few, they are liable to variations, and until operative processes are completed and perfected it is impossible always to avoid a series of unfavourable cases. Such were the first cases of ovariotomy, and such, probably, will be the first of any new operation whatever. No conception can be condemned offhand because it cannot at once be realised.

The first Thames Tunnel took years to complete, and cost nearly half a million; yet Brunel's conception was a grand one. Tunnels were not condemned, and now with improved "operative procedures," as the Scottish Surgeons phrase it, Mr. Barlow is finishing a Thames tunnel in a few months for less than a twentieth of the cost of the first. Neither a large number of initial failures, nor even a series of unsuccessful cases subsequently, ought to condemn an operation if the result aimed at is a good one, and if in competent hands a series of

cases are recorded which show that the operation need not be unsuccessful as a rule. We will urge attention again to what our reviewer says of the statistics of excision of the knee, and will add that this operation should not be judged of merely by the average mortality, be it 1 in 3 or 1 in 5, of a series of cases performed at different times by different people; but when we know that Humphry has had 39 cases with 2 deaths and 28 recoveries with useful limbs, H. Lee 11 cases with 1 death, and Butcher 6 cases with no death, we learn what can be done with well-selected cases well treated by good Surgeons.

The worst of an appeal to figures is, that they are capable of being sorted, cooked, and manipulated, so as "to make the worse appear the better part." Even so, when Moses and Aaron turned their rods into serpents before King Pharaoh, the king's magicians did the same; and it is not always that evident truth, like Aaron's rod, comes at once to swallow up the fictitious reptiles. In fact, there are some cases in which the accumulated experience of mankind, backed by the knowledge of those natural laws, immutable by man, which modern science has made known to us, guides us to conclusions which statistics may confirm, but cannot rebut. If, for example, any number of instances were told us of "fasting women" so called, who went on for weeks without food, and without losing weight, although they gave out a given quantity of urea, carbonic acid, and water daily, reason will force us to doubt the competency of the observers rather than believe in the failure of natural law. The same if the statistics of some old undrained town are alleged to prove the wholesomeness of breathing cesspool air, and drinking sewaged well water.

The same may be said regarding Sir J. Y. Simpson's statistics of the comparative mortality of amputations in crowded Hospitals and in isolated dwellings respectively. Any one who looks at the matter from the standpoint of a knowledge of natural law and some Hospital experience, will say, not that Sir J. Y. Simpson's statistics are true, but that they must be true, and would be incredible were they other than they are. What is wanted is the "*cæteris paribus*"—the assurance that two series of cases differ only in this—viz., that one series has been operated on in air free from septic pollution, and the other series in a Hospital ward. The former cases must in a long series be more successful than the latter; otherwise all that modern science has taught us of the causes and effects of putrescence is a myth.

The writer of these remarks never can forget his first visit to a Hospital. When ten years old, he was taken into a provincial Hospital. The air of the place on entering was simply stunning. It was not that it could be smelled merely, but it could be tasted and felt—a compound of stinking feet, suppurating wounds, sour poultices, bad breath, night stools, and cooking, mitigated by the smell of the drugs in the laboratory. It was his privilege to see many a case of erysipelas in those wards in later years, and never could he be persuaded that what was noisome to a novice could ever be wholesome to anyone. Any attempt to show that the emanations of any one Hospital patient can be harmless to any other Hospital patient, even though supported by statistics, may be fairly met by saying—We know what Hospital air can do on the large scale; military Surgeons have written in vain, and although some series of cases may be gathered in which the effects are scanty, or capricious, or at a minimum, we refuse to unlearn what reason, and natural law, and large experience teach of the unwholesomeness of Hospital air, though mitigated by cubic space, ventilation, and carbolic acid.

THE ORIGIN OF SYPHILIS.

Our article on the origin of syphilis having elicited some most valuable communications on the subject, we are tempted to again refer to Finckenstein's book. This author undoubtedly lays some stress on the letter of Peter Martyr, in which are described the alleged syphilitic symptoms of Arias Barbosa, Greek Professor at Salamanca. The letter in question exists in the earliest edition of Martyr's work, of date 1530, and Morejon says "it cannot be later in date than 1488." It is urged against its authenticity that there was no professor of Greek at Salamanca before 1518; still, Barbosa is elsewhere [illegible] his visit that "Catedratico," which does not differ great[illegible] be said that vision of that in fact it was Professor. Other works, as one by Louis Bathomano, and a song of an early date, also serve to bear out the conclusion that syphilis originated in Europe. Still Finckenstein rests his belief on other grounds, especially on the silence of the very earliest writers on syphilis—Pintor, Torrella, and Almenar—as to its American origin; whilst he shows Diaz de Isla to be the reverse of a trustworthy authority. Some of the earliest authors, again, assign a French origin to the disease. Sanchez, who long ago adduced Peter Martyr's letter as all-important, ultimately gave it up, and it must be yielded that certain passages in it sound suspiciously. Thus:—"Which the Spaniards call *bubas*, the Italians *morbus Gallicus*, some Physicians elephantiasis, and others still other names." Now, the very name *morbus Gallicus* is of more recent date than 1488, whilst the general acquaintance with the disease argued is contrary to collateral evidence. One great difficulty is the confusion of scabies with syphilitic lesions. Thus, when we are told that scabies had long prevailed in France, we do not know what to understand by the word. Torrella, in a somewhat doubtful passage, says the disease began in Albernia, whence it passed to Spain. Pintor, Torrella, and Almenar call the disease *morbus Gallicus*. Still all these arguments are, so to speak, side winds; they do not carry conviction. It seems to us that something more is possible. Various Englishmen are now at work unearthing the stores of Simancas—stores which have already yielded such wonderful corroborations and reversals of history. May they not find, if careful search be made among the documents relating to the end of the fifteenth century, some manuscript or cipher relating to the introduction of a disorder which, before the century ended, had attained to such magnitude?

But still another fount of knowledge is suggested to us by Sir James Simpson's classical researches into the early history of syphilis in Scotland. From burgh records he has been able to collect five or six notices of the disease prior to 1497-98—primitive but effectual measures of Medical police. The same sources might be searched in Spain, at Palos, Seville, and Barcelona. But there is still another point worthy of attention. A few days after Columbus landed at Palos, Pinzon with his caravel and crew landed at Bayonne. Were it true that syphilis came from America, this place would undoubtedly have become affected at a very early date, and would have constituted one of the foci for disseminating the disorder. We are not aware that any researches have been made at this spot, and the mode of investigation adopted by Sir James Simpson might with great benefit be employed here.

PROFIT AND LOSS.

In the last report of the Registrar-General there is to be found a table which has not yet, as far as we have seen, received the public notice which its importance might claim. It is entitled "The Mean Annual Rate of Mortality in England from each Class of Causes and from each Cause during three Periods of Five Years, and Rate of Mortality in the Year 1867." The rate is expressed per million of persons living. It is worth while to study it with a view to discover in what directions an advantage has been gained in our war against disease, and in what directions disease has gained upon us. Such an inquiry will have its value both in the way of encouragement and of warning.

Speaking generally, the result of the figures in Dr. Farr's table may be thus stated:—During the seventeen years the rate of mortality from "zymotic diseases" and also that from constitutional diseases has been decreasing; that no very

decided improvement has been observed in the rate of mortality from "developmental diseases," while that from the heterogeneous collection of maladies called "local diseases" has been on the increase, the final result being that the rate of mortality in the kingdom has on the whole been very little affected by either what we have been doing, what we have escaped, or what we have suffered.

But such a broad statement as this can neither satisfy a reasonable curiosity nor be fruitful in practical suggestions. We must go much deeper into the matter. We will cull from the table a list of diseases which have more or less distinctly been getting less and less fatal to our population, and another list of diseases which seem to have been becoming more and more fatal to it, and, as we do so, point out some of the probable causes of gain and loss.

We will begin with the zymotic maladies. It is well known that this class of diseases is separated by the Registrar-General into four groups—the "miasmatic," the "enthetic," the "dietic," and the "parasitic" diseases. Of these it is worthy of all remark, for it is one of the most distinctive features of the table, that the "miasmatic" diseases, on the whole, have been producing throughout the kingdom, at every successive quinquenniad, a smaller and smaller number of deaths per million of population. In the three quinquenniads, starting from 1850, the numbers were 5019, 4807, 4552, and, in 1867, 4005. The actual deaths registered from these causes in 1864 were 113,051; in 1865, 107,650; in 1866 (the cholera year), 110,059 (a smaller number actually than in either 1863 or 1864); and in 1867, 84,985. Now here is a gain which it is impossible to over-estimate when we consider that the diseases grouped as miasmatic include the contagious fevers, which make yearly a vast inroad, especially upon the young. But although there is an aggregate gain here, it is only five or six special diseases that the gain is made upon. They are small-pox, typhus (including other forms of continued fever), erysipelas, dysentery, diarrhœa, and what has been designated remittent fever. We will give the rates of mortality from the table we have referred to, supplementing them by the actual numbers dying from these diseases in 1864, 1865, 1866, and 1867, as gathered from another table:—

	Annual deaths per 1,000,000 living.			Actual deaths.			
	5 years 1850-54.	5 years 1855-59.	5 years 1860-64.	1864.	1865.	1866.	1867.
Small-pox	... 279·0	199·0	190·6	7,684	6,411	3,029	2,513
Typhus...	... 995·0	897·6	846·6	20,106	23,034	21,104	16,862
Erysipelas	... 111·6	101·6	87·0	2,104	1,963	1,675	1,450
Dysentery	... 120·6	77·2	56·6	1,060	1,072	1,096	962
Diarrhœa	... 867·4	838·6	704·6	16,452	23,531	17,170	19,851
Remittent fever	35·2	21·0	12·6	262	80	123	86

The most striking reduction is in the mortality from small-pox. This cannot be honestly referred to general hygienic improvements throughout the country, inasmuch as the latter might be supposed to operate equally in the reduction of the other diseases in the above list, whereas the reduction of small-pox mortality is out of all proportion to theirs, and is evidently due to some special preventive measure such as would be the more zealous manner in which vaccination has been extended. Perhaps the reduction of remittent fever as shown in the table may be more apparent than real from the registration of the disease under some other head, such as typhoid, or from a more accurate diagnosis. On other miasmatic diseases it appears that there has been a loss to the population. This seems to be the case with scarlet fever and diphtheria (taken together), although the mortality has been lessening throughout the country year by year since the grand epidemic of 1863. And then the great epidemic of 1863 was less fatal than that of 1858, five years before, allowing for the difference of population.

In the table we are quoting from there does not appear distinctly to have been a gain in the case of measles. The quinquennial ratios of mortality were 406·0, 412·0, 478·0, and the actual mortality year by year from 1863 (a very unhealthy year) 11,349, 8233, 8562, 10,940, 6588. Still the epidemic of 1866 was less fatal than that of 1863, and in the non-epidemic year 1867 the mortality was less than in the non-epidemic year 1864. Hooping-cough seems to have been increasing in its death-producing powers ever since 1850. Taking off as it does chiefly young infants, this may be due to its ravages being exercised upon those spared by infantile bowel complaints. Notwithstanding some drawbacks, then, we may congratulate ourselves on being able to show generally some reduction in the special kind of diseases against which the sanitary efforts of the last twenty years have been particularly directed. There is a great deal more to be done, however, even here, and we must hope that popular enlightenment will assist the progress to be anticipated from better legislation.

It is curious to note that while a rapid increase of mortality as registered is indicated to have taken place from "syphilis," a diminution no less remarkable is indicated in the mortality from "stricture of the urethra," the most obvious permanent lesion resulting from gonorrhœal attacks. The ratios quinquennially from 1850 for syphilis are 37·2, 51·2, 63·6, and the annual mortality from 1863 onwards has been 1386 deaths, 1550, 1647, 1662, and (in 1867) 1698, the last number being equivalent to a ratio of 80 per million of population. For urethral stricture the corresponding ratios are 13·4, 10·0, 9·4, and the annual mortality from 1863 183, 229, 244, 191, 197, the last number corresponding to a ratio of 9 deaths per million. Are we to infer that syphilis has been increasing amongst us at the rate which the above figures represent? Before we draw such a conclusion, it would be necessary to eliminate a most important circumstance connected with the registration of the cause of death—namely, the immense strides which have been made of late years in our acquaintance with the pathology of syphilis and with the organic alterations which constitutional syphilis brings about. These alterations are now thoroughly recognised in our schools, and a knowledge of them is now rapidly spreading through the Profession. Diseases, therefore, which would formerly have been registered under other terms, are now recognised as syphilitic, and registered accordingly. It is quite impossible to estimate the influence exerted by this fact upon the figures in Dr. Farr's table. It is quite credible that in truth syphilis *may* have been lessening amongst us as a fatal malady. The deaths from stricture of the urethra of course are only male deaths. The reduction observed in the mortality thus registered probably shows as much improved treatment as an actual diminution of severe gonorrhœa among our population. The figures which Dr. Farr gives in reference to three of the "dietic" causes of death are very suggestive.

	Annual deaths per million living.			Actual deaths.					
	1850-4.	1855-9.	1860-4.	1863.	1864.	1865.	1866.	1867.	(ratio 1867)
Want of breast-milk	53·0	46·0	53·8	1158	1253	1410	1410	1437	68
Purpura and scurvy	14·4	15·6	19·0	409	392	424	471	471	22
Delirium tremens	28·6	25·6	23·8	471	592	612	487	369	17

First, as regards the steady increase in our infant mortality from "want of breast milk." The ratio in 1867 was double that in the quinquenniad 1850-54. Surely this tells a sad and mournful tale, for it is impossible to believe that twice the number of our women are physically incapacitated from nursing their offspring. Illegitimacy alone will not explain it, for as a fact we have it on the authority of the Registrar-General that in this respect "a gradual improvement is perceptible year by year." Two conditions alone seem capable of explaining the result of the calculations. One is that mothers in an increasing proportion are showing a preference for making money by their labour to performing their maternal duties; the other, that a certain class of mothers are increasingly careless of the lives of the beings to whom they have given birth. The practice of baby-farming is a growing evil, and it would be interesting to learn from workhouse statistics or the experience of union Medical officers whether the mothers in lying-in wards of workhouses more frequently than formerly deny to their

infants their natural nourishment in order to starve them slowly upon the bread pap which is ordinarily substituted under such circumstances. Unmarried mothers too readily learn the process by which the fountain of supply may be cut off. The increase of mortality from scorbutic diseases is too steady and obvious to be accidental; it points to a deficiency in the alimentation of the people which should draw upon it the attention of the political economist. The steady reduction in the mortality from delirium tremens seems to show that inordinate drinking is a practice which is at any rate not an increasing one. It is a good and auspicious sign of the times.

Passing on now to the class of "constitutional" diseases, it is interesting and important to observe that, while a regular decrease in mortality has taken place in respect of phthisis, the most widely spread of the whole group, the contrary is observable in respect of cancerous maladies. Thus, the ratio for phthisis quinquennially from 1850, as given by Dr. Farr, is 2811·3, 2647·6, 2566·4, and the annual mortality from 1863 is 51,072, 53,046, 53,734, 55,714, and 55,042 in 1867, the ratio of the last per million living being 2595. For cancer the quinquennial ratios given are 302·2, 327·4, 368·8, and the annual mortality from 1863 7479 deaths, 8117, 7922, 8293, and 8545, the ratio per million in 1867 being 403. To cancer as a disease largely fatal to our population the resources of State Medicine have not yet been applied. In fact, science has afforded us hitherto no clue to the method in which they might be applied with any chance of success. The recent researches of Mr. A. Haviland will probably inaugurate a new era in this respect. Phthisis has up to late years been not only the bane of our population, but the opprobrium of hygienics. Since the establishment of the connexion between phthisis and dampness of soil, and the consequent importance of drainage as a prophylactic, we not only begin to see how its prevalence may be still further lessened, but one probable reason why the disease has been diminishing its death-roll as works of this character have been extended through the country.

It is difficult to offer any practical comment upon the results of Dr. Farr's calculations in respect of the heterogeneous class of "local diseases." The class itself is the cemetery in which we inter as decently as may be our pathological and etiological ignorance, and hide from sight the results of folly, vice, and misery. The cause of death as recorded in this section is scientifically often about as true as the euphemistic inscription on the departed squire's tablet in a country church. Still there is some valuable information derivable from this part of Dr. Farr's table, notwithstanding that improved powers of diagnosis will account for a good deal of the apparent improvement or the reverse as respects the results appended to certain special forms of disease. However, we cannot undertake to sift all the wheat from the chaff. Our readers will comprehend us when we state that improvement generally in the diagnostic powers of the Profession at large will account for such apparent results as the following:—An increase in the mortality registered from aneurism, heart disease, liver disease, and nephria, and a diminution in that registered from such consequences or symptoms of disease as convulsions, asthma, and ascites. There are some diseases, however, registered in this section which we must suppose so trenchantly marked that the results appended against them must be regarded as tolerably trustworthy. Of such are the following (we will put in brackets the successive quinquennial ratios):—Increasing diseases—epilepsy (105·8, 115·4, 122·8), diabetes (23·0, 24·8, 28·4). Decreasing diseases—stone (12·0, 11·0, 8·8).

In the class of "developmental diseases" we find a most striking reduction, each five years, in the mortality registered from "premature birth," the ratios per million being successively 1043·6, 737·0, 392·0. It is impossible to say with certainty how much of this is due to a more accurate registration of the cause of death, to a greater amount of care bestowed upon these delicate plants, or to causes, social or physical, actually lessening the number of children born before their time. It is, however, worthy of remark that children dying from malformations, cyanosis, spina bifida, etc., have been becoming more numerous in proportion to the population in successive periods of five years. Probably the true explanation of the apparent diminution under the head of premature birth may be found in the ratios of deaths registered under the head of atrophy and debility. The quinquennial ratios are 697·0, 1031·0, 1403·8, the ratios increasing, while those against premature birth were decreasing. At any rate, if the premature births have actually lessened, no gain to the population seems to have resulted, in consequence of the compensation just alluded to.

THE WEEK.

TOPICS OF THE DAY.

Two names were unintentionally omitted from the list which we published last week of the Committee of the Royal College of Physicians empowered to discuss with the Universities and other corporations the subject of a joint examination. They were those of the Registrar (Dr. Pitman) and of Dr. Risdon Bennett, the representative of the College in the General Medical Council. The difficulties in the way of carrying out a scheme of the kind seem to become greater the more narrowly the subject is looked into. They are increased tenfold by the inclusion of the Universities, and yet to exclude such a body as the University of London from a joint board, whilst at the same time it is deprived of its right to grant licences to practise, would be an enormous injustice which will certainly never be perpetrated by a Government of which Mr. Lowe is a member. Then, again, there can be no doubt that if the Universities are represented at the board, their special function of granting degrees will be reduced to a minimum. Only the few will obtain these decorative titles, which will confer no right to gain any tangible reward for the knowledge they prove their owners to possess. If, in order to prevent a falling off in the number of University graduates and candidates for Fellowships of colleges, the standard of the pass examination for the licence to practise is kept low, the sole object of the scheme will be defeated, and the Profession and public will be simply losers by the change. On the other hand, if the standard is really a high one, the Universities and Colleges granting high diplomas will be the real sufferers, and, we should think, are not very likely to be willing to become the scapegoats for all the sins and shortcomings of Medical education. The gain by the change must be very evident and very great to make it advisable to interfere with the usefulness and prerogatives of such educational bodies as the Universities of the three kingdoms.

The subject of the remuneration of the Medical Practitioner is brought prominently before our readers in the letter from "A Constant Reader and Subscriber" which we publish in another column. Our correspondent writes from one of those benighted rustic regions where still the bulk of the Doctor's income is made up by the medicine he sends out. There is no doubt that the system still lingering in our correspondent's district, which thirty years ago was universal, is in many respects a very bad one, and has been made worse by abuse; but it is equally certain that the present generation of Medical men, by reforming it, have been terribly losers in pocket. There can be no doubt that where it can be done, as in the higher class of practice in large towns, Medical men should be remunerated for their skill and time only. But even in towns it is not possible that this should be the plan adopted in dealing with the artisan and small tradesman class, unless the Medical Profession can afford to throw up many thousands a year, and to hand over the people in question to the tender mercies of the chemists and druggists. A man who is the father of a family, and who earns two pounds a week, can

not afford, when his children have scarlatina, to pay a Doctor for his visit and prescription and a druggist for his medicine. If the pharmaceutist is not to take the patient, the Doctor must supply the physic, and his charge must include it, for the patient cannot possibly pay separately and adequately for visits and medicine. Then, again, it will be long before patients in the lower and lower middle classes will see the justice of paying the Medical man merely for attendance and advice. A practical dyspeptic English cheesemonger wants a remedy, and if the Doctor only gives him a little advice as to diet he is very likely to find his way to the quack in the next street. Again, in sparsely peopled country districts a chemist and druggist could not live. The plan our correspondent proposes of charging an adequate fee for attendance and medicine is the one which we believe will answer best in dealing with the educated classes. On the other hand, with honest poor people, who are not willing to lose their self-respect by applying to the Poor-law Doctor or to Medical charities, we do not think that the Medical man in any way forgets his dignity when he gives his advice and merely charges for medicine, which has an undoubted money value not to be measured by the mere cost of the ingredients.

We have received a report of two inquests held in St. Luke's parish on children who have been attended in fatal illnesses by unqualified practitioners. In one case the mother took the child to the shop of a Mr. Smith, a chemist, in White Cross-street. She said:—

"When I took my child into Mr. Smith's shop, I thought that he was a doctor, for there was over his shop-front the name of 'Rumboll,' and on the door was the word 'Surgeon.' I, believing that he was Dr. Rumboll, paid him money, and allowed him to prescribe for my child. The infant became worse, and on Monday Mr. Smith said to me, 'Take the child to Dr. Rumboll,' and I then for the first time ascertained that I was not dealing with a doctor. As the child was too ill to be removed out of the house, I went to Dr. Rumboll, and he gave me a mixture and three powders, and charged me 9d. for them. He refused to come and see the child unless I gave him another 1s. 6d., and, as I had no more money, I was compelled to call in the parish doctor."

The other case was one in which an unqualified assistant to a Medical man attended a girl of eleven years of age, who died under his care. Both cases illustrate the difficulty which we have already discussed in reference to Medical fees. There are thousands of people in London who neither wish to be pauperised by Medical charities nor to apply to the parish doctor, and yet who cannot afford to pay more than small sums for medicine. If these people are not to fall into the hands of the mere pharmaceutist, the Medical man who attends them must be content to receive the payments which they can make. We need only appeal to the experience of many of our now wealthy brethren to prove that the foundations of many lucrative practices have been laid in this low stratum of London society.

We notice with regret that of 5567 boys who applied for service in the navy, and were examined on board the flagship at Woolwich, Dr. C. K. Ord reports that 4410 were rejected as ineligible for the service. The boys are principally from the London district. Of course they were not all rejected on account of physical defects. 494 were unable to read, and 169 to write; but 674 were under the standard of height, and 823 under the standard of chest. The minimum for stature and chest measurements was, for boys between 14½ and 15, 4 ft. 8½ in. and 27½ in. respectively; and for boys between 15 and 16, 4 ft. 10½ in. and 29½ in.

The General Council of the University of St. Andrews have appointed a Committee to confer with the General Councils of the other Scottish Universities as to the expediency of restoring the degree of B.A., and of rearranging the curriculum of study. The University Court of St. Andrews have resolved to introduce chemistry into the curriculum and examinations for the M.A. degree.

Last week there were 219 deaths from scarlatina, a mortality slightly greater than that of the preceding week. The East and South districts are suffering most.

Dr. A. Wiltshire has written to inform us that, owing to official engagements which are not yet concluded, he is prevented becoming a candidate for the vacant obstetrical posts at the Charing-cross Hospital. The Council of the Hospital, we hear, have unanimously recommended Dr. J. Watt Black for the office of Obstetric Physician. This is tantamount to election. Dr. Snow Beck was also a candidate.

Some of the patients sent from the St. Pancras Infirmary to the Charing-cross Hospital have been dismissed as unfit cases for a general Hospital. They are said to be suffering from ulcerated legs. It is reported that the St. Pancras wards of the new Infirmary will be ready for the reception of patients on Monday next.

Dr. Wallich has written a letter to the *Times* claiming for Sir J. Ross and for himself priority in discovering and making known the fact that animal life exists at great depths in the ocean—far below the 300 fathoms supposed by the late Dr. Edward Forbes to be its limit.

Whilst we write the session of the St. Andrews Medical Graduates' Association is being held at the Freemasons' Tavern. The meeting on Wednesday was signalised by the reading of an excellent paper on the urine by Dr. C. Black, of Chesterfield. The meeting will be brought to a close by a dinner, and an address from the President, Dr. B. W. Richardson, F.R.S., on "The Science of Cure."

THE PLEA OF INSANITY IN CRIMINAL CASES.

Some time since the plea of insanity in criminal cases came to be regarded with suspicion in consequence of attempting to carry it out in more than doubtful cases. We perceive that the man Martin, who murdered a woman in Southwark a short time ago, was acquitted on the ground of insanity at the Central Criminal Court last week. The plea was founded on the evidence of several persons which went to show that for several days before the commission of the act the prisoner had exhibited a low and dejected appearance. Dr. Harrington Tuke expressed his opinion that at the time of the occurrence the prisoner was not in a sound state of mind, and this was not incompatible with the fact that, immediately after the commission of the crime and at the present time, no symptoms of insanity might present themselves. The circumstances of this case corroborate Dr. Tuke's opinion, and we are glad that the verdict was in accordance with that aspect of the case, for it is an admission against the lawyers' view of the subject that the "impulsive or moral insanity" of Esquirol may be successfully advanced in a proper case. Dr. Tuke gave his evidence in a manner which commends itself to our warmest approbation.

SCULPTURED STONES IN INDIA.

Our readers may remember the interesting work of Sir James Simpson on the early sculptures of Scotland, in which he points out the universality of a cup kind of marking apparently antecedent in date to the well-known spectacle ornament. He also discovered an unmistakable representation of the mammoth, one of the most interesting archæological discoveries on record. Such sculptured stones and cup-like markings have been found elsewhere, but they have hitherto been supposed to be confined to countries formerly occupied by Celtic races. Recent discoveries in India, however, dispose of this theory. Mr. Rivett Carnac has found on the monoliths surrounding various large barrows in Upper India cup-markings, etc., cut out, of exactly the same character as those described by Sir James Simpson in his book on archaic British sculptures as found in the sepulchral monoliths, etc., in this country. Lord Mayo is anxious that further investigations be set on foot in the matter

It is interesting to find thus the oldest, in all probability, stone sculpturings of India to be the same in type and character as the oldest stone sculpturings of Europe. It breaks down at once the common idea that those cup-markings on the stones of France and Britain were Celtic, and gives them a more prehistoric character.

SORE LEGS.

Now that the laxity of administration of the large endowed Hospitals is attracting much public attention, it may not be out of place to say a word or two about an unpretending little institution called "The London Infirmary for Diseased and Ulcerated Legs," to show at what a small expense a great benefit may be effected. It is needless to remind our readers that the sore leg is the opprobrium of Surgery. It is sedulously refused admission into the general Hospitals, and is all but ignored in the out-patient departments. The infirmary for bad legs in Red Lion-square admits patients without any letter of recommendation, and has been, since its institution in 1857, the means of curing many hundreds of the worst cases of ulcers and other diseases of the legs. The Surgeon is Mr. Thomas Westlake, whose name is honourably associated with labours and sacrifices for the relief of the sick poor. The expenses are wonderfully small, but the income does not meet them, and Mr. Westlake looks for support to his brethren and the public. We think he should receive that support, for he has carried on his exertions in a quiet Professional way, and has discarded all clap-trap and puffing; and he has, moreover, the goodwill and patronage of some of the most distinguished members of the Profession, and of Florence Nightingale.

FOOT-AND-MOUTH DISEASE IN RUSSIA.

The foot-and-mouth disease is very prevalent in some parts of Russia. In the southern provinces it has entirely disappeared, owing, it is said, to the system of inoculation which is largely practised in those countries.

FROM ABROAD.—THE FRENCH MEDICAL JOURNALS AND THE STAMP DUTIES—FECUNDITY OF PROSTITUTES—ACUTE RANULA.

Among the difficulties of Medical journalism in France the operation of the stamp law plays an important part. It must have often struck the readers of French Medical journals that there is a remarkable absence of writing on Medical politics and on social topics in their relation to the Profession, matters which form such prominent objects of notice with ourselves. But then we are not hampered with the operations of a troublesome stamp law with its Argus-eyed myrmidons ever on the look-out for delinquencies. Last week the *Gazette Hebdomadaire*, in relation to the remarks it had published on the discussion on infant mortality, received the following intimation from the supervisor of taxes that its appreciation must in future be confined within narrower limits:—

"Sir,—In your number for October 29 you inserted an article on the 'mortality of young infants,' which treats the subject not only from its scientific point of view, but also from its economical point of view. Thus you enter into the consideration of the question of the intervention of the State in the choice of nurses, of the application of the ordinance of 1842, the principle of pecuniary assistance, etc. I have the honour of calling your attention to the character of such a discussion, which is of a nature to subject your journal to the stamp duty."

"For our own part," says the *Union Médicale*, "we have not been so lucky as the *Gazette* to get off with an *avertissement*, for about six weeks ago a fine of 56 francs was imposed upon us on account of the publication of an article by M. Brierre de Boismont in reply to the attacks which have been made on the laws regarding lunatics. Our readers will therefore certainly understand and excuse the reserve and sobriety we exhibit on several important questions which are the order of the day."

The various phases of prostitution being now the topic of the day, whether in Professional or lay circles, we may cite a contribution by M. Lasègue, contained in the November number of the *Archives Générales*. It relates to "Fecundity in relation to Prostitution," the materials being derived from an elaborate examination of the lists of the Paris registered prostitutes. These, 3155 in number, of course constitute a very small portion of the women engaged in the business of prostitution; but being all carefully entered as regards their antecedents and procedures subsequent to registration, they furnish a means of investigating their fertility, attainable with such precision in no other class of women. Of the 3155 women, 1628 had children neither prior nor subsequent to registration, 1158 had them both prior and subsequent to this, and 369 only subsequently. The 1527 *filles-mères* gave birth to 2403 live children, 1485 before, and 918 after registration. Considered in relation to their ages, the following results were obtained. Between 15 and 19 years 53 women had no children, 15 had 1, and 2 had 2; between 20 and 24, 343 had none, 113 had 1, 29 had 2, 8 had 3, and 8 more than 3; between 25 and 29, 544 had none, 207 had 1, 72 had 2, 37 had 3, and 26 more than 3: between 30 and 34, 395 had none, 136 had 1, 62 had 2, 20 had 3, and 32 more than 3; between 35 and 40, 268 had none, 97 had 1, 44 had 2, 16 had 3, and 29 had more than 3; at 40 and above, 334 had no children, 139 had 1, 51 had 2, 21 had 3, and 154 had more than 3.

The following table presents, at a view, the comparison of fertile with barren prostitutes at their respective ages:—

Ages ...	15 to 19	20 to 21	25 to 29	30 to 34	35 to 39	40 and above
Prostitutes ...	70	501	886	645	454	599
Fertile ...	17	158	352	250	186	265
Barren ...	53	343	544	395	268	334
Means ...	4·01	2·01	1·05	1·09	1·04	1·06

The means represent the proportion of prostitutes at the respective ages childless for 1 fertile in each category. Thus, in the second list, there are 2·01 childless women to 1 having 1 or more children.

At a recent meeting of the Société de Chirurgie, M. Bouchard related a case of "acute ranula." A woman eight months advanced in pregnancy, while swallowing a glass of wine, felt a tumour suddenly form in her mouth, which in a few minutes had acquired a size sufficient to obstruct the passage of air and threaten asphyxia. He found her in that condition, having both sides of the supra-hyoidean region greatly distended, and with a tumour the size of a large fowl's egg, thrusting back the tongue, and filling the cavity of the mouth, excepting at a small space on the left side. The tumour was livid and fluctuating, and seemed to be caused by effusion under the mucous membrane. On making an opening into it with scissors, the discharge of a considerable quantity of white-of-egg-like fluid showed that the tumour really was an example of acute ranula. M. Forget, reporting on the case, said that he had also met with a similar case in a lady who, while eating, became the subject of a swelling, which prevented her swallowing, and impeded respiration. On examination he found the buccal floor raised up, but especially along the left side, giving it very much the appearance of a highly distended finger of a glove. A puncture discharged an albuminoid fluid, and restored the normal movements in the parts. The patient had already experienced the same accident while eating three times within six months, but not to the same extent, the inconvenience caused being slighter, temporary, and disappearing spontaneously. In order to prevent the reappearance of the tumour, M. Forget followed up an extensive incision of the wall of the cyst with cauterisation by nitrate of silver several times repeated. According to the researches of M. Tillaux, ranula is due to the dilatation of one of the secreting conduits of the sublingual gland, which had become obstructed; but M. Forget does not regard this gland and its appendices as the exclusive seat of ranula, which may arise in the canals of the submaxillary and parotid glands, which, like those of the mammary gland, and, indeed, all glandular apparatus, may undergo considerable dilatation.

M. Desprès inquired whether, in M. Bouchard's case, obliteration of Wharton's duct had been found. In his opinion, the fact of ranula being produced by such obliteration has not been completely demonstrated. He has seen this canal obstructed by calculi so as only to leave a furrow on their surface for the slow issue of saliva, and yet no ranula has resulted. M. Giraldès observed that two forms of ranula must be distinguished, according as it has its seat in the submaxillary or sublingual gland. The dissections of MM. Tillaux and Guyon have done much to elucidate the origin of sublingual cysts. In this form of ranula the tumour is always developed on the side of the buccal cavity, thrusting the tongue upwards and backwards, and very rarely depressing the floor of the mouth. In submaxillary ranula the tumour spreads downwards towards the neck. M. Guyon observed, as to the doubt entertained by M. Desprès of the simple obstruction of Warton's duct being the origin of ranula, such obstruction has been incontestably demonstrated in several cases. M. Lefort adverted to the important distinction laid down by M. Giraldès between ranula, properly so called, and cysts of the submaxillary gland. He had occasion to see a patient with a tumour under the tongue, prolonged under the ramus of the jaw and at the side of the neck. Opened by the mouth, scarcely any liquid flowed out, and pressure made on the part of the tumour which projected under the jaw caused none to issue. To evacuate the tumour it became necessary to make a puncture beneath the jaw, and the liquid which flowed thence did not resemble that which issued from the buccal aperture. The distinction laid down by M. Giraldès is therefore of importance as regards indications for operation. M. Forget stated that he was quite aware of the difference between sublingual and submaxillary ranula. He maintains, however, that the dilatation of Wharton's duct may take place towards the mouth as well as towards the neck, and that the line of distinction between sublingual and submaxillary ranula is not so well marked as stated by M. Giraldès. He admits that ranula very rarely arises from a dilatation of Wharton's duct, its cause usually being an obliteration and consecutive ectasis of one of the numerous conduits of the sublingual gland. The principal feature of interest in the present case was, however, its illustration of the acute or sudden production of ranula.

REPORT ON THE TEACHING OF THE OUT-PATIENT DEPARTMENTS OF THE LONDON HOSPITALS.

St. Bartholomew's Hospital.

1. The out-patient staff consists of four Assistant-Physicians —two seniors (Drs. Southey and Church) and two juniors (Drs. Gee and Duckworth)—and four Assistant-Surgeons, also two seniors (Messrs. Callender and T. Smith) and two juniors (Messrs. Willett and Langton). The senior assistant Medical officers attend each two days in the week, the junior assistant Medical officers only one day in the week, so that there are in daily attendance an Assistant-Physician and an Assistant-Surgeon.

2. The length of attendance of each Assistant-Physician varies from three to five hours. The hour of attendance is 11·30 a.m. The average length of the attendance of the Assistant-Surgeons is two hours. Their visit commences at 12.30.

3. With respect to the specialities represented.

(*a*) Diseases of the skin, by Dr. Gee, on Fridays, at 1.30.

(*b*) Diseases of women, by Dr. Greenhalgh, on Saturdays, at 9.

(*c*) Aural Surgery, by Mr. T. Smith, on Mondays, at 1.30.

(*d*) Orthopædic Surgery, by Mr. Willett, on Fridays at 1.30.

(*e*) Ophthalmic Surgery and demonstrations with the ophthalmoscope on Wednesdays and Saturdays at 12.30.

(*f*) Laryngoscopic demonstrations, by Mr. Langton, as occasions arise.

(*g*) Dental Surgery, by Mr. Coleman, on Fridays, at 9 a.m.

4. As to the number of cases seen at each visit, it would appear that each Assistant-Physician, on an average, has a daily attendance of 170 to 200 cases, about 28 of these being new cases; the Assistant-Surgeons from 80 to 100 cases, including about 25 new ones.

5. With regard to the attendance of students, here, as elsewhere, the Surgical rooms attract many more students than the Medical—from twenty to thirty may commonly be seen attending the Surgical practice, whereas only four or five will be found in the Physicians' rooms.

6. There is not much help afforded the assistant Medical officers in seeing out-patients. Each Physician has a senior student, often a qualified man, to help him. He is appointed or selected by the Physician himself. Each out-patient Surgeon has three dressers, who prescribe, etc., under his directions, and who must be at least third-year's men. Every new case is seen by the Physician or Surgeon himself.

7. It will be seen from the preceding that no responsibility or independent action is permitted to those pupils who assist the out-patient Medical staff in their work.

8. As to the nature of the cases seen in the out-patient department it appears difficult to particularise, as almost every form of disease is met with here; but there can be no doubt whatever as to the great value and fitness of the cases for teaching purposes.

9. The amount and kind of teaching attempted in the out-patient department depends chiefly on individual effort.

Dr. Duckworth states that he spends at least an hour on his out-patient day in teaching and making the men work for themselves under his directions, "in examining the various cavities and viscera," and in taking notes of cases. The students are also admitted to all the private examinations and consultations with the Assistant-Surgeon in an adjoining room.

Dr. Church and Dr. Duckworth also hold two large classes twice a week in the ward for elementary clinical instruction.

Mr. Thomas Smith devotes himself especially to those students who are about to present themselves for examination at the College of Surgeons, making some of them diagnose and others dictate the proper treatment of cases as they come in. Much the same methods appear to be adopted by the other out-patient Physicians and Surgeons.

10. There can be no doubt at all as to the success which follows most of the efforts made in the direction of clinical teaching in the out-patient department of this Hospital. This is especially evidenced by the large attendance of pupils who are preparing to go up for examination, as mentioned in the preceding paragraph.

As this report is concerned solely with the educational aspect of the out-patient department, we have but little concern with the vexed question of the admission and attendance on casualty cases, which are unusually large at this Hospital. We would simply, however, observe that if these cases are of use for teaching purposes in any moderate proportion, they ought not to be treated as casualties, but utilised in the regular way for the instruction of the pupils. As to the reported retention and treatment as casuals of interesting cases by the House-Surgeons and House-Physicians, and the drafting off of the old and chronic cases to the regular assistant Medical officers, it seems to us to be a course of action so offensive to these officials, and so unjust to the general body of students, as to be altogether intolerable. We believe a temporary arrangement has now been made for the purpose of regulating the admission and distribution of these casualties. Two gentlemen, one a Member of the College of Physicians, and the other a Fellow of the College of Surgeons, attend daily and investigate all the cases as they present themselves, and dispose of them according to their nature and necessities.

In conclusion, we wish to observe that there appears to be every possible disposition on the part of the out-patient staff, which is a large and an efficient one, to make the best use, for teaching purposes, of the abundant and valuable material here at their disposal. The rooms in which the out-patients are seen are commodious, quiet, and of good size.

Prince Leopold has been suffering from a slight cold, but is now convalescent.

The Poor-law Board has taken the new infirmary at Highgate out of the hands of the St. Pancras Guardians, and vested it in the managers of the Sick Asylum District, comprised of representatives of the parishes of St. Clement Danes, St. Anne (Soho), St. Martin-in-the-Fields, St. James (Westminster), St. Mary-le-Strand, St. Paul's (Covent-garden), St. Giles's-in-the-Fields, St. George's (Bloomsbury), and St. Pancras.

SIR J. Y. SIMPSON, BART.,

ON THE MORTALITY OF LIMB-AMPUTATIONS AS REGULATED BY THE SIZE OF HOSPITALS AND THE DEGREE IN WHICH PATIENTS ARE AGGREGATED OR ISOLATED.

In previous communications on Hospitalism, we have seen that in our large metropolitan Hospitals, about 41 in every 100 operated on die of those patients who are subjected to the four major amputations of the limbs; while in single or isolated rooms in country practice patients die under the very same class of operations to the extent only of 10 or 11 in every 100. We have collected evidence of the death-rate from these same four major limb-amputations in British provincial Hospitals of various sizes. If we throw the whole facts thus collected into a tabulated form, the general results may be stated as follows:—

Size of Hospital, etc.	Death-rate.
1st Series.—In large and metropolitan British Hospitals, chiefly containing from 300 to 500 beds or upwards, out of 2089 limb-amputations 855 died, or	1 in 2·4
2nd Series.—In provincial Hospitals containing from 201 to 300 beds, out of 803 limb-amputations 228 died, or	1 in 3·5
3rd Series.—In provincial Hospitals containing from 101 to 200 beds, out of 1370 limb-amputations 301 died, or	1 in 4·4
4th Series.—In provincial Hospitals containing from 26 to 100 beds, out of 761 limb-amputations 134 died, or	1 in 5·6
5th Series.—In provincial Hospitals containing 25 beds or under, out of 143 limb-amputations 20 died, or	1 in 7·1
6th Series.—In British private country practice, with the patients operated on in single or isolated rooms, out of 2098 limb-amputations 226 died, or	1 in 9·2

These data go to point out and establish the general fact or general law in Hospital hygiene, that the death-rate accompanying amputation of the limbs, and, as we may infer, the death-rate accompanying other Surgical operations, and many Medical diseases also, is regulated in a great and marked manner by the size of the Hospitals, and the degree of aggregation or segregation in which the patients are treated. But, like all other general laws in Medicine, this law is subject to many exceptions. Thus, a small Hospital, if overcrowded with beds and patients, becomes as insalubrious as a large Hospital under one roof. On the other hand, a large Hospital would be generally made almost as salubrious as a small institution, provided few beds were left scattered over its wards, and these wards were well ventilated and often changed. But such exceptions only establish more securely the great and important hygienic law, that, in the treatment of the sick, there is ever danger in their aggregation, and safety only in their segregation; and that our Hospitals should be constructed so as to avoid as far as possible the former, and secure as far as possible the latter condition.—*Edinburgh Monthly Medical Journal*, December, 1869.

Medico-Psychological Association.—At a meeting held on Thursday last week, in the hall of the Royal College of Physicians, Edinburgh, the Chairman, Professor Laycock, brought under the notice of the meeting the subject of clinical teaching of insanity, when, on the motion of Dr. Sibbald, of the Argyle District Asylum, seconded by Dr. Skae, of Edinburgh, it was resolved "That this meeting desire to express a strong opinion of the necessity of making the clinical teaching of insanity imperative in every Medical curriculum, and request the Secretary to send a copy of the resolution to the Medical Faculties and University Courts of Scotland, the boards of examiners in Scotland, and the members of the General Medical Council." Papers were afterwards read by Dr. Tuke on the "Cottage System of the Management of Lunatics;" by Dr. Clouston, of Carlisle, on the "Medical Treatment of Lunatics;" by Dr. Bence Thomson, of Perth, on the "Hereditary Nature of Crime;" and by Dr. Howden, of Montrose, on the "Death-rate of the Insane."

During the past fortnight 3487 lbs. of meat have been seized in the London markets. Of these 2249 lbs. were diseased, 460 lbs. were putrid, and 592 lbs. came from animals which had died either of accident or disease.

REVIEWS.

Injuries and Diseases of the Knee-joint, and their Treatment by Amputation and Excision Contrasted. The Jacksonian Prize Essay of the Royal College of Surgeons of England for 1865. By William Paul Swain, F.R.C.S., Surgeon to the Royal Albert Hospital, Devonport. 8vo. Pp. 252. London: John Churchill and Sons.

It will be in the recollection of our readers that in the year 1860 the Royal College of Surgeons had announced the following as the subject for the Jacksonian Prize Essay:—"A Description of the Diseased Conditions of the Knee which require Amputation of the Limb, and those Conditions which are favourable to Excision of the Joint; with an explanation of the relative advantages of both operations as far as can be ascertained by cases properly authenticated." It is also well known that the late distinguished young Surgeon, Peter Price, who had been for years the pupil and assistant of Mr. (now Sir) William Fergusson, and who had previously made himself well known by his practice and writings in connexion with the subject, tried for the prize, and, in the words of one of his biographers, "produced an essay on excision of the knee-joint which, for the fulness with which the subject is treated, the vast number of facts brought together, the beautiful preparations, drawings, and photographs which accompanied it, is unequalled in the records of conservative Surgery."

Nevertheless, the committee appointed by the Council, consisting, it is said, of three gentlemen who had scarcely any practical acquaintance with the treatment of disease of the knee-joint by excision, refused to award the prize to the author of the essay. Price, already lingering under a wasting disorder, had his end hastened by the disappointment attending the rejection of his work, which was published soon after his death. Then only was it fully seen with what indignity and injustice he had been treated. The Profession at large endorsed the truth of the remarks of his biographer just quoted. And, we suppose as some reparation for the grave wrong perpetrated, the Council five years later again invited gentlemen to come forward and compete for a prize on the same subject. Curiously enough, by a kind of retributive justice it fell to the lot of another distinguished pupil of King's College Hospital to write an essay which was thought worthy of the coveted award, and which is now before us. Some justice was done to the memory of Price by the posthumous publication of his own essay, but a much fuller amount by Mr. Swain's beautiful and elaborate work; for he has gone over the very same ground that Price had trodden, has handled the subject much in the same way; and although, from the lapse of time which has intervened between the publication of the two essays, Mr. Swain has been able to bring together a larger amount of facts, the conviction is carried to the mind that, whilst Swain has most deservedly earned the prize in 1865, the author of the essay for 1860 was treated in the most shameful and humiliating manner. We are sure that Price's friends and relatives will be grateful to Mr. Swain for having been the medium of thus rendering an act of tardy justice to the memory of that distinguished young Surgeon.

The work before us is divided into ten chapters, and, as in the case of Price's essay, the first parts treat of the anatomy of the knee-joint, and of those diseases which are peculiar to this region, and which demand active Surgical interference. The greater portion of the essay—as in Price's—is devoted to the consideration of the special question of excision of the knee-joint, whilst a very limited portion is devoted to amputation of the thigh; and we call especial attention to this fact, for, as a kind of excuse for the harsh treatment pursued towards Price, an attempt was made to show that the work was all about excision, and referred to amputation only in a slight and secondary manner.

Mr. Swain's descriptions of the various diseases to which the knee is subject are remarkably good and clear, and yet without prolixity. We would call especial attention to his picture of the chronic inflammation of the synovial membrane as well as to the description of the gelatinform degeneration of the same tissue. We find that on the subject of tuberculosis of bone Mr. Swain is at variance with Price, who averred that "morbid deposits of true tuberculous material in the cancellous structure of the expanded ends of bone is, so far as my own experience goes, an affection of common occurrence." Mr. Swain remarks in reference to this point, "Price's extended study of knee-joint disease and the intelligence he brought to bear upon the subject demand extreme deference to any opinions he may

have enunciated; but I cannot help feeling that in this matter he was mistaken. I have never seen a case of pure tuberculous deposit in a joint end, and I believe that the 'gelatinous material' which Price describes as in 'every respect analogous to pulmonary tubercle' is nothing more than the granulations filling the cancelli which I have before described." (P. 35.)

It is needless to remark that what is needed here is a definition of tubercle; and that the word has been, and still is, used in so vague a way that two men of equal experience may mean different things by it.

A chapter is devoted to the consideration of wounds, injuries, and deformities of the knee-joint, and some very interesting illustrations of these conditions are given.

Mr. Swain, having described the diseased conditions of the knee-joint, next passes to the consideration of excision and its advantages compared with those of amputation, and he gives us the latest statistics, with the caution, "We cannot fail to remark how careful we should be in jumping at any conclusions drawn from statistical evidence." We quite agree in the necessity of his caution, although we suspect the author has unconsciously transgressed his own rule. And here we feel provoked to say one word as to "statistics." In this much misused department of human knowledge there are two branches. First, there is the collection and enumeration of facts; and secondly, the drawing of inferences from the figures so collected. The first branch may be called naked or dry statistics, and, when they are collected by persons who have no by-ends, are generally to be relied upon. Such would be an enumeration of the number of persons operated on at different times, by different Surgeons, in different places, from various diseases, or the like. The second branch deals with inferences and with comparisons, and it is here that the most astounding instances are met with of the credulity, or blindness, or one-sidedness of so-called scientific men. Inferences are daily drawn, without consideration or remorse, from scanty and incongruous materials, and comparisons made of things which cannot be compared; for it is the essence of fair comparison, when instituted for the purpose of determining the difference of result which follows difference of cause, that the things compared should be *cæteris paribus*—that is to say, that they should be alike in all particulars save those selected for the purpose of comparison.

To return. Mr. Swain gives a "statistical" account of the results of 472 cases of excision of the knee. From the year 1760 up to 1865, 316 cases are recorded, with 76 deaths—*i.e.*, one in four; Dr. MacCormac, of Belfast, has since collected 74 cases, with 25 deaths, or one in three; and Mr. Swain has collected 82 others, with 15 deaths, or one in five and a half. Take them altogether, the deaths are 116 out of 472, or 24·57 per cent. But granting the accuracy of these figures, they are dry, naked, barren, and worthless, as showing the chance of life after excision of the knee, and they besides do an injustice to the operation. For Mr. Swain goes on to show, first, that these are the handiwork of *British* Surgeons, whereas Hodge, of Boston, has collected 208 cases with a mortality of 28·84 *per cent.*, Hayfelder, of St. Petersburg, 213 cases with a mortality of 30 *per cent.*, and he quotes four cases operated on in Paris in 1862 with a mortality of 100 *per cent.* So that in the first place, according to Mr. Swain, the mortality varies with the country. Secondly, he says it varies with the epoch, inasmuch as the ratio of deaths is smaller in some later series than in some earlier ones. Thirdly, it varies according to the Hospital and the skill and discretion of the Surgeon. On this last point we are quite at one with Mr. Swain, and we envy him the honest pride with which he writes—"In Exeter, Plymouth, and Devonport together the knee-joint has been excised in no less than 43 cases, with only 5 deaths and 4 subsequent amputations—a fact which, I may be permitted to say, speaks well for the Surgery of the West." And, without any doubt, the Surgeons of the West have not yet reached the limit of perfection.

We confess we feel mortified when we peruse Mr. Swain's comparative statement of the results of amputation of the thigh, and find him, after quoting Mr. Bryant's 1168 cases of amputation of the thigh with their mortality of 21·7 *per cent.*, and his 188 cases of amputation for disease with a mortality of 21·8, going back to Mr. Carrick's table, dated 1862, of 1413 cases of amputation with mortality of 30·71 *per cent.*, and drawing attention to "this very considerable difference of 9 per cent. of deaths," as if Carrick's cases seven years ago vitiated Bryant's. Why, it is just the same as the difference between Dr. MacCormac's cases of excision and his own!

Having given the most careful attention to the statistical part of Mr. Swain's work, we say positively that, valuable and necessary though it be as a part of Surgical history, it does not give one grain of support to excision over amputation. Nay, that the attempt to compare two such series of discordant and incongruous cases with a view to practical results is fruitless of necessity, and that the attempt is injurious to the operation which it is meant to support. And let us say that if we have dwelt thus long upon the fallacies of the statistical argument, it is because Mr. Swain gives such plenty of materials for putting the case on a right issue that it is quite needless to put it on a wrong one.

His whole book says most justly that the object of excision is a higher one; that it is the Surgeon's duty to give his patient the chance of saving his leg and foot; that the mutilation and shock are less; that the exposure of medulla by sawing the shaft of a bone is presumably more dangerous than the exposure of cancellous structure; that if there are failures after excision, so there are bad stumps after amputation; that if excision fails, there is the option of removing yet more of the diseased bone, and of amputation as a last resource; that if the convalescence after excision be longer, yet that the patient does not wait for the operation so long as he does for amputation, and that a foot of flesh and blood is worth waiting for. Then there is the "proof of the pudding," the cases of good recovery; the fact which daily experience teaches that deaths after operation depend more on incidental than on essential conditions, and that the skill and humanity of modern Surgeons will prompt them to avoid these causes of death, and aim at recoveries more numerous than even the best operators have yet shown. With solid arguments like these to rest on, why resort to the treacherous reed of "statistics," falsely so called?

But we must hasten on, and follow the author as he describes the methods of performing excision very carefully and very plainly, and gives some very useful hints regarding the details. "It is very necessary," he says, "to arrest all hæmorrhage before the limb is finally put up. I think we are too sparing in our ligatures in this operation. Every bleeding point of consequence in the soft tissues should be tied. I have frequently seen the most free hæmorrhage from the cut edges of the periosteum. A careful search for bleeding points should be here made. A little patience and a stream of iced water will generally arrest oozing from the surfaces of the bones. It is most distressing to the patient, and a fertile source of ill-success, to have to take down the limb, reopen the wound, and search for bleeding vessels." (P. 77.)

The importance of absolute rest of the limb after operation' and the dire results of meddlesome interference, are insisted upon by Mr. Swain most forcibly, and we commend these remarks to every Surgeon.

We are next treated to a description of those diseased conditions of the joint which require excision, and very properly Mr. Swain cautions Surgeons against its performance in instances where disease of the synovial membrane alone exists, or where acute suppuration has taken place, except under certain circumstances, and recommends it in cases where disease has extensively attacked the cartilages and bones. He also agrees with all other good Surgeons that the operation should not be adopted where there is diffuse inflammation or suppuration in the ends of the bones.

He devotes some space to the question of excision for traumatic injury and deformity. He is of opinion that excision might be more frequently performed for injuries of the joint. As yet, however, there is not much experience to guide us on this matter. Deformity of the limb resulting from old disease of the joint is the last condition requiring excision which Mr. Swain considers, and his remarks here are replete with sound judgment. He wisely says he would not urge the operation under such circumstances, but thinks that, at the earnest desire of patient or friends, the proceeding may be justifiable. Moreover, he refers to instances where active disease has subsided, leaving, however, a deformed and useless limb, and where, upon the receipt of injury, fresh morbid changes may be continually being set up. In these instances there cannot be a doubt that removing the diseased and deformed tissues in a block is warrantable, and, indeed, such cases have furnished some of the best results.

Mr. Swain concludes this important question by considering the constitutional conditions and age admitting of excision of the knee and re-excision, and makes this sound remark—"When the constitution is enfeebled by other disease than that in the joint, I think that the procedure which holds out the best chance of rapid recovery should be adopted. If, for instance, a strumous joint has reached that state of disease in which it is a constant source of trouble and annoyance, and if it seems to increase, as no doubt it frequently does, the irritation of

tubercle in the lung, it should be removed; but rather by amputation of the limb than by excision of the joint." (P. 138.) With regard to the age, Mr. Swain says it should never be performed in patients above 45 years of age. This is a good rule, but there may be some exceptions. He is, moreover, of opinion that, as a general rule, excision of the knee should not be performed under 10 years of age, owing of course to the shortening which is liable to occur, especially if the whole or greater part of the epiphyses has been taken away. Mr. Swain, in some few concluding remarks, shows himself, we are glad to say, a warm advocate for re-excision in certain instances of a failure after the operation.

The author has finished his task by devoting a chapter to the consideration of amputation for diseases of the knee; and having referred to the various methods, and discussed the merits of each, he comes to a similar conclusion with Price, that there are only two conditions of the knee-joint absolutely demanding amputation—namely, acute suppuration and diffuse inflammation or strumous deposit in the ends of the bones. It is true Mr. Swain differs somewhat from Price as regards the proper mode of action in cases of extensive disease of the synovial membrane alone—Price recommending excision, our author hesitating about this; but before proceeding to amputate he wisely suggests making an attempt to save the limb by an exploratory excision of the knee.

A very valuable appendix will be found, in which are given the details of more than one hundred cases of disease of the knee-joint treated by various Surgeons, mostly by excision; and the work is embellished by numerous illustrations.

We cannot conclude the notice of this most valuable essay without expressing our high admiration of it and congratulating the author on the great success he has achieved. Mr. Swain was already well known to us, and the publication of this work will at once place him in the front rank of those distinguished provincial Surgeons who are an honour to their Profession and their country. We also congratulate the Council of the Royal College of Surgeons for making some reparation for the humiliation heaped upon Price whilst he was living, and upon his memory when he was lying in his grave, by awarding the prize to Mr. Swain, for we are sure, from what we can judge of the spirit in which this essay is written, that the author himself will be the first to admit that he has only amplified what Price had originated. He has gone over exactly the same ground which Price had trodden five years previously, and, whilst employing the same energy and intelligence, has been able to make use of more abundant materials than his predecessor possessed, and in this way has brought before the Profession a more comprehensive and valuable essay. And it has fallen to the lot of Mr. Swain to accomplish what it was not permitted for Price to do so thoroughly—viz., to dispel the doubts and uncertainties in which the question of excision of the knee-joint was involved, and to prove beyond all question that the operation is one of the greatest improvements in modern Surgery.

GENERAL CORRESPONDENCE.

ON MEDICAL CHARGES.

[To the Editor of the Medical Times and Gazette.]

Sir,—Allow me, through your widely circulated columns, to address a few remarks to my Medical *confrères* which have been suggested by a consideration of the existing system of Medical charges in country districts, where, in the year of grace 1869, the amount of medicine supplied to the patient, is still made the basis of remuneration for Medical services.

To quote the words of Dr. Kirby in his *brochure* upon the "Ready Method of administering Remedies," "under such a system it is clear that the Doctor must be underpaid or the patient overdosed." The educated classes in our larger towns have long been familiar with a more just and rational system, based upon the principle that "a Practitioner is evidently as justly entitled to his fee when he prescribes food as physic," and the practice has become almost universal of charging so much per visit, "including necessary medicines." To imagine that such enlightenment exists throughout the country at large I apprehend to be a great mistake. I write to expose the existing system and to suggest a remedy.

After a prolonged course of study, first as a pupil to a Surgeon in a large town, and afterwards for nearly six years at a metropolitan Hospital (where, besides obtaining the ordinary Medical and Surgical diplomata, the writer graduated at the London University), I find myself, by a fortuitous chain of circumstances, the purchaser of an ordinary general practice in a country district. All preliminaries arranged and introductions effected, I leave my city brethren to imagine my dismay at finding the following system of charges to prevail. I take as an example the case of a respectable well-to-do farmer, living between two and three miles from my residence. Every time this patient was visited he was charged thus—Iter, 2s. 6d.; mist. and pil., 5s. 6d. That is to say, my predecessor was obliged to supply him with 5s. 6d. worth of medicines at each visit in order to obtain adequate remuneration for his services.

A further analysis of these separate items, 2s. 6d. and 5s. 6d., will more clearly expose the folly and baseness of the system. 1. Iter 2s. 6d. This means the fee for visit and mileage, for when the patient could not be prevailed upon to swallow the nauseous "mixture and pills," the charge was still only 2s. 6d. Of course it implies that a patient must have a certain amount of medicine supplied to him, that the mere working expenses of the practice may be defrayed apart from any charge for time and skill employed. How many journeys at 2s. 6d. must a man make per diem to defray the bare expense of keeping two horses, a gig in repair, paying farmer's bill, shoeing bill, saddler's bill, toll gates, wages to a man and boy, livery, assessed taxes, stable and coachhouse rents? for these are the expenses incurred in working the visiting part of the practice, omitting all consideration of interest upon the large sum of money and long years of mental toil spent in study preparatory to the active practice of one's Profession." 2. "Mist. and pil. 5s. 6d., and I may add a lotion, or draught, or powder, plaster, or blister, whenever the patient can be prevailed upon to submit to the imposition, and for which equally extravagant charges are wont to be made. The necessities of the case forbid the inquiry whether the patient requires such and such a medicine—the real question, in bold English, is, "How much can I make him swallow?"

It is almost ludicrous to compare the few pence and few minutes spent in the preparation of these precious mixtures, pills, draughts, etc., and the fabulous sums charged for them, and to compare that again with the ridiculously small fee charged for "Medical attendance and advice" which the two-and-sixpenny iter comprehends. Under such a system the Doctor is underpaid unless he can contrive to make his patient swallow a certain amount of medicine. How demoralising, unprofessional, and inexcusable!

Let me proceed to suggest a more excellent way. My own plan last year was that generally adopted in town practice—viz., to charge so much per visit, "including necessary medicines;" and this charge was based upon an average taken from the charges made in the practice under the old system.

To take the case quoted above. My predecessor in effect argued—"If I charge only 2s. 6d. per journey, the patient must be supplied with 5s. 6d. worth of medicine to make it pay"—*i.e.*, the average charge per visit for this particular case was 8s. But inasmuch as the patient was not always tractable, and objected sometimes to the flood of nauseous drugs, it would occasionally happen that the Doctor was obliged to content himself with "iter 2s. 6d." only. Allowing for an occasional *contretemps* of this description, I fixed the charge for the case referred to at 7s. 6d. per visit, "including necessary medicines."

Does this plan—the system of fees so generally adopted in towns—meet the wants of every case? Hardly. Notoriously not in pure Surgical cases, or where scarcely any medicine is required; for in such cases, where none or scarcely any medicine is supplied, a patient will complain that the fees have been the same as when medicines have been regularly and continuously supplied. There is a show of justice in this, though, of course, the answer is that the one must be set against the other—the attendance with small supply of drugs against the attendance with larger supply. The only true solution of the problem, to my mind, lies in the general adoption of the Continental system, where every Medical man, of whatever grade, throughout the country writes his prescription, and the State sees to it that efficient and reliable pharmaceutists are provided in all districts. The Practitioner charges a single fee for each visit, and gets rid of the bugbear of supplying medicines himself altogether. Of course it will be long ere conservative England will adopt such a simple plan, but much may be hoped for from a Department of State Medicine.

Meanwhile need the present demoralising system of charging which prevails in country districts continue? I think not, and after mature deliberation have adopted the following plan. I separate entirely the two existing elements of Medical

practice—viz., (*a*) Medical attendance and advice; (*b*) the dispensing and supply of drugs. I explain to my patients that were I in a town (where every facility exists for procuring perscriptions dispensed) I should not dispense at all myself, but write my prescriptions and charge a single fee "for Medical attendance and advice" for each visit, but to oblige them, situate as they are in a country district, I shall dispense my own prescriptions, charging for the medicines mere druggist's prices (which I have ascertained from a respectable provincial chemist), and charge a separate adequate and remunerative fee for "Medical attendance and advice" *per se*. The former would of course be fixed and invariable for whatever class of private patient; the latter would vary infinitely with his social position, the nature of the attendance, time spent, and distance travelled, etc.

Trusting that you will be able to find space for this in your valuable journal, and that it may lead to some general discussion upon the subject of Medical charges in general practice,

I am, &c. A Constant Reader and Subscriber.

November, 1869.

MR. GASKOIN ON THE ORIGIN OF SYPHILIS.

[To the Editor of the Medical Times and Gazette.]

Sir,—The first notice I have had of Dr. Finckenstein's work is derived from your issue of November 27, which is certainly very menacing to views I venture to hold concerning the derivation of syphilis. I profess myself, however, as wholly willing to be convinced by stronger argument. But that I may not seem to owe more than is necessary to Dr. Finckenstein, I have no option but to do what had been better done long since—viz., publish an English translation of the work of Villalobos. It is well known to a few of my friends in England and abroad that I have made such a translation, and whatever hesitation I may have had about publishing it is removed by present circumstances. Although at this time I have pressing engagements, I undertake to lay it before the public in its present shape in the beginning of next year. In the meantime, my jealousy for the honour of Villalobos compels me to say that no author could be more than he explicit or assertive as to syphilis being entirely a new complaint, up to that time not mentioned in literature; on this account he has been quoted by an author and critic of great name as giving some degree of support to the view of its derivation from America.

In page 647 of the same issue (November 27) there is a most interesting passage quoted from church archives in the fourth century which demands my attention. It is indeed a most remarkable passage; were there many such, I should tremble for my opinion. So impregnable does it appear that I fear my reply will appear to many what is called special pleading, and especially to those who have not studied the ecclesiastical aspects of leprosy.

The "learned author" gives the key to the solution. Guided by erudition, he doubts whether leprosy stands for cutaneous disease. Very likely "the leprosy that infects others" was a moral infection, or some ecclesiastical disability, but perhaps it was contagious venereal, of which there was a real superabundance in antiquity as well as in the days that immediately preceded the outbreak of syphilis; but neither venery nor venereal can produce syphilis without its proper antecedent.

I do not say that the venereal diseases of the ancients are perfectly comprehended by what we see now. It would be unphilosophical to assert that syphilis has never anywhere existed in the old continent. Still, I have never seen a description of syphilis from an ancient author that satisfied me, but only what a German author, learned on this subject, has called "indications." The old Physicians, our predecessors, could describe disease fully as well as the moderns. My argument is that they described syphilis thoroughly and completely as soon as they had it to describe.

I am, &c. George Gaskoin.

COLLECTION OF WORKS ON OPHTHALMOLOGY.

Letter from Dr. Hirschberg, of Berlin.

[To the Editor of the Medical Times and Gazette.]

Sir,—I hereby beg room in your esteemed journal for the following scientific notice:—

"J. Hirschberg, M.D., Berlin, 5 Ziethenplatz, having been appointed by the *Wiener medicinische Rundschau* to give a complete summary of ophthalmology and a yearly report on the progress of ophthalmological science, begs to request the authors on those subjects to forward to him their essays, works, etc., and especially those which have appeared in such journals that have no extensive circulation in Germany, and will send them back if it is desired."

I am, &c.

Berlin, Prussia, 5 Ziethenplatz. J. Hirschberg, M.D.

THE EDINBURGH ROYAL MATERNITY CHARITY.

Letter from Dr. Charles Bell.

[To the Editor of the Medical Times and Gazette.]

Sir,—It is a matter of the utmost indifference to me whether or not Dr. Matthews Duncan admits the accuracy of my statements in regard to the Royal Maternity Hospital of this city, so long as I am satisfied that they are correct; and I can defy him or any one else to disprove them. If Dr. Duncan's arguments are not to be founded on facts, it is a pity that he should have laid them before the Profession.

I am, &c. Charles Bell.

18, Maitland-street, Edinburgh, November 30.

OPHTHALMIC PRACTICE AT ST. THOMAS'S.

Letter from Mr. Sydney Jones.

[To the Editor of the Medical Times and Gazette.]

Sir,—I am desirous of making more complete your otherwise very accurate report on the out-patient department at St. Thomas's by adding—

1. That eye cases are seen on Wednesdays as well as on Saturdays; that on the former day from 80 to 120 cases attend. From your report it would appear that "eye cases (40)" are attended on Saturdays only.

2. That ophthalmoscopic demonstrations are given every Wednesday morning, and in the summer special evening ophthalmoscopic demonstrations.

3. That six beds are allowed to the Senior Assistant-Surgeon for the purpose of illustrating the lectures given by him on Ophthalmic Surgery.

The time selected (9 a.m.) for the seeing of eye cases might, with advantage to the patients, be altered, especially during the winter months. Many come from long distances.

I am, &c.

Sydney Jones, M.B., F.R.C.S.,
Senior Assistant-Surgeon and Lecturer on Anatomy and Ophthalmic Surgery at St. Thomas's Hospital.

THE ASSISTANT HOUSE-SURGEON AT KING'S COLLEGE HOSPITAL.

Letter from Mr. Henry Smith.

[To the Editor of the Medical Times and Gazette.]

Sir,—My attention has been drawn to the following statement in your report on the teaching of the out-patient departments of King's College Hospital:—

"A considerable amount of responsibility is thrown upon the Assistant House-Physician and Assistant House-Surgeon. We presume that theoretically these gentlemen only act *under the direction* of the Physician or Surgeon whom they may be assisting, but practically they appear to act independently of them, and take old and new, severe and slight cases, equally with them, and without any consultation or communication. It results from this practice that cases may and do attend this Hospital for many months together without *once* seeing the Medical officer under whose care they nominally are."

I hope you will permit me to state that your reporter has been misinformed regarding the position and functions of the assistant resident officers. So far as relates to the Assistant House-Surgeon, at least, I can answer for the fact that, whilst this gentleman, who is a M.R.C.S., and almost always one of our most distinguished pupils, is allowed considerable latitude in the discharge of his duties, it is distinctly understood that he does not see or send away any case of interest or importance without calling the attention of the Surgeon to it first; and although these gentlemen have considerable opportunities of setting at nought these instructions, I have never once had occasion to complain of such neglect. And as an illustration of this I may mention that I always permit my assistant to

perform the minor operations, such as tapping for hydrocele, phymosis, and catheterism (except in difficult cases); and such is the understanding between us, and, I may say, such is the invariable courtesy pursued, that the cases where such minor operations are urgently demanded are always set aside for me to decide upon previously. Thus it will be seen that, so far as the Surgical department is concerned, it is an error to suppose that the Assistant House-Surgeon "acts independently" of the Surgeon in attendance.

As regards the estimation in which the teaching of the out-patient department conducted by my colleague Mr. Wood and myself is held by the students, I may mention that the attendances of pupils during a week lately were exactly 180, thus giving an average of thirty pupils daily. When we take into consideration the fact that our new students did not number many more than thirty, that some of these may be engaged elsewhere, and that all may not be diligent and anxious to learn, I think we may be satisfied that our efforts to make the out-patient department available for teaching purposes are well appreciated by our pupils. I am, &c.

Wimpole-street. HENRY SMITH.

ILEUS RELIEVED BY INFLATION.

LETTER FROM MR. F. J. ORFORD.

[To the Editor of the Medical Times and Gazette.]

SIR,—Having observed in your last number a case of "Obstruction of the Bowels relieved by Inflation," reported by Dr. Whyte, I venture to send you an outline of a case which happened to me about two years ago. I was requested to see an elderly man, and upon visiting him, about 3 p.m., I found him suffering from obstruction of the bowels. He had previously taken six doses of castor oil and tincture of rhubarb (each half an ounce), with no effect. The abdomen was swollen and tympanitic, and I at once administered a turpentine enema, which came away coloured, but without any solid matter. I next injected warm water, which returned nearly colourless. I then ordered warm fomentations to the abdomen, and returned in about two hours and repeated the enema, afterwards throwing up warm water, all of which returned colourless; there was no vomiting, and as I feared to excite that formidable symptom by administering remedies by the stomach, I ordered croton-oil liniment to be rubbed in over the whole surface of the abdomen, and the fomentations to be continued. This was assiduously done during the night, one ounce of the liniment being used, and about 6 a.m. the following morning the bowels were copiously evacuated. They continued to act rather frequently for a day or two, but when that had ceased the patient was quite convalescent, and has continued in good health up to the present time.

Shortly after, I mentioned the case to a neighbouring Practitioner of eminence, who thought my treatment rather "heroic;" and as it seems to me that "inflation" is open to the same objection in a greater degree, I should like to have the opinion of your readers upon the subject.

I am, &c.

FREDERIC J. ORFORD, M.R.C.S.

Welleshourne, Warwick, November 30.

ON PNEUMONIA.

LETTER FROM ASSISTANT-SURGEON WELCH.

[To the Editor of the Medical Times and Gazette.]

SIR,—The presence in your last week's issue of a summary of two papers read before the Royal Medical and Chirurgical Society—the one by Dr. Heale on "The Physiological *Rationale* of Pneumonia," and the other by Dr. Waters on its treatment—leads me to forward you the following *résumé* of the disease in question, based on a careful observation of 52 cases occurring during the winter of 1866-67 in the 1st Battalion 22nd Regiment then stationed in New Brunswick, North America, and detailed at length in the *Army Medical Reports*, vol ix. p. 329. Of these 52 cases, in males between the ages of 17 and 34, and most of good stamina of system, the right lung was involved in 21, the left in 16, and both in 15. Of the extent of involvement of single lung complication—one lobe, 32 (19 right, 13 left); two-thirds of organ, 3 (1 right, 2 left); and whole lung, 2 (1 right, 1 left). Of the double pneumonia, in 13 the disease was limited to the lower lobes, and in 2 (both fatal) the whole of the right lung was involved, and upper and middle lobes of left. Of the fatal cases (2), in one disease of the kidney existed of the granular form of degeneration, in the other the system was completely undermined by syphilis and drunkenness.

The average duration of the cases from the first symptom of congestion to hepatisation of lung tissue was 3·4 days. *Crepitans redux* supervened after an average of two days' duration of consolidation, and an average of seven days ensued from this to restoration of respiration of normal character (with the exception of prolonged expiration), the average duration of cases from first symptom of systemic derangement to full recovery being 17·2 days. Bronchitic complication occurred in the ratio of 54 per cent., pleurisy 59.

A systemic derangement following chilling of the body, suggestive of arrested secretions, and associated with blood change, preceded the local lesion of the lung in all, and determined its extent; the onset of inflammation of lung tissue was associated with high febrile disturbance, and on the completion of hepatisation active morbid change was exhausted.

The temperature of the breath in one lobe involvement was reduced to 86° F., in double pneumonia to 80°; in no case did the thermometer mark more than 103° on skin of epigastrium.

Diminution of the chlorides of the urine was the rule, in proportion to the extent of lung implicated—partially or totally absent while hepatisation was in progress, and reappearing on its completion.

Microscopic examination of the sputum and lung tissue demonstrated that hepatisation was consequent upon cell-proliferation in the air-vesicles (originating probably in those lining the interior), and restoration of patency of the latter by fatty degeneration of the cellular elements mainly removed by absorption; the fibrous tissue of the lung being also swollen out, granular, and with a great tendency to break up into fragments.

The treatment pursued consisted in the relief of the pleurisy by cupping to the extent of three or four ounces, or by counter-irritation, in the restoration and increase of the secretion of skin, kidneys, and intestinal canal by diaphoretics, diuretics, and mild purgatives, especially by one-twelfth of a grain of antimony every four hours; in obtaining sleep by narcotics; in the relief of the accompanying great thirst; and in free support of the system by fluid nutriment and alcoholic stimulants. To get rid of the superadded dyspnœa of pleurisy was clearly indicated, and nothing was so potent to effect this as cupping; the relief of the associated exhaustion of the nervous system by sleep narcotically obtained was also strongly marked; and the asthenic and anæmic tendencies of the disease required to be anticipated by liquid nutriment and alcohol in proportion to the individual peculiarities of the case. No medicine was given for "aiding absorption;" when delayed, it was always associated with deficient stamina, and best rectified by medicinal tonics and dietetic means.

For the arrest of pneumonia the natural history of the disease points to a rapid restoration of the depurating organs, especially the skin and kidneys, as outlets from the system of the accumulated effete products, and consequent curtailment of extent of involved lung.

In uncomplicated pneumonia, the morbid action in the lung is essentially limited to the air-vesicles; the blood, incapable of arterialisation, is stagnant in the capillary network, while cellular elements, rapidly produced, are gradually excluding the inspired air.

Is not the primary obstacle to the efficient performance of the respiratory function in pneumonia in the abnormally vitiated blood, and does not the excessive cell proliferation in the air-vesicles aid greatly in the removal of the offending material? Careful study of the disease certainly supports these deductions, and indicates that if epithelial pneumonia be considered an inflammation of the lung tissue, a great modification of the morbid process embraced in the term inflammation must be allowed according to the tissue or organ of the body implicated. I am, &c.

FRANCIS H. WELCH,

Cork, November 24. Assist.-Surg., 1st. Bat. 22nd Regt.

ACADÉMIE DES SCIENCES.—To fill the vacancy left among the corresponding members of the Botanical Section by the death of Dr. von Martius, an election took place at the last meeting. The Committee sent up the following names:—On the first line: Pringsheim (Berlin). On the second line, *ex æquo:* De Bary (Halle), Bentham (London), Goeppert (Breslau), Asa Gray (Cambridge, Mass.), Naegeli (Munich), and Parlatore (Florence). Of forty-one voters, Prof. Pringsheim obtained the suffrages of thirty-two.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

TUESDAY, NOVEMBER 16, 1869.

RICHARD QUAIN, M.D., President, in the Chair.

DR. MOXON read a report on Dr. Tilbury Fox's specimen of Madura Foot from India. He and Mr. Hogg agreed that it belonged to the second form described by Dr. Carter. It contained no fungus-like structure, but rounded roe-like masses of doubtful origin.

Dr. BRISTOWE reported nothing new with regard to Dr. Powell's specimen of Lympho-sarcoma.

Dr. TUCKWELL (of Oxford) exhibited a specimen of Lympho-sarcoma of the Spleen and Lumbar Glands. The latter formed a mass round the pancreas, and consisted of growths of various sizes. The liver was enlarged, but its structure was not much affected. There was nothing in the mediastinum. The anterior surface of the stomach was dotted over with growths from the peritoneum. The kidneys were contracted and cystic. The patient was a middle-aged woman, who had long suffered from a large ulcer of the leg. Referred to committee.

Mr. J. D. HILL showed a Diaphragmatic Hernia passing upwards through the œsophageal opening. The hernia was covered by a peritoneal sac, and looked as if the fibres of the œsophagus spread out over it. The sac contained the stomach, with the great and less omentum, which were thus situated in the chest. The man had been ill twelve months, and finally could not swallow, nor could a bougie be passed. He died of bronchitis. There were three tumours in various parts of the body, with a structure like scirrhus. Query: Was the stricture of the œsophagus of this nature, or was it congenital?

Mr. CALLENDER asked if the distribution of the vessels was normal, as this would tend to show whether the hernia was congenital or otherwise.

Dr. MURCHISON did not understand how the stomach was in a sac covered by the peritoneum and œsophagus.

Mr. HULKE wished to know where the œsophagus ended in the stomach. The specimen was referred to Mr. Arnott and Mr. Callender.

Mr. BARWELL exhibited the Ring of a Strangulated Ventral Hernia from a foreign patient who was brought exceedingly ill to Charing-cross Hospital. There was an abdominal tumour on the left side, a little above the umbilicus, and the integuments were here darkened. The patient had stercoraceous vomiting, and exhibited a reducible scrotal tumour with no signs of inflammation. He opened the sac, whence a dark fluid flowed, and the intestine was found to be dark with two ashy spots. There was coffee-grounds vomiting, and though the patient partially rallied, he ultimately died. The gut had passed through the muscle, and was there surrounded by a hard cartilaginous ring.

Mr. NUNN exhibited certain casts of a case of Dislocative Rheumatism. The flexors had overcome the extensors, owing to softening of the ligaments. This occurred at various joints, the wrist, the fingers, and the ankles.

Mr. ADAMS said these were merely the results of chronic rheumatic arthritis.

Mr. NUNN also showed certain Fibrous Tumours existing over the Olecranon and Tibia on the same side of the body. They resembled fibrous degenerations of the bursal sacs. As they were in the patient's way, they were removed. There was nothing peculiar in his occupation.

Dr. CAYLEY showed a Fibroid Ovary with a large cyst in its interior. The case occurred in the practice of Mr. Alderson, of Hammersmith. The ovary consisted of two parts—fibroid and cystic—and was that of a woman aged 60. It had grown three years. The cystic portion had ruptured into the intestine. The hard part consisted of fibrous bands with nuclei.

Dr. JOHN MURRAY exhibited the liver, uterus, and appendages of a woman eight months pregnant, aged 24, who was brought into the Middlesex Hospital drenched with blood from ante-partum hæmorrhage. All means were tried to arrest the hæmorrhage, but in vain. At length craniotomy was performed, as the os uteri would not dilate sufficiently to admit of turning. She, however, died a few hours afterwards. Extravasations of blood were found under many of the serous surfaces, and into the tissue of the liver and ovaries. Her history was not that of a bleeder; still these extravasations were unusual, and pointed to the hæmorrhagic diathesis. This would explain also the obstinate hæmorrhage, which was not to be accounted for by any local disease.

Mr. LEGG exhibited from the museum of University College Hospital a specimen of Cherrystones referred to at a former meeting. The woman had suffered from her fifth year from colic. Once, after an enema, she passed many cherrystones. She first entered University College Hospital under the care of Dr. Walshe, when she vomited some fruit stones. Five gutta-percha pills were given to see if they would pass, but they would not. She was lost sight of for a time, but when she re-entered the Hospital, the sound produced on striking the stones was more decided, and a chinking was audible to bystanders. The sound was sometimes elicited from the left, sometimes from the right iliac fossa. After death, the cæcum was found to be very small, and the ileo-cæcal valve extremely narrow. Just above, the ileum was enormously dilated with fæces, containing a few cherrystones. Most of those found were lying higher up in the ileum quite free. They filled a pint measure, and were covered by an inky-looking compound. There was a large opening just above the valve communicating with another part of the ileum.

Mr. NUNN said he remembered seeing in Cruveilhier's plates something of the kind—a concretion having a damson-stone as a nucleus.

Dr. BRISTOWE thought such concretions not very uncommon.

Mr. T. SMITH referred to a case where colotomy was performed and many passed.

Dr. MURCHISON asked if there was anything peculiar about the woman leading her to swallow cherrystones habitually. In Cruveilhier's case there was a cancerous structure.

Dr. EDWARDS CRISP thought gradual accumulation would account for so many being found.

Dr. BUCHANAN said he saw the patient when she first came into University College Hospital. Dr. Walshe diagnosed the existence of the stones in the canal. He being, like most House-Physicians, rather presumptuous, fancied they were outside, and contrived the experiment of the gutta-percha pills to prove this.

Dr. ADAM exhibited a specimen of a Mitral Valve with soft Vegetations on its Margins and an Infiltrated Spleen, removed from a lady aged 48. She had long been weakly, and complained of coldness with shivering, followed by feverish attacks. There was then no evidence of organic disease. By-and-by she got worse. Her temperature rose to 101°—104° F. in the evening. Ascites came on, and she died seven months after the commencement of her illness.

Dr. ANSTIE thought the case one of pyæmia connected with ulcerative endocarditis.

In reply to Dr. Moxon, Dr. ADAM said the murmur had been heard for two months.

Mr. HOGG objected to the term vegetation, as likely to lead to confusion, when men talked so much now-a-days as to the vegetable origin of disease.

Dr. MOXON exhibited a specimen of Pulmonary Embolism. The patient, a male, came under the care of Mr. Birkett for a wound of the foot. There was some erysipelas, but the wound ultimately healed. There was no œdema of the foot, but there was slight pain in the course of the vein. While apparently going on well, the man suddenly died. After death the blood was found quite liquid except in the pulmonary artery, which was filled with a white clot. The femoral vein showed an old phlebitis of months' standing. This plugging was often seen in phthisis.

Dr. POWELL had often seen plugging in phthisis, but no congestion or phlebitis.

Dr. MOXON said there was no congestion, owing to the peculiar circumstances of the case.

Dr. FAGGE remembered a case where they watched for three weeks before œdema appeared after femoral phlebitis.

In reply to Mr. Hulke, Dr. MOXON said he wished to convey the idea of bodily removal of the clot.

Mr. BARWELL drew attention to the femoral clot.

Dr. MOXON said that its upper end was evidently fractured. The man had an erysipelatous attack five days before death.

Referred to Drs. Murchison and Bristowe.

Dr. WHIPHAM showed the Ribs and Heart of a Man destroyed by a pistol-shot wound of the left side. There was a large wound over the apex of the heart, which was blown clean away. Two bullets, very coarsely made, were lodged in the back. The lung was not much injured.

Dr. BRISTOWE showed an Apoplectic Clot in the brain of a woman, aged 68, which had caused loss of speech. She was in the Hospital a month, and was gradually improving so that she could say a few words, but soon broke down. She died of

bronchitis. The clot existed in the left cerebral hemisphere, involving the corpora striata and optic thalami, but the anterior hemispheres were not implicated.

Dr. Greenhow drew attention to the importance of distinguishing the loss of the power of speaking and the loss of the power of language.

Dr. Bristowe could not say which exactly; she recovered both slightly.

ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.

Saturday, November 20.

Mr. Liddle in the Chair.

The Secretary, Dr. Vinen, stated the result of the recent interview with Mr. Goschen on the subject of the Registration of Disease. Mr. Goschen was favourably disposed towards their views. At a second meeting held at Dr. Richardson's it was determined that a deputation should also wait upon the Registrar-General.

Mr. Oram, H.M. Inspector of Factories, and Dr. Steele, Superintendent of Guy's Hospital, were proposed as associated members.

Dr. Ballard then read a paper

ON SCARLET FEVER AND ITS FATALITY, AS AFFECTED BY AGE SEX, SEASON, AND EPIDEMICITY.

Dr. Ballard premised that the remarks he was about to make were based upon a registration of disease in his parish of Islington extending over the twelve years 1857-1868, and including three epidemics. His tables gave a total of 2375 pauper cases; making 10,000 living his basis of calculation, and taking the whole and not merely the pauper population into account, his tables showed that under 5 years of age there were 418 cases; from 5 to 10, 544; from 10 to 15, 224 cases; from 15 to 20, 72 cases; 20 to 40, 24 cases; and so on. He next gave the numbers for each year, and from these he proceeded to refute the statements of various authors on the subject of scarlatina. One author asserted that early infancy and extreme age were exempt from attack. Dr. Ballard had in his register a case of a child only 5 weeks old, and he had another as far advanced as 74 years of age. One author asserted that the liability to attack began towards the end of the first year of life. Dr. Ballard's tables showed him a percentage of $2\frac{1}{2}$ under 9 months old; they also indicated that children under 10 years of age were most liable to attack, that the greatest prevalence was between the ages of 5 and 10, that scarlatina attained its maximum during the fifth year of life, being a year later than that of measles. From 10 to 15 a rapid decline of liability to attack was shown. His tables gave no indication of the period of first dentition or of second dentition being particularly liable. With regard to sex there was shown to be a slightly greater liability on the side of male children under the age of five, and on the side of females between the ages of five and ten, and subsequently. With regard to seasons, spring and winter were shown to be nearly alike in the liability to this disease; the numbers increased considerably in the summer, and attained their maximum in autumn. With regard to temperature the disease seemed more disposed to spread when the mean temperature was between 56° and 60°. With regard to the fatality of the disease this seemed to lessen from infancy, when it was greatest up to the age of 15, and onwards. The fatality was also greater in males than in females up to puberty, when the state of the disease became reversed. It was also shown to be least fatal in summer and most fatal in winter. In the first half of the year there was shown to be, on the whole, most fatality when the disease was least prevalent. Dampness in the weather seemed also to have much more influence in promoting fatality than even a low temperature. Dr. Ballard concluded with some remarks upon the influence of what is called "epidemic constitution" in determining the fatality of the disease.

A short discussion on the subject of the paper followed, in which Dr. Tripe, the Chairman, Dr. Iliffe, Dr. Gibbon, Dr. Stevenson, and others took part, but the statements of Dr. Ballard remained unshaken.

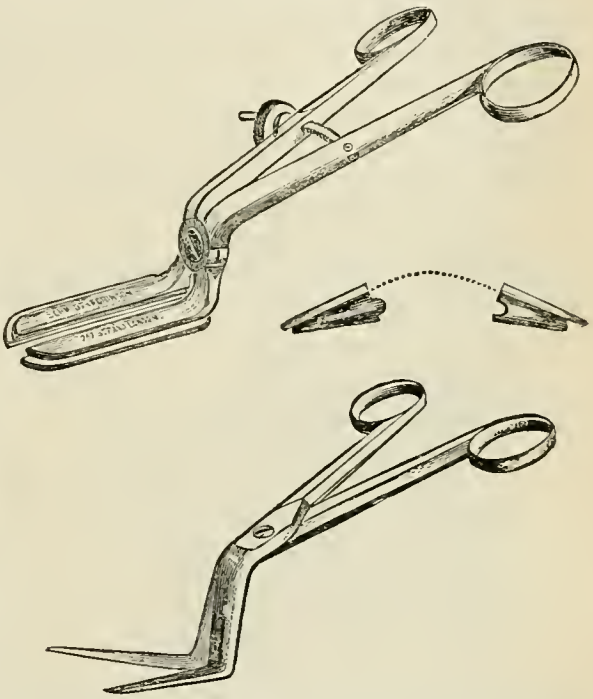
The meeting shortly afterwards adjourned.

Birmingham.—Mr. James Baldwin has forwarded to Mr. Sampson Gamgee a cheque for £100 for the Workingmen's Fund for the Extension of the Queen's Hospital.

NEW INVENTIONS.

NEW CLAMP FOR HÆMORRHOIDS.

Mr. Sydney Jones, feeling how unequally the clamps in present use press on all parts of the pile to be removed, has devised an instrument in which the bars act in a perfectly parallel direction. This parallel action of the blades is effected by placing the joint-screw at right angles to the blades. A scooping action is at the same time secured, so that the deepest part of the pile is seized and drawn forwards. On the upper surface the blades are sloped, so as to make their line of closure project beyond the general level. By this arrangement the removal of the pile by scissors can be more readily effected. The rack and screw for fixing the handles play very easily: the



rack is curved, and, instead of being fixed, has vertical and horizontal movements. Of course, in the use of this clamp the ordinary curved scissors would not have availed; their shape has been modified to adapt them to the curve of the clamp. The principle has been admirably carried out by Messrs. Schmidt and Robinson, of 267, Strand.

NEW BOOKS, WITH SHORT CRITIQUES.

On the Pathology of Insanity. By R. C. Shettle, M.D., Physician to the Royal Berks Hospital. London: Hamilton, Adams, and Co. Pamphlet.

*** This is a paper read before the Reading Pathological Society as an introduction to a discussion, and is evidently the result of much labour on the part of its author. He enters into all the investigations which have been made as to the causation of insanity from the days of Pinel downwards. A previous paper on puerperal mania, by Mr. Walford, had given rise to some discussion, and Dr. Shettle selected his subject in accordance with what he thought most likely to promote debate.

Tooth Extraction. A Manual on the Proper Mode of Extracting Teeth. By John Gorham, M.R.C.S.E., etc. London: Hardwicke. Pamphlet.

*** This little book is likely to be of use. When a young man enters a surgery as apprentice, as is still sometimes the case, one of the earliest operations he is called on to perform is tooth-drawing. Too often he is left to find out the *rationale* of the process by himself, not unfrequently at the expense of a good deal of suffering on the part of unfortunate patients, until he has attained to a kind of rule of thumb. Most books on dentistry are far too large to be put in such a one's hands, but this little manual is just the thing; plain and simple in its

style, no one can fail to understand it, and its precepts certainly seem to us, who do not profess to be profoundly skilled in dentistry, sound and good.

Letts's Medical Prescription Copyist.

*** This recent publication is a pocket-book of convenient size, containing all the prescriber needs for writing prescriptions and retaining a copy of them. We all have experienced, on many occasions at the houses of our patients, delay and vexation for want of pen, ink, and paper. Letts's copyist renders us independent in the matter, and we have the duplicate prescription for reference. The convenience of the arrangement is so great that we feel assured that it will be adopted by the Profession, to whom we strongly recommend its use.

Letts's Medical Ledger.

*** A very useful work for Surgeons in general practice. By its employment they will save themselves an infinite deal of trouble in bookkeeping. By a very simple arrangement the Practitioner can see at a glance all that is required for him to draw up his account.

Letts's Visiting-Lists.

*** These convenient lists are of different sizes to suit different sized pocket-books. We cordially recommend their use.

MEDICAL NEWS.

UNIVERSITY OF LONDON.—The following are Lists of the Candidates who have passed the recent Examinations in Medicine and Surgery:—

M.D. EXAMINATION.

Entire.

Casey, Edward, King's College.
Cavafy, John, Westminster Hospital.
Clothier, Henry, University College.
Eager, Reginald, Guy's Hospital.
Hilliard, Henry Charles (Gold Medal), Guy's Hospital.
Loy, Thomas Richardson, University College Hospital.
Ridge, John James, B.A., B.Sc., St. Thomas's Hospital.
Tibbits, Edward Thomas, University College.

Logic and Moral Philosophy only.

Coombes, Carey Pearce, St. Mary's Hospital.
Parsons, Henry Franklin, St. Mary's Hospital.
Richards, William Alsept, King's College.
Thomas, Edward Wynne, University College.

M.S. EXAMINATION.

Michell, Thomas, M.D., London Hospital.

B.S. EXAMINATION.—PASS EXAMINATION.

First Division.

Dukes, Clement, St. Thomas's Hospital.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, November 25, 1869:—

Gray, Robert, Armagh, Ireland.
Oakes, Charles, Dudley-grove, Bayswater.
Pinder, John William, Horsforth, Leeds.
Waterworth, Edward Allan, Newport, Isle of Wight.

As an Assistant in compounding and dispensing medicines:—

Sutcliffe, William Henry, Jersey.

The following gentlemen also, on the same day, passed their First Professional Examination:—

Nicott, William Mathias, Middlesex Hospital.
Tothill, Thomas Henry Frederick, St. Bartholomew's Hospital.

APPOINTMENT.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

HOPE, WILLIAM, M.B., M.R.C.P.—Physician-Accoucheur to the St. George's, Hanover-square, Dispensary, *vice* Dr. Lee, resigned.

NAVAL AND MILITARY APPOINTMENTS.

ADMIRALTY.—The following appointments have been made:—Dr. John R. Holman, Staff Surgeon to the *Duke of Wellington*, for service in the *Donegal*, to be appointed to the *Ocean* when recommissioned; Francis W. Davis, Surgeon, additional, to the *Duke of Wellington*, for service at Lisbon Hospital; Matthew Trevan, Assistant-Surgeon, additional, to the *Royal Adelaide*, for service in the *Revenge*, to be appointed to the *Zealous* when recommissioned. The undermentioned officers have been promoted to the rank of Surgeon in Her Majesty's Fleet:—Charles Devonshire, M.B.; Arthur Borough Johnson; Thomas Jameson, M.D.; Thomas Dunlop Allison, M.D.; and Duncan McNab Johnston, M.D.

WAR OFFICE.—The Secretary of State for War has appointed Francis Baxter, M.D., F.R.C.S., Surgeon-Major, to be Visiting Surgeon for Chatham, Gravesend, and Maidstone, under the Contagious Diseases Acts, 1866 to 1869.

MEDICAL DEPARTMENT.—Deputy Inspector-General of Hospitals Thomas Guy, M.D., from half-pay, to be Deputy Inspector-General of Hospitals, *vice* John Mure, M.D., who retires upon half-pay.

BREVET.—The undermentioned Deputy Inspectors-General of Hospitals who retire upon half-pay, to have the honorary rank of Inspector-General of Hospitals:—James Walker Chambers, M.D., and John Mure, M.D.

BIRTHS.

HERBERT.—On November 25, at Bradford, Yorkshire, the wife of Henry C. Herbert, M.D., H.M.'s 40th Regiment, of a daughter.

MACKINNON.—On October 11, at Campbellpore, Punjab, India, the wife of Assistant-Surgeon Charles Mackinnon, 20th Hussars, of a son.

PICARD.—On November 25, at 24, Abbey-road, N.W., the wife of P. Kirkpatrick Picard, M.D., of a son.

RHODES.—On November 20, at 5, Royal-terrace, Weymouth, Dorsetshire, the wife of Charles Rhodes, M.D., of a son.

TANNER.—On November 26, at Alfred House, Newington-causeway, London, S.E., the wife of John Tanner, M.D., M.A., LL.D., of a son.

WALLICH.—On November 28, at 11, Earl's-terrace, Kensington, the wife of G. C. Wallich, M.D., of a son.

WILKS.—On November 29, at the residence of Frederick J. Clouston Scott, Esq., Swansea, the wife of Dr. Platt Wilks, of a daughter.

WILSON.—On November 22, at 6, Montpellier-terrace, Cheltenham, the wife of Edward T. Wilson, M.B. Oxon, of a daughter.

WOLFE.—On November 28, at 7, Shaftesbury-terrace, Glasgow, the wife of F. R. Wolfe, M.D., of a daughter.

MARRIAGES.

AVERY—COLEY.—On November 30, at St. Anne's, Wandsworth, William Howard Avery, of Stockton-grange, Shifnal, to Ellen, only daughter of the late John Coley, Surgeon, Bridgnorth.

BLAKE—ALDER.—On November 11, at Hurstbourne Tarrant, Andover, by the father of the bride, Thomas William Blake, M.R.C.S. Eng., second son of Thomas Blake, Esq., of Galway, Ireland, to Katherine Aliee, younger daughter of the Rev. Gilbert Alder, Vicar of Hurstbourne Tarrant and Rural Dean.

HIRON—SHELTON.—On November 23, at the parish church, Walcot, Bath, John Hickman Hiron, M.R.C.S., L.S.A., of Studley, Warwickshire, to Julia, youngest daughter of George Shelton, of Edgbaston.

MALONE—HOFFMEISTER.—On November 23, at Northwood Church, Anthony Malone, Captain R.M.L.I., to Eliza Carter, eldest daughter of W. C. Hoffmeister, M.D., of Clifton House, Cowes, Surgeon to the Queen and Royal Family in the Isle of Wight.

UNWIN—WOOD.—On November 24, at the parish church, Wigan, John Brooke Unwin, L.R.C.P., to Elizabeth, only daughter of Thomas Wood, Esq., Wigan.

DEATHS.

DAVIDSON, MARGARET, third daughter of the late James Davidson, M.D., Marischal College, Aberdeen, and widow of Colonel Thomas Wardlaw, 45th Regiment B.N.I., at Bath, on November 23.

EVANS, GEORGE WILLIAM, M.R.C.S., at his residence, Herne Bay, suddenly, in the 67th year of his age.

FOLLIOTT, JAMES, M.R.C.S., etc., at Stapeley Cottage, near Nantwich, Cheshire, in his 34th year, on November 25.

FULCHER, FREDERICK BROOKER, Surgeon, at Orpington, Kent, on November 24, in his 48th year.

LOCKING, JOHN, M.D., formerly of Market Rasen, Lincolnshire, at 17, Connaught-square, Hyde-park, London, on November 20.

LYFORD, HENRY SUTTON, Esq., son of Henry Giles Lyford, M.D., late of Winchester, at Lyndhurst, on October 7, aged 46.

MACARTHUR, CHARLES BAIRD, son of C. B. Macarthur, Surgeon, Dumbarton-road, Glasgow, at Kirn, Dunoon, N.B., on November 20.

SINCLAIR, JOHN DE BARROCK DUNBEATH, fifth son of Donald Sinclair, M.D. Edinburgh University, at 1, Lyndhurst-road, Peckham, on November 26, aged 8 years.

VERDON, EDWARD HOWARD, Esq., late of Oakley-square, London, and Sligo, at Dublin, on November 22.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

BOROUGH OF IPSWICH LUNATIC ASYLUM.—Resident Medical Superintendent. Applications and testimonials to the Town Clerk's office, Ipswich, addressed to "The Lunatic Asylum Committee," on or before January 15, 1870. The Asylum will be ready for occupation in April or May.

CHOLSEY NEW PAUPER LUNATIC ASYLUM.—Medical Superintendent. Applications and testimonials to J. T. Morland, Esq., Clerk to the Committee of Visitors, at the Asylum, Cholsey, near Abingdon, Berks, on or before December 16.

EAST WARD UNION.—Medical Officer and Public Vaccinator for the Workhouse at Kirkby Stephen. Candidates must be registered, and possess the qualifications prescribed by the Poor-law Board. Applications and testimonials to Mr. John Whitehead, Clerk to the Guardians, Appleby, on or before December 4. Election on the 6th.

GERMAN HOSPITAL, DALSTON.—Honorary Medical Officers, an Honorary Physician, and an Honorary Assistant-Surgeon. They must both be natives of Germany, or prove themselves fully conversant with the German language. Candidates must produce a diploma from a British or foreign university. Applications and testimonials to the Honorary Secretary on or before January 3, 1870.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.—Assistant-Physician; must be M.B. or M.D., and F. or M.R.C.P. Applications and testimonials to the Secretary on or before December 15.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.—Resident Clinical Assistant. Applications and testimonials to the Honorary Secretary on or before 6th inst. Attendance will be required at 4 o'clock the following day.

LIVERPOOL ROYAL LUNATIC ASYLUM.—Medical Superintendent. Applications and testimonials, on or before the 6th, to E. Gibbon, Esq., Royal Infirmary, Liverpool, from whom further information may be obtained.

RADCLIFFE INFIRMARY, OXFORD.—House-Surgeon. Must have both Medical and Surgical qualifications. Applications and testimonials to the Committee of Management on or before the 15th inst. The successful candidate will be required to enter upon his duties on January 1, 1870.

RAMSGATE AND ST. LAWRENCE ROYAL DISPENSARY.—Resident Medical Officer; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Secretary on or before December 4. Election on the 6th.

ROYAL ALBERT HOSPITAL, DEVONPORT.—Junior House-Surgeon; must possess a diploma of the Royal College of Surgeons of London, Edinburgh, or Dublin, and be registered. Applications and testimonials to the Hon. Secretary on or before December 10, 1869. Election on the 14th.

STOURBRIDGE DISPENSARY.—House-Surgeon; must be L.R.C.P. Lond. or L.S.A. Lond., and M.R.C.S. Eng. Applications and testimonials to the Secretary on or before December 14.

WORCESTER GENERAL INFIRMARY.—Resident Dispenser; must be legally qualified to practise as an apothecary. Applications and testimonials to the Secretary on or before December 10.

POOR-LAW MEDICAL SERVICE.

*** The area of the district is stated in acres. The population is computed according to the last census.

RESIGNATION.

Abergavenny Union.—Mr. Samuel H. Steel has resigned the Abergavenny District; population 12,629; also the Workhouse, salary £100 per annum.

APPOINTMENTS.

Banbury Union.—Clarence L. H. Pemberton, M.R.C.S.E., L.S.A., to the Croprody District.

Seisdon Union.—William Spackman, M.D. St. And., M.R.C.S.E., L.S.A., to the Wombourn District.

Stroud Union.—Alfred S. Cooke, M.R.C.S.E., L.S.A., to the Workhouse.

THE ROYAL SOCIETY.—At the anniversary meeting of the Fellows of this institution on the 30th ultimo, being St. Andrew's day, the Copley medal was awarded to M. Henri-Victor Regnault, of Paris, already a recipient of the Romford medal of the same Society. The Royal medals were awarded to Sir Thomas Maclear, Astronomer Royal at the Cape of Good Hope, and Mr. Augustus Matthiessen, co-Lecturer on Chemistry at St. Bartholomew's Hospital, for their admirable researches, the former in astronomy and the latter in chemistry. Few of our readers are perhaps aware that Sir Thomas Maclear is a member of our Profession, having been admitted a Member of the Royal College of Surgeons of England so long ago as December 1, 1815, in the calendar of which institution he appears shorn of his well-earned title. The gentlemen nominated for seats in the Council of the Society, a list of whom appeared in the *Medical Times and Gazette* last week, were duly elected.

ROYAL COLLEGE OF SURGEONS.—We are glad to state that at the examinations for the Fellowship of the College which closed on Friday last, all the candidates, eighteen in number, were successful; with the exception of one gentleman, all were Members of the College, and only two had to go through an examination in Medicine, the other candidates possessing Medical degrees or licences. There were of this number:—M.D. Edin. and L.S.A. Lond., 1; M.D. Edin., 1; M.D. and L.R.C.S. Edin., 1; L.R.C.P. Lond., 1; L.R.C.P. Lond. and L.S.A., 3; L.R.C.P. Edin., 1; M.B. Lond., 2; L.S.A. Lond., 3; L.S.A. Dub., 2; and L.K.Q.C.P Ire., 1. The names of the successful candidates cannot be published until submitted to the Council for confirmation at its next meeting. We understand that for the preliminary examination in arts, etc., commencing on the 15th inst., there are as many as 324 candidates for the Membership, and 65 for the Fellowship of the College, a number much larger than has ever been known at the College of Surgeons; and as there is not sufficient room-space in that institution for the proper examination of this large number, it has been decided to hold the meetings for that purpose at the Whittington Club, Arundel-street, Strand.

ROYAL IRISH ACADEMY.—At the stated meeting of this body held, according to charter, on Tuesday evening, the 30th ult., the Earl of Dunraven, F.R.S., V.P., in the chair, the Rev. Professor Jellett was, on the motion of the Rev. the Provost of Trinity College, seconded by Dr. Stokes, D.C.L., F.R.S., chosen to fill the office of President of the Academy, vacant by the resignation of Lord Talbot de Malahide, F.R.S.

HENRY MARDER, ESQ.—We regret to record the death of Mr. Henry Marder, of Lyme Regis, at the age of 51 years. Mr. Marder had a good local reputation both as a Surgeon and a geologist.

ST. VINCENT'S HOSPITAL, DUBLIN.—Mr. Edward Ryan and Mr. Patrick Laffan, both students of the Medical school of the Catholic University, have, after a competitive examination, been recommended as house pupils in St. Vincent's Hospital.

A MODE OF TREATING TETANUS.—Quite recently a patient who had become attacked by tetanus after compound comminuted fracture of the little, ring, and middle fingers, was treated by section of the chief nerves of the arm. Mr. Maunder cut across the median, radial, and ulnar nerves in the lower fourth of the upper arm instead of amputating.

MEDICAL BENEVOLENT FUND.—At the usual monthly meeting of the Committee held on Tuesday at 11, New Burlington-street, Dr. G. C. Jonson in the chair, the sum of £113 was distributed in grants among sixteen cases; and as the state of the annuity department warranted it, it was decided to hold another meeting on Tuesday next for the election of additional annuitants. The Treasurer, Dr. Hare, gave notice that at the annual meeting he should move that for the future the Fund be called the "*British* Medical Benevolent Fund."

NATURAL SCIENCE SCHOLARSHIPS AT CAMBRIDGE.—Clare College offers a scholarship of the value of £50 per annum, tenable for three years and a half, for natural science. The examination (in chemistry, with physics, comparative physiology, and geology) will be on March 30, and will be open to all students who are willing to commence residence in October, 1870. Information may be obtained from the Rev. W. Rayner, tutor of the College.

THE following gentlemen were elected office-bearers at the last meeting of the Edinburgh Obstetrical Society:—*President:* Dr. Charles Bell. *Vice-Presidents:* Dr. Menzies and Dr. Thomson, of Dalkeith. *Treasurer:* Dr. James Young. *Secretaries:* Dr. R. P. Ritchie and G. Stevenson Smith, Esq. *Councillors:* Dr. Matthews Duncan, Dr. Cochrane, and Dr. James Sidey.

ABERDEEN MEDICO-CHIRURGICAL SOCIETY.—The following office-bearers have been appointed for 1869-70. *President:* Dr. George Ogilvie. *Secretary and Treasurer:* Dr. Robert Beveridge. *Librarian:* Mr. William Fraser. *Curator of Museum:* Mr. R. Smith. *Council:* Dr. R. Jamison, Dr. William Keith, Dr. G. G. Brown, Dr. A. Fraser, and Mr. J. Corbet. *Representatives* to the North of Scotland Medical Association: Dr. G. Ogilvie, and Dr. R. Beveridge; *ex officio*, Dr. J. W. F. Smith, and Dr. A. Kilgour, elected.

THE adjourned election of a Physician to the Murroe Dispensary, Ireland, was held on Thursday, under the auspices of some 500 soldiers and police, when the mob limited their demonstrations to yells, etc. There were twelve governors present, of whom seven (three of them Roman Catholics) voted for the Protestant candidate, Dr. Keyes, and five (of whom two were Protestants) for the Roman Catholic candidate, Dr. O'Malley.—*Guardian.*

THE MEDICAL CLUB.—The members of this Club seem to have learnt the lesson, so thoroughly appreciated by Englishmen, that there is nothing like a good dinner for keeping up the feelings of good fellowship. The monthly dinners of the Club are always well attended and well managed, and consequently increase in popularity. These have been held now for some length of time. The second of the present season took place on Wednesday, the chairman for the occasion being Dr. Swettenham, Deputy Inspector-General of Hospitals, who pressed upon the Medical officers in the army and navy the advantages which the Club affords to men like themselves who require a temporary home occasionally in town, and wish to find in it something more of the social elements of home than can be got at an hotel.

DUBLIN UNIVERSITY MEDICO-CHIRURGICAL SOCIETY.—The inaugural meeting of the third session of this useful association was held on Friday evening, November 26, in the Museum-buildings, Trinity College. The chair was occupied by Dr. Stokes, Regius Professor of Physic, President of the Society. The Auditor, Mr. F. C. Crossle, B.A., and gold medallist of the Pathological Society, read the opening address, the subject of which was "Quacks and Quackery." Having given an interesting historical review of the subject, the Auditor went on to deal with the expedients at present used by the many persons who trade upon the credulity of the public in Medical matters. As remedies to the great abuses resulting

from quackery, the following were particularised in this able address:—1. The education of the minds of the public on hygienic principles and sanitary laws. 2. The closing of the press to quacks and their advertisements; and 3. The moral effect produced by the conduct and knowledge of the members of our Profession. A vote of thanks to the Auditor was proposed by Dr. B. G. McDowel, Professor of Anatomy, and seconded by Dr. Wharton. The following gentlemen subsequently spoke—viz., the Rev. Professor Jellett, F.T.C.D.; Dr. Gordon; Mr. W. E. Battersby, ex-Auditor of the Society; Dr. J. W. Moore, and Mr. Mackamara, President of the College of Surgeons. The Chairman then distributed the following prizes:—The Society's first prize for the best essay, read during the previous session, to Reuben J. Harvey, Sch., B.A., Med. Sch.; second prize for essay, to Francis Crossle, B.A., Auditor; and the prize for Oratory to F. Crossle, Auditor. After some interesting remarks from the Chairman, the meeting adjourned.

Pathological Society of Dublin.—The opening meeting of the thirty-second annual session of this Society took place on Saturday, the 27th ult., in the Anatomical Theatre of Trinity College, Dr. Alfred H. McClintock, President, in the chair. A specimen of "myxoma," or mucous tumour of Virchow, was shown by Dr. R. McDonnell, and communications were also made by Dr. E. H. Bennett, on peculiar fibroid tumour; by Dr. Wharton, on rupture of the inferior vena cava, the result of a car accident; by Dr. James Little, on cirrhosis of the kidney; and by Mr. H. Wilson, on suppuration of the eyeball. The President then declared the subject for competition for the Society's gold medal, which will be awarded in April, 1870, to be the "Diagnosis and Pathology of Thoracic Aneurism." The Society subsequently adjourned to transact business. The following were elected officers for the session 1869-70:—*President:* George H. Porter. *Vice-Presidents:* Robert Adams; James Duncan; Sir Dominic J. Corrigan, Bart.; Thomas Beatty; James S. Hughes; Samuel Gordon. *Council:* John J. Banks; John Denham; Christopher Fleming; John Hamilton; Edward Hamilton; Henry Kennedy; George Kidd; Robert Law; Benjamin G. McDowel; Robert McDonnell; Alfred H. McClintock; Joliffe Tufnell. *Honorary Secretary:* William Stokes. *Secretary and Treasurer:* Robert D. Smith. *Secretary for Foreign Correspondence:* Robert D. Lyons. The incoming President, Dr. George H. Porter, having taken the chair, a vote of thanks to Dr. McClintock was proposed by Sir Dominic Corrigan, Bart., seconded by Dr. Beatty, and carried by acclamation. The proceedings then terminated.

Dublin Statistical Society.—At the first meeting for the session of the above Society, held on Tuesday, November 23, Dr. Robert M'Donnell, F.R.S., in an able paper, again called attention to the subject of "patronage and purchase in making appointments." Having adverted to Dr. Mapother's paper of the preceding session, Dr. M'Donnell stated his conviction that it was very undesirable that appointments of Professional men should be made by boards composed solely of members of the Profession. He showed how the abolition of state sinecure offices has struck at the very root of the laws of primogeniture. "Men of great wealth and influence," he said, "not now, as formerly, able to provide for a younger son by shoving him into a sinecure office, are driven to make some other provision for younger children. In the social ascendency struggle which must go in Ireland for many a day, it is obviously the interest of one faction to advocate systems in which patronage, purchase, etc., will come in. It is as obviously the interest of that faction now at the bottom of the social pyramid to advocate systems in which tests of industry and intelligence will be required—systems which will bring talent to the front, and enable a man, not backed by influential or aristocratic friends or money, to fight his way. Those who throw obstacles in the way of education, or who adopt money tests or systems of purchase, are not the friends of the native Irishman, who, with a lively intelligence and a light purse, has the world before him." Of nepotism, Dr. M'Donnell spoke under two forms: (1) that exercised by an individual who has the sole power of appointment intrusted to him; (2) that practised by a corporate body. The first he illustrated by the appointments of officers in our courts of law; to illustrate the second, he referred to the "honoured names which for generations have been connected with some of our most valued Medical institutions." Of the first form he treated at some length; in connexion with the second he alleged among the "special reasons why small corporations of Medical men are even worse suited than similar bodies of other callings, for having confided to them the trust of appointing their colleagues," the existence of an element which, we believe and trust, seldom or never comes into play, namely, "professional jealousy," creating "a positive interest in electing an inferior man." To take the lowest ground, we trust there are few so unwise—to take higher ground, we hope there are still fewer so base—as to act on such a principle. Dr. M'Donnell pointed out the difference between the sale of a share in, for example, a "proprietary Medical school"—which is unobjectionable—and in a charitable institution; and also in the purchase of a resignation where the out-going officer has, and where he has not, a voice in the appointment of his successor. In the former case "to accept money is corrupt, it is selling not only the resignation, but the vote." Finally he referred to the case of "a charitable institution, an Hospital suppose, supported by voluntary contributions; a large number, say, 200 or 300 contributors of a certain amount, are governors, and they elect the Medical officers. A vacancy by death occurs on the Medical staff, thereby a golden opportunity is offered to the governors to get a sum of money for their charity. Six candidates, suppose, enter for the vacancy. They are told that it is expected that the person elected is to give, say, £100 or £500 to the charity. The two best, let us suppose, being poor, and not having the requisite sum at their disposal, retire. The other four, it is true, enter for the race, all carrying equal weights; the sum is an understood and fixed one. The governors are quite free to elect the best of the four, and thus they get a very fair Medical officer and a good lump of money into the bargain." But he showed that such a proceeding is neither moral nor wise. In the first aspect it is "charity" at another's expense, in the second £20 or £30 a year made up by a little more energy on the part of the governors would be more useful to the institution than such an unequal and precarious income. Dr. M'Donnell concluded his able address in the following words:—"Let not the honest men among the governors of our charitable institutions shut their eyes to the fact, that, whether there be five of them or 500, the sale of Medical appointments is wrong, even although it be a sale apparently for the benefit of the charity over which they preside. Of course, if they sell the post of Medical officer and divide the whole or a part of the booty among themselves, this is a breach of public trust. The remedy lies with the Court of Chancery, which might be put in motion to compel the Medical trustees to account for all the money received in the performance of their trusts. There are few persons who have the hardihood so far to outrage common honesty as to defend this amount of corruption; yet, strange to say, even this has found its defenders. In conclusion let me say that I am very well aware of how imperfectly I have dealt with my subject. I trust, however, that I may have succeeded in pointing out that purchase in some of its forms can no more be defended than bribery at an election. I would remind some of those able and distinguished men who on a former occasion before this Society advocated purchase in the case of Hospital appointments that they have been misunderstood, and their authority has been cited in support of systems of purchase of which I cannot doubt they also would strongly disapprove. Although I admit that in this age, and with a society such as this, soundness of argument goes further than authority, and that which is said has more effect than who it is that says it, yet it is certain that the weight of an eminent man's name is often cast into the balance, and the lighter the scale the more need for that kind of weight."

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Dr. George Johnson's paper on Cholera shall be inserted next week.

A Subscriber of Three Years.—Yes, if the mirror is perforated; not otherwise. It would be inconvenient, and the ophthalmoscope could be obtained for a few shillings.

A. B. should apply to the Secretary at Apothecaries' Hall, Blackfriars.

Unum.—Not if he had registered his attendance at the proper time.

A Bibliopolist.—The edition of Hippocrates in black-letter referred to is in the library of the Medical Society of London.

Chirurgus.—The coroner was bound to hold an inquest in such a case. The Registrar would not have been justified in registering the death on the certificate which was given.

Aliquis.—Dr. Conolly's "Study of Hamlet" may be obtained by order of any bookseller. It is not regarded as one of the happiest works of the author, but it is a most interesting and classical production.

Gray's "Anatomy."—A Suggestion.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Might I be spared space in your valuable columns for a suggestion? It is this, that the very valuable introduction on general anatomy in the present edition of Gray's "Anatomy" should be published by Messrs. Longman in a separate form. I dare say there are many like myself who, not long since, purchased the fourth edition, and therefore are not inclined to purchase the new edition for the sake of its introduction, but, at the same time, would not mind giving a few shillings for the part on general anatomy alone. I am, &c. A Second Year's Man.

Candidate.—The salary bears relation to the number of emigrants, etc. Application should be made to the Commissioners of Emigration, Duke-street, Westminster.

Libelled.—The saying attributed to Lord Mansfield that the "greater the truth the greater the libel," has always been regarded as a paradox. Whatever force the "axiom" might have had in the days of "courtly Murray," it has little or no application at the present time. The jury, and not the judge, determines whether the writings be libellous or not, and a defendant can "justify." If our correspondent is not prepared for a searching investigation, he had better "put up with the affront." The case referred to was tried before Mr. Justice Buller, and Erskine defended.

Protection of Drunkards.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In the draft of an Act you propose to be made applicable to the drunkard, I do not see any provision, like that of the American, for interfering with the personal liberty of the individual, but only with his property. If I am mistaken, will you kindly allude to it in an editorial note? If the personal liberty of the drunkard could be restrained from temptation under the American law, it is evident that he would be taken from doing harm to himself and others. The mere security of his property would not at all touch the question at issue. I beg you will excuse this communication. I am, &c. Thomas Stokes.

Nailsworth, November 23, 1869.

*** The preamble of the draft Bill states it to be expedient that the "powers, etc., now exercised by the Lord Chancellor over the persons and property of all idiots, lunatics, etc., should be extended over those incapable of conducting their own affairs in consequence of habitual drunkenness." It proceeds to enact that, "from and after the passing of this, the Lord Chancellor shall have the care and custody of all persons who shall be incapable of conducting their own affairs in consequence of habitual drunkenness, and of their real and personal estates." In every such case, where the property of such habitual drunkard is less than £500, the county court of the district in which he resides "is hereby vested with the same powers in relation to the person and real and personal estate of the said drunkard as are, by this Act, conferred upon the Court of Chancery, and shall, in all respects, proceed in like manner." In the article upon the American laws, the very point raised by Mr. Stokes came before the New York Court of Chancery under the revised statutes of that State, and the Chancellor said, in giving judgment—"The appeal in this case presents an important question as to the power and control which this Court has over the persons of this unfortunate class, etc. . . . By the recent revision of the statutes, the powers of this Court in relation to the persons, as well as to the estates, of habitual drunkards are put precisely upon the same ground as the powers over the persons and estates of idiots and lunatics . . . That the statute gives to the Court a perfect control over the person of an habitual drunkard, which it can exercise through the medium of a committee, I think there is no reasonable ground to doubt." The draft Bill adopts, in all these respects, the *ipsissima verba* of the revised statute of New York.

M.A. can "go in" for the B.M., and afterwards for the higher qualification.

Botanicus can obtain admission to the Apothecaries' Garden at Chelsea by application to the Master of the Society of Apothecaries.

A St. Pancras Parishioner.—We have read Mr. Jabez Hogg's letter in the *Examiner and London Review:* it is a laboured and studied effort to "whitewash" the present Board of Guardians. With all his special pleading, his copious extracts, and appeals to authority, he leaves the case much as he found it.

Uterine Hæmorrhage.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The following suggestions for the suppression of uterine hæmorrhage I beg to communicate for the consideration of your readers:—

The act of performing deep inspirations, by its tendency to draw both venous and arterial blood towards the cavity of the chest, weakens and diminishes the volume of the venous circulation. This, in cases of uterine hæmorrhage, would, partly by enabling the sinuses to contract, diminish the loss of blood, or cause its suppression. The diaphragm also, being drawn downwards in each inspiration, has a tendency, during the latter stages of labour, by diminishing congestion of the viscera and assisting the abdominal muscles in expulsion, to hasten delivery, or, after delivery, to assist the proper contractions of the uterus. The bearing-down efforts in labour should consist chiefly in taking deep inspirations and prolonging the expirations, and not in holding the breath, which is attended with danger.

Secondly, as the uterine sinuses terminate on each side of the body of the uterus, I would suggest, instead of the old practice of applying the abdominal compress in cases of uterine hæmorrhage over the uterus, that it should be applied on each side, or in the ileo-lumbar regions, so as to compress these sinuses and insure the contraction of the uterus in the lateral diameter. I am, &c. W. C.

University College.—You will find Mr. Samuel Cooper's course of lectures on Surgery published in the *Medical Times*, vol. xvi.

Thomas Guy, S.E.—Formerly the College of Surgeons claimed and obtained the bodies of all murderers executed at the Old Bailey. This supply to the schools has been cut off by the interment of the bodies within the walls of the prison. We understand that action is about to be taken in the matter of the inefficient supply by the College of Surgeons.

Dermatologist.—Some little time ago there was a case of true leprosy in St. John's Hospital. Bontius states that the disease was observed on the banks of the Ganges, where it was known by the name of *Cowrap*. Kaempfer noticed it in Ceylon and Japan. Some of the beautifully executed preparations presented by Professor Erasmus Wilson to the College of Surgeons are now to be seen in the new cases provided for them, and amongst them we believe you will find illustrations of leprosy.

Child-bed Mortality.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The question of hospitalism, which has been so ably discussed of late in your pages, is one of such overwhelming importance that it behoves every man who can to throw in his mite towards its elucidation. It is truly appalling to think of the death-rate, during fifteen years, being 1 in 31½ in Dublin Hospital, and 1 in 65½ in Edinburgh Hospital, provided the cases were all of a fair average class. In order to be certain, however, how far this high death-rate may be owing to mere hospitalism as distinguished from other causes, it would be absolutely necessary to go over every death in detail, so as to ascertain from the nature of the case what chances of recovery the same patients would have had out of Hospital. If puerperal fever, which is a special Hospital disease, be thrown out of the list, the probabilities are that it will be found that most of the cases would have died anywhere. At any rate, this appears to me the only true method of forming a correct estimate; and if a scrutiny of this description places all the blame on hospitalism, the course of duty is plain.

I have acted as Physician and Surgeon to the Coleraine Infirmary (113 beds) for the last fifteen years. One room of the Infirmary, with two beds, is specially appropriated to such midwifery cases as are occasionally admitted to the house. During my term of office, 157 women have been delivered, and one of them died. This death, however, cannot properly be set down to the Hospital. The case was perfectly natural and easy, but the woman died shortly after her confinement from the bursting of an abdominal tumour, the nature of which was not correctly ascertained, as there was no *post-mortem*. I have now been thirty-one years in private practice. During all that time I have had a large midwifery practice in every rank of life. I have no record of the number of my cases, but I have never yet had a single death. The chief causes which have contributed to this result are detailed in my letter published in your journal of November 25, 1865. I am, &c. James C. L. Carson, M.D.

Coleraine, Ireland, November 27.

Archæologist.—It is stated that Sir Theodore Mayerne took instruction in Medicine from Sir Walter Raleigh. In early life the celebrated Sydenham left Magdalen-hall, Oxford, to serve in the Parliamentary army.

The Pharmacy Act.—We have noticed the change. Our contemporary struck some terror into the minds of Surgeons in general practice by his extraordinary statements some months since respecting the above Act. What a contrast does his last issue exhibit! It is, however, only an illustration of what Lord Castlereagh described as "a man turning his back upon himself."

Rahere.—John Abernethy was elected President of the College of Surgeons in 1820, and of the Court of Examiners in 1821; judging from an interesting autograph before us dated July, 1829, it would appear that he resigned his seat that year in the following terms:—"Mr. Abernethy having reason to believe that his health will not be reinstated so as to enable him to resume the arduous duties of a member of the Court of Examiners of the College under so long a time that he does not feel justified in keeping out his successor for that term, he therefore begs to tender his resignation of the office of Examiner.—John Abernethy." You will find Mr. Macilwain's life of Abernethy very interesting.

Yellow Fever.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I cannot conceive whence Dr. Paterson obtained his theories on yellow fever. He says that it is "one of the most virulently contagious of diseases." Even the upholders of the contagious theory allow that its contagious powers are low and inoperative, unless the poison is much concentrated; whilst, on the other hand, numerous observers, among whom I may name Drs. Blair, La Roche, Bults (of Demerara), and Condis (of Philadelphia) (with whose experience mine coincides), deny altogether its propagation by contagion. During my frequent visits to the Yellow Fever Hospitals in the Havana and George-town (Demerara), I never contracted the disease, nor did I hear of any instance of its spread amongst the Hospital attendants—indeed, Blair, in his treatise, says the surest way to catch yellow fever is to leave the clean airy wards and go live in the town.

Then, as to the period of incubation, Dr. Paterson says that three days is about the average. I think if that gentleman consults the writings of any authorities upon the subject, he will find that the period of incubation averages ten days, and frequently extends to double that time. In fact, such a short incubescence as three days is unusual. The following are examples in my own practice:—

A. B., stoker, seized with yellow fever six days after arrival of the ship in St. Thomas from the Havana; the voyage occupied five days. There was not any yellow fever at St. Thomas, but it was very severe in the Havana. Period of incubation at least eleven days. This was a mild case, and recovered.

C. D., a passenger, suddenly prostrated on the day of embarkation at St. Thomas for England; died with symptoms of virulent yellow fever within seventy-two hours. He had been a week in St. Thomas, which was free from yellow fever; but three days before he arrived there he had slept

two nights in Jarmel, a dirty town in Hayti, where yellow fever prevailed. Period of incubation at least ten days.

E. F., a passenger, native of Port-au-Prince, and G. H., ship's store-keeper; both fell sick th ee days before arrival at Southampton, and both died with black vomit; one the day after, and the other two days after, landing.

In these cases the first symptoms appeared on the tenth day after leaving St. Thomas, where yellow fever was epidemic. Incubesecence at least ten days, probably longer. These are a few out of numerous instances I could cite. I may add, on no occasion did the disease spread.

Portsea, November 30. I am, &c. R. E. Power.

P.S.—Reading "Medical Opinions," I am reminded that black vomit has been swallowed by enthusiastic theorists with impunity.

COMMUNICATIONS have been received from—

Dr. B. Kelly; Mr. T. W. Blake; Mr. C. B. Macarthur; Dr. Fayrer; Mr. J. F. Collingwood; A Constant Reader and Subscriber; Dr. J. Young; Mr. C. F. Maunder; Dr. H. C. Andrews; A Second Year's Man; Mr. W. Chenhalls; Mr. W. W. Reeves; Mr. John Gorham; Dr. Hirschberg; Mr. W. H. T. Power; Dr. J. C. L. Carson; Mr. J. D. Hill; Mr. F. R. Wilson; Dr. R. W. Foss; Dr. Wiltshire; Dr. R. E. Power; Mr. Thomas Bryant; Dr. Clifford Allbutt; Dr. J. Kent Spender; Mr. C. Orton; Mr. J. Chatto; Dr. Yeo; Dr. Hope; Dr. Felce; Mr. F. J. Orford; Dr. Madden; Dr. J. R. Wolfe; Dr. J. J. Phillips; Mr. J. Birt; Dr. Lory Marsh; Dr. Quinlan; Mr. Sydney Jones; Mr. B. Wills Richardson.

BOOKS RECEIVED—

Reports of the Governor, Chaplain, Prison Minister, and Surgeon of the Liverpool Borough Prison—Madden's Observations on the Cure and Prevention of Puerperal Fever—Thomas's History of Four Cases of Chronic Inversion of the Uterus—Gorham on Tooth Extraction—Amory and Webber's Contribution to the Physiological Study of Veratrum viride and Veratria—British Journal of Dental Science, No. 162—Pharmaceutical Journal, No. 126—Schroeder Van der Kolk on the Pathology and Therapeutics of Mental Diseases, translated from the German by J. T. Rudall, F.R.C.S. Eng.—Spence's Lectures on Surgery—Grundzüge der Wissenschaft des Glücks, von F. A. v. Hartsen—The Life and Letters of Faraday, by Dr. Bence Jones—Edinburgh Medical Journal, December.

NEWSPAPERS RECEIVED—

Examiner—New York Medical Gazette—Aris's Birmingham Gazette—Eastern Post—Pulman's Weekly News—Medical Press and Circular—Lincoln Journal—Brighton Guardian—Philadelphia Medical and Surgical Reporter.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, November 27, 1869, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the year 1869.	Persons to an Acre. (1869.)	Births Registered during the week ending Nov. 27.	Deaths. Corrected Average Weekly Number.	Deaths. Registered during the week ending Nov. 27.	Temperatur of Air (Fahr Highest during the Week.	Temperatur of Air (Fahr Lowest during the Week.	Temperatur of Air (Fahr Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3170754	40·7	2080	1462	1676	49·9	26·8	41·0	1·16	117
Bristol (City)	169423	36·1	94	76	*73	51·7	23·5	39·9	0·33	33
Birmingham (Boro')	360846	46·1	229	175	199	50·1	28·6	39·6	0·18	18
Liverpool (Boro')	509052	99·7	338	295	289	51·2	29·7	41·2	0·85	86
Manchester (City)	370892	82·7	300	210	*230	51·0	28·8	38·5	0·89	90
Salford (Borough)	119350	23·1	95	60	65	49·9	26·2	38·8	0·82	83
Sheffield (Borough)	239752	10·5	185	126	155	51·0	27·5	35·4	0·74	75
Bradford (Borough)	138522	21·0	115	71	70	51·0	31·4	40·5	0·31	31
Leeds (Borough)	253110	11·7	156	129	139	51·0	32·0	40·6	0 24	24
Hull (Borough)	126682	35·6	71	59	58	45·0	25·0	37·2	0·95	96
Nwestl-on-Tyne, do.	130503	24·5	88	69	67	...	...	...	...	...
Edinburgh (City)	178002	40·2	133	86	84	49·7	29·0	39·3	0·36	30
Glasgow (City)	458937	90·6	377	268	308	48·4	23·7	36·3	0·99	100
Dublin (City, etc.†)	320762	32·9	137	158	146	51·8	26·0	39·7	0·78	79
Total of 14 large Towns	6546587	35·5	4398	3244	3559	51·8	23·5	39·4	0·66	67
Paris (City)	1889842	...	...	...	933 Week ending Nov. 20.	...	...	...	...	...
Vienna (City)	605200	...	...	...	...	...	...	...	...	...

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·513 in. The barometrical reading decreased from 30·18 in. at the beginning of the week to 29·03 in. on Monday, Nov. 22.

The general direction of the wind was variable.

Note.—The population of Cities and Boroughs in 1869 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous.

* The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

† Inclusive of some suburbs.

VITAL STATISTICS OF LONDON.

Week ending Saturday, November 27, 1869.

BIRTHS.

Births of Boys, 1063; Girls, 1017; Total, 2080.

Average of 10 corresponding weeks, 1859-68, 1972·9.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	852	824	1676
Average of the ten years 1858-67	734·1	720·7	1454·8
Average corrected to increased population	...	...	1600
Deaths of people above 90	...	...	...

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-cough.	Fever.	Diarrhœa.	Cholera.
West	463388	...	3	19	1	7	7	4	...
North	618210	2	8	38	2	17	6	2	...
Central	378058	...	2	17	1	8	5	1	...
East	571158	3	17	60	2	15	12	6	...
South	773175	...	20	85	1	23	15	7	...
Total	2803989	5	50	219	7	70	45	20	...

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·513 in.
Mean temperature	41·0
Highest point of thermometer	49·9
Lowest point of thermometer	26·8
Mean dew-point temperature	37·6
General direction of wind	Variable.
Whole amount of rain in the week	1·16

APPOINTMENTS FOR THE WEEK.

December 4. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m. King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 1½ p.m.

6. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 1½ p.m.; St. Peter's Hospital for Stone, 2½ p.m.

Medical Society of London, 8 p.m. Mr. Haynes Walton, "On Sympathetic Ophthalmitis." Mr. J. Sampson Gamgee (of Birmingham), "On Compound Fracture."

Royal Institution, 2 p.m. General Monthly Meeting.

7. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.

Ethnological Society, 8 p.m. Lieut. S. P. Oliver, R.A., "Report on the Prehistoric Remains in the Channel Islands." Rev. W. C. Lukis, "On the Megalithic Monuments of Brittany."

Pathological Society, 8 p.m. Dr. Murchison, "Gall-stone impacted in Common Duct." Mr. Hulke, "Effects of Impacted Calculi;" "Encysted Hydrocele." Mr. Davy, "Injury to Tendon;" "Ruptured Spleen." Dr. Sutton, "Cyst of Stomach." Dr. Crisp, "Diseased Ovaries in Fowl;" "Calculus from Bladder of Dog." Dr. Kelly, "Malformations of Heart." Dr. Leared, "Cancer of Lung." Mr. Maunder, "Nerves of Arm divided to arrest Tetanus," etc.

8. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1¼ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.

Epidemiological Society, 8 p.m. Dr. Blaxall, R.N., "On the later History of the Outbreak of Fever in Mauritius."

Hunterian Society, 7½ p.m.; Council Meeting. 8 p.m.: Dr. Daldy, "On serious Spinal and Cerebral Symptoms associated with Imperfect Development of the Cranium."

Royal Microscopical Society (King's College), 8 p.m. Professor Rymer Jones, F.R.S., "On Deep-sea Dredgings from the Vicinity of China and Japan."

Society of Arts, 8 p.m. Meeting.

9. *Thursday.*

Operations at St. George's, 1 p.m. Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

10. *Friday.*

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

Clinical Society, 8½ p.m. Mr. Croft, "Case of Tumour removed from the Orbit." Mr. Cooper Forster, "Cases in which Torsion has been employed." And other Papers.

ORIGINAL LECTURES.

ON THE

INFLUENCE OF PULMONARY STENOSIS, OF OTHER DISEASES OF THE HEART, AND OF ANEURISMS

ON TUBERCULAR INFLAMMATORY DEPOSITS IN THE LUNGS (TUBERCULOSIS).

By Dr. HERMANN LEBERT,
Professor of Clinical Medicine in the University of Breslau.

It has long been considered a kind of dogma that there exists a law of exclusion between the diseases of the heart and tuberculosis. I have always objected to any such general law in pathology, since a sufficient number of exceptions is always to be found to prohibit the framing of any such law; all that we can do is to speak of a general rule. The fact that diseases of the heart and pulmonary tuberculosis are not often met with together is generally true, and for this very reason an examination of the circumstances under which the two diseases co-exist is of importance.

Thirteen years ago I drew attention to the fact, which was afterwards prominently brought forward by Bamberger, that I found tubercular disease of the lungs in a fourth part of the cases of pericarditis observed by me; some of these were cases of tubercular pericarditis, others were of the simple sero-purulent and pseudo-membranous varieties; under these circumstances the inflammation of the pericardium is generally the consequence of tuberculosis, forming only one of the consecutive inflammations of the latter.

Of all diseases of the heart and vessels I know not one which is so frequently followed by tubercular inflammatory deposits in the lungs as is congenital pulmonary stenosis. A broad general distinction must be drawn between those diseases of the heart which may be consequent on tuberculosis, as pericarditis, myocarditis, fatty degeneration of the heart, etc., and those, which are of much more importance, in which the cardiac disease leads immediately to the production of tubercular pneumonic deposits.

I presume you are aware that I do not consider tubercle to be an essentially new formation, but that I look upon the so-called tubercular affections as creeping chronic or subacute inflammation, in which, of course, local and general changes in nutrition, now of a mechanical, now of a cachectic nature, play an important part.

Cases have already been published by previous observers, as Farre, Travers, Gregory, Louis, Creveld, and in recent times by Frerichs, Mannkopf, Duchek, Stölker, and myself, in which pulmonary stenosis has occurred in connexion with tuberculosis of the lungs of considerable intensity. If we were to decide on the frequency of their co-existence according to the general routine of statistics, we should arrive at perfectly wrong conclusions. In the observations of the last century their coexistence was not mentioned; in those of the early decades of the present century it has been but seldom referred to; while in the observations made during the last twenty-five years, according to an analysis which I have prepared, over thirty per cent. (*i. e.*, nearly one-third) of all the cases of tubercle in the lungs have been complicated with pulmonary stenosis. I have myself collected twenty-one cases of the kind, of which five only were observed before 1843, and sixteen between that year and 1867. Now it would betray a lack of all philosophic reason if one were to conclude that pulmonary stenosis has led to tuberculosis more frequently during the last quarter of a century than during the century and a half before, since no explanation can be more certain than this—that at the present time the post-mortem examinations are performed with much more care than was the case formerly, and that every studious observer in our days examines all the organs at each autopsy. I myself have observed that from the moment I turned my attention to this subject, the number of cases met with has been increasing, and in future the proportion will still more increase.

It is an interesting fact that, in the elaborately written histories of the cases, no mention has been made of hereditary taint or of tuberculosis of the parents. No other disease gives so large a proportion of cases of consecutive tuberculosis, and, since the pulmonary stenosis is generally congenital, since the tubercular deposits in the lungs form only after years, and sometimes develope only after puberty, no doubt can exist on this point—that the affection of the lungs is the consequence of the disease of the heart.

Neither can it be doubted that the pulmonary circulation is directly interfered with by the stenosis of the orifice of the pulmonary artery, and this it is which plays the principal part in the production of the tuberculosis. It cannot be argued that disease of the right ventricle would suffice, because such argument is refuted by the circumstance that I have never seen a case of disease of the tricuspid valve coexistent with tuberculosis of the lungs, nor do I know of any such case in Medical literature, except the one which was brought before the Medical Society in 1866 by Dr. Ebstein. In this case there was a congenital defect of the tricuspid valve of such a kind as to impede, to a high degree, the entrance of blood into the pulmonary artery—viz., rudiments of the valve were present, but, besides these, a large membrane existed, partly connected with the papillary muscles and the tendinous cords, by which the right ventricle had been divided into two halves, the one corresponding with the conus arteriosus, the other with the remainder of the ventricular cavity; the two divisions communicated, through only one large oval and several small openings, in such a way, that at all events a great impediment was afforded to the blood current in its course towards the pulmonary artery. An insufficient closure of the valve of the foramen ovale allowed the exit of part of the blood, which was stagnating in the right side of the heart, from the right into the left ventricle.

We have already mentioned that a patent state of the fœtal circulatory channels is a condition almost essential to narrowing of the pulmonary osteum, by which, it is true, mixture of the arterial with venous blood takes place in different ways. How little that mixture aids in the production of cyanosis may be seen from the fact that in twenty-one cases of pulmonary tuberculosis with pulmonary stenosis, collected by me, cyanosis existed only in twelve. Besides the patency of the fœtal circulatory tract, a collateral pulmonary circulation, which remains always imperfect, is formed, partly by means of the enlarged bronchial arteries, by the arteria œsophagea, by branches of the subclavian, etc.; notwithstanding this the circulation remains always inefficient, and particularly so in the case of the lungs; it is from this cause that a relative smallness and imperfect development of the lungs are not unfrequently observed under such circumstances. The unequal distribution of blood in such conditions must be of particular influence in the production of tubercular deposits; for in an advanced stage of other valvular diseases the lungs are often gorged with blood, the pulmonary artery enlarged at its origin, and numerous capillary dilatations are found in the terminal ramifications of the vessels; nevertheless this enormous engorgement does not lead to the production of tubercle. I would not lay too much stress on the abnormal inter-mixture of the venous and arterial blood, in cases of pulmonary stenosis, because that exists within the whole body, and yet it is only in the lungs that tubercular deposits are first formed, and always to a greater extent. How important the prolonged influence of an irregular blood supply is on the development of these deposits, may be seen in that, although the disease be congenital, pulmonary tuberculosis terminates fatally for the most part in the second decennial period of life, those patients who live to their twenty-fifth year forming exceptions to the rule. Two other facts in connexion with these cases astonish us—viz., on the one hand the relatively slow course, and on the other the constant progress of this kind of pulmonary tuberculosis.

The left lung is generally most compressed by the much hypertrophied heart; in consequence of this the mechanical impediment to the circulation is considerably increased. This observation accords with the circumstance, that the left lung exhibits alterations much more advanced and of greater intensity than does the right lung. A case communicated by me is an apparent exception; in this case, the post-mortem examination showed that the changes had taken place in connection with the right lung, and it was in fact this lung which was most diseased. The relative frequency and intensity of hæmoptysis in such patients is most conspicuous, and is in accordance with everything above mentioned. In spite of the slow progress of the disease, the clinical phenomena exhibit not only the symptoms characteristic of pulmonary tuberculosis, but particularly also the constantly progressive indications of destructive processes in the form of hectic fever and marasmus.

Nor from an anatomical point of view is anything wanting to complete the circle of the progressive disease; granulations composed of cells, smaller or larger infiltrations, disintegration

and formation of cavities, adhesions of and deposits of lymph on the pleura, the maximum amount of infiltration and cavity formation in the upper parts of the lungs, particularly of the left, are found. Wherever in other organs tubercular points of irritation have been discovered at the post-mortem examination, they have manifestly been of later date than the alterations in the lungs.

The principal element in the production of tubercular deposits in these cases is, therefore, the mechanical impediment to the circulation caused by the irregular distribution of blood, aided not unfrequently by compression due to enlargement of adjacent organs.

Something similar may occur at an advanced stage of large aneurisms, particularly when filled with fibrinous laminæ. I have recently in private practice seen a man who, during life, exhibited symptoms of disease of the aorta, in addition to which manifest progressive tuberculosis of the lungs, with the formation of cavities, came on at a much later stage; at the post-mortem examination was found a large aneurism of the aorta ascendens, of a solid feel, distended with numerous fibrinous masses, and exercising great pressure on the lungs, in which organs numerous disseminated tubercular-inflammatory spots, in the form of smaller and larger infiltrations and cavities, existed. I have previously shown in my work on diseases of the vessels that, in aneurism of the aorta within the thorax, progressive tuberculosis of the lungs may be found not unfrequently, in about six per cent. of all the cases. In this occurrence I formerly saw evidence only of this truth, that there is no such incompatibility between aortic aneurism and tuberculosis as has been generally believed, but it was not clear to me whether it was a mere accidental co-existence of the two diseases, or whether there was a close connexion between them. The latter hypothesis seems to become more and more probable; for large aortic aneurisms impede the circulation in two ways—on the one hand, a direct pressure may be exercised on the pulmonary artery, on its ramifications, and on certain parts of the lung tissue; and on the other hand important changes in the general nutrition and in that of the individual organs and tissues take place, which impart to the products of congestion and inflammation a more tubercular tendency, in the same way as is the case in diseases of the heart of long duration. To what extent such aneurisms may press on the pulmonary artery, has not rarely been seen at post-mortem examinations. Dr. Peacock long ago collected the cases in which aortic aneurisms even burst into the pulmonary artery. A most remarkable case of this kind was brought before our Medical Society in 1867, by Dr. Abstein; in this case the right osteum arteriosum had been narrowed, and insufficiency of the semilunar valves of the pulmonary artery had been produced by the pressure of only a small aortic aneurism. I cannot abstain from communicating to you the principal points in that very rare and most remarkable case.

The patient was a journeyman carpenter, 42 years of age, and was admitted into the Hospital for ulcer of the leg. When in the Hospital, general anasarca came on; albuminuria and a considerable enlargement of both ventricles, and a loud sometimes whiffingly ending bruit, were discovered; with bruit lasted during the systole as well as during the diastole, and could be heard with undiminished intensity over the whole area of cardiac dulness, but was particularly loud between the fifth and sixth left ribs in the mammillary line. The impulse of the heart could neither be seen nor felt.

The post-mortem examination confirmed the diagnosis made during life—viz., of insufficiency of the aortic valves, the anterior of the semilunar valves being rolled up towards the wall of the aorta, in consequence of atheromatous deposit at its free margin; but its condition was otherwise normal. Immediately above the right half of the right semilunar valve of the aorta, a true aneurism was found, the size of a chestnut, perfectly answering to that form of aneurism to which Cruveilhier has given the name *ampoule à bosselures*. It was filled with tough laminated fibrine, and it tapered towards the right conus arteriosus, opposite the valves of the pulmonary artery, the right arterial osteum being in such a condition as scarcely to admit the tip of the little finger. The right segment of the pulmonary valves, with the exception of a small semilunar part at the free margin, and the left segment, with the exception of the smaller left half, were adherent to the corresponding parts of the endocardium of the conus arteriosus in consequence of adhesive inflammation. In this way a narrowing of the right osteum arteriosus and an insufficiency of the pulmonary valves were caused by the aneurism. Both sides of the heart were much enlarged, the myocardium thickened, and in a state of fatty degeneration.

Thus, the field for the possibility of tubercular inflammatory deposits in the lungs in consequence of mechanical impediments to the circulation becomes widened. But, in a similar manner, diseases of the heart without such disturbances to the circulation may cause pulmonary tuberculosis, if their course be of such a nature as to produce comparatively rapid changes in the general nutrition. A woman suffers a long time from endocarditis of the mitral valve, with evidence of simple catarrhal engorgement of the lungs; in the trochanter major of the thigh caries with very profuse suppuration comes on; this exhausts the patient very rapidly, and now in both lungs tubercular deposits are gradually developed, with disintegration and the formation of cavities. A cast-iron worker, of 31 years of age, five years ago had an attack of articular rheumatism for the first time, two and a half years ago for the second time, and in February, 1867, for the third time. During this attack, the patient being in the Hospital, a protracted and severe pericarditis comes on, which terminates in symptoms of perfect adhesion of the pericardium; now, double pleuritis with considerable effusion and very slow absorption, with constant dyspnœa, continual rather high fever, with a temperature not excessively high, but yet constantly above the normal, and with irregular exacerbations, consecutively set in; patient becomes more and more feeble and emaciated; unmistakable symptoms of progressive tuberculosis of the lungs, particularly of the left, become prominent; a marasmic thrombosis developes in the left thigh; the urine contains now and then small quantities of albumen; and then the patient dies after four and a half months' existence in a condition of the utmost feebleness. At the autopsy, besides pericarditis with adhesion, pleuritic effusion on both sides, and the other anatomical alterations of pleuritis, all forms of tubercular changes are found in the lungs—viz., small nodules, lobular infiltrations, smaller and larger cavities, patches of peribronchitis, as well as granulations; somewhat larger deposits are found in the peritoneum and within the parenchymatous organs of the abdomen, and yellow infiltration into the different abdominal glands.

The immunity of patients suffering from heart diseases from tuberculosis of the lungs remains, generally speaking, true, and particularly so with reference to non-congenital endocarditis, defects in the valves, and their consequences; but, from what we have stated, it is evident that exceptions to the rule are numerous. The serious study of these may in time afford a contribution to the solution of the question concerning the nature of tuberculosis, a subject on which we are still in the dark in numerous particulars. At all events, the points we have alluded to indicate that the necessity has arisen for the clinical teacher, as well as for the pathologist, to pay careful attention to the connexion between diseases of the heart and vessels and tubercular deposits in the lungs and other organs.

ORIGINAL COMMUNICATIONS.

CASE OF

ELEPHANTIASIS OF THE SCROTUM, COMPLICATED WITH HERNIA.

By J. FAYRER, M.D., C.S.I., F.R.S.E.,
Professor of Surgery, and Senior Surgeon Medical College Hospital, Calcutta.

Ram Broma K., 30 years of age, a Hindoo, and a native of Bengal, district Burdwan, admitted into Hospital on July 30, 1869, suffering from scrotal tumour, with inguinal hernia. About six years ago he had an attack of fever, preceded by pain and swelling of the right cord and general swelling of the scrotum. The fever subsided after three days, but the swelling continued, though slightly diminished. After fifteen days had a relapse of fever, accompanied by the same symptoms, but aggravated. Had several such attacks, pain and swelling increasing with each. Six months ago the pain became intense and continued. He gets fever bi-monthly, corresponding, he says, with the lunar changes. The tumour evidently contains fluid, and is of the size of a medium-sized melon. Slight pain in penis, which is completely drawn into the scrotum. Has always lived in Kota Maucor, in the Burdwan district.

The tumour was excised on July 31, 1869, and weighed 4 lbs. 15½ oz. Twenty-eight ligatures were applied; he bled a good deal, and became very low, requiring stimulants. Tumour was very vascular. He was too low to be weighed immediately afterwards. Weight of patient before operation, 7 st. 8 lbs.

During the operation the hernial sac was slightly wounded, but was stitched up at once. After the operation he became very feverish, which was checked by quinine and diaphoretics.

This case was made over to Mr. C. A. Cordell, Assistant Apothecary to the Medical College Hospital, by Dr. Fayrer, to dress, on August 14, 1869. Surface of scrotum covered with purulent discharge, with slight granulations. There were excoriations on the right thigh and left hip, from tight bandaging and uncleanliness. Treated with carbolic oil dressing morning and evening externally, and occasional aperients, as required. Tonics thrice daily; good and nourishing diet.

September 10, 1869.—The granulations very healthy, and wound contracting rapidly.

October 5. — Scrotum steadily healing from last report. General health good.

November 2.—The surface of the scrotum almost healed. General health good.

The above case is interesting, being a combination of elephantiasis of the scrotum with scrotal hernia. The hernia was reduced, and kept back by pressure during the operation. The sac was slightly wounded, but no evil followed. The cicatrisation is now almost complete, and the hernia is restrained to the external ring by the cicatrix. There was no symptom of peritonitis throughout the treatment.

Calcutta.

THE THEORY AND TREATMENT OF CHOLERA IN INDIA.

By GEORGE JOHNSON, M.D., F.R.C.P.,
Physician to King's College Hospital, Professor of Medicine in King's College, London.

I HAVE read with great interest a report recently issued by the Indian Medical Department on the treatment of epidemic cholera. The author of this report is Dr. John Murray, the Senior Inspector-General of Hospitals in India. It appears that printed questions relating to the nature and treatment of cholera were sent to the whole of the Indian Medical staff. Dr. Murray gives extracts from the replies to these questions, and his own report may be looked upon as a fair representation of the opinions and practice of the Profession in India at the present time.

It is satisfactory to find, after all the controversies as to the nature and treatment of cholera which have occupied the pages of the Medical journals during the last few years, that the points of agreement amongst us are now far more numerous than the subjects with respect to which we differ.

It appears from Dr. Murray's report that there is a general agreement amongst Indian Practitioners with regard to the following propositions:—Cholera is the result of a specific poison, a poison of so special a character that it is believed that, however bad may be the sanitary condition of a place, no cholera will occur without the introduction of the specific cholera germ. It is believed that the specific poison may enter the system either through the lungs with the air, or through the stomach with the food, but more especially with contaminated water. Some striking instances, in which the disease was communicated by drinking foul water, are given in Dr. Murray's report. The poison, having entered the circulation, frequently occasions symptoms of depression and general malaise before the occurrence of the gastro-intestinal symptoms. It is generally admitted that the poison is eliminated through the alimentary canal, and that the discharges contain the specific poison of the disease.

Dr. Murray believes that the poison is also eliminated by the skin, the lungs, the liver, and the kidneys; but, so far as I can see, he gives no evidence in support of this proposition.

During the stage of collapse, the liver and kidneys, with their suppressed secretions, obviously can render but little assistance, and if the poison were eliminated by the skin and the lungs, we should probably find the air of a cholera ward more noxious than, in general, it appears to be. In the mode of elimination and of communication, cholera is very like enteric fever, and very unlike typhus and small-pox.

With regard to the nature of collapse, Dr. Murray makes not the slightest allusion to the theory of a drain of liquid from the blood being the essential cause of that condition. We may, therefore, infer that the theory in question has been abandoned by the Profession in India.

The report contains numerous statements and striking illustrations of the want of direct relationship between the degree of collapse and the amount of discharges. It is admitted that the discharges afford relief by removing the poison from the system, until reaction comes on; and although they may be so copious as to be exhausting, yet their sudden cessation is alarming, and their abrupt stoppage by opiates and astringents dangerous.

The only proposition relating to the theory of cholera which Dr. Murray puts forth is the following:—"The primary action of the poison depresses or paralyses the sympathetic and ganglionic nerves, and diminishes or suppresses the secretions of the organs supplied by them." Now, with much respect for Dr. Murray's practical skill and experience, I venture to ask what evidence he can adduce that paralysis of the sympathetic diminishes or suppresses secretions. Surely the evidence, derived from the experiments of Bernard, Brown-Séquard, and others, tends in the opposite direction, and goes to prove that paralysis of vaso-motor nerves causes an increased afflux of blood and a more abundant secretion. If Dr. Murray had referred to the profuse discharges from the alimentary canal as evidence that that portion of the sympathetic system is paralysed, it might have been difficult to disprove this proposition. But if the large afflux of blood to the stomach and intestines and the abundant secretions from the alimentary mucous membrane indicate paralysis of this part of the vaso-motor sympathetic system, the state of the pulmonary circulation in collapse affords conclusive evidence that *there* the vaso-motor nerves are in a condition the very reverse of paralysis.

In accordance with this view, Surgeon-Major Farquhar suggests, in reply to Dr. Murray's nervous theory, that the poison "more likely causes a state of tonic spasm of the nervous system in part; at least, this is the more likely action."

Mr. Macnamara refers to an outbreak in which the seizure was so sudden that the "men fell about like dead men and died in an hour or so, without vomiting or purging." In such cases the onset of collapse is almost as sudden as an epileptic seizure; and as epilepsy is now acknowledged to be the result of the sudden contraction of the minute cerebral arteries, so cholera collapse is probably due to contraction of the minute pulmonary arteries. With reference to this theory of arterial contraction, epilepsy may be designated cerebral collapse, while cholera collapse is pulmonary epilepsy.

Passing on to the question of treatment, there appears to be a general agreement that, during the stage of collapse, brandy, opium, and chlorodyne are many degrees worse than useless; they are positively poisonous. Dr. Murray intimates that there is a close relationship between the increased use of stimulants during the last few years and the increased mortality from cholera in India; and he refers to one outbreak in which, under an unusually free use of stimulants, the mortality was 92 per cent.

I now come to the only practical question with respect to which I differ from Dr. Murray. He has great faith in opium and a great dread of purgatives in the diarrhœa stage of cholera. He dreads purgatives, because, he says, congee stools and collapse have often followed their use. He might with equal reason dread mustard poultices for sore-throat, because the eruption of scarlatina has often followed their application. Surely a Practitioner who believes, as Dr. Murray does, that cholera is the result of a specific poison, should be cautious in attributing to a purgative or any other medicine the peculiar and characteristic symptoms of that disease. No prudent Practitioner would recommend saline or drastic purgatives in the early stage, or in any stage, of cholera; but it was long ago pointed out by Twining and other Indian Practitioners how unreasonable would be the conclusion that the choleraic symptoms which follow an aperient dose are the result of the medicine, which, in fact, had been given for the relief of the symptoms of malaise that so often attend the onset of the disease.

I must give, in Dr. Murray's own words, his reason for a trust in opium and a dread of purgatives in the diarrhœa stage of cholera:—"The poison, or the secretion caused by it, is of an irritating nature to the mucous membrane of the intestines, and opiates soothe or lull the irritation during the period the poison is passing, while purgatives add to the irritation, and thus increase the power of the poison in causing collapse." Dr. Murray admits that astringents which retain irritating secretions within the bowel are mischievous, and so, with reference to opium, he confesses that "the objections to its use are that it is apt to retain irritating matter in the bowels, and diminish or suppress the action of the liver and kidneys; but by keeping these points in view, and counteracting them by calomel when necessary, opium is a most valuable remedy in this stage. There is danger of continuing it into the follow-

ing stage (the stage of collapse), when it would be most injurious."

It is especially to be noted that, in Dr. Murray's opinion, opium is useful only so far as it soothes the bowel, while its astringent action is injurious by retaining morbid secretions. It is obvious, then, that if opium is to be beneficial it must be given only in small doses, or it must, as Dr. Murray suggests, be combined with calomel or with other evacuants. This, be it observed, is a very different theory and practice from that which prescribes opium for the express purpose of arresting the diarrhœa. If this be the true theory of the use of opium, we shall soon agree either to avoid it altogether in the treatment of cholera or to give it in such small doses as shall be soothing without being dangerously astringent. We shall then cease to hear or read of such cases as the following, which was reported to me quite recently:—

An officer in India, having visited a cholera Hospital, was seized with diarrhœa. This was checked by a "cholera pill." The diarrhœa returned, and was a second time checked by chlorodyne; again it returned, and a third time it was checked by the "usual remedies." From that time there was neither diarrhœa nor pain; but he went into collapse, lost his voice, was very weak and sleepy, and so he died—died, as I believe, from the conjoint operation of opium and retained morbid secretions.

This case affords a good illustration of Dr. Murray's statement that "the looseness is often checked for a time by brandy, opium, chlorodyne, etc.; but when the disease proceeds to collapse, in cases where much opium or alcohol has been given, it generally terminates fatally."

If, in the case of a mustard poultice or a turpentine stupe proving intolerably painful, it is more rational to remove the irritant from the skin than to give an opiate to lull the pain resulting from its continued application, is it not equally reasonable, when irritating secretions annoy the intestine, to permit, and even to encourage, their escape by a mild laxative, rather than to give an opiate, which, while it soothes the mucous membrane, may arrest all expulsive efforts, and thus leave the irritating secretions to act with increased energy when the effect of the opiate has ceased? This appears to be the opinion of some Practitioners of high rank and large experience in India. Thus, Deputy Inspector-General Saunders considers opium "absolutely pernicious in every stage of cholera." Deputy Inspector-General Chalmers says:—"Unquestionably in some cases a mild purgative with some carminative is found useful." Surgeon-Major Macleod states as follows:—"I have always found a purgative, oil or rhubarb with magnesia, or the ordinary senna draught, an unfailing remedy. Those who combine opium with such medicines under a vague idea of moderating their effects, will sometimes achieve success in spite of the combination." And Dr. Murray himself admits that a laxative dose of rhubarb or castor oil may be useful in removing irritating secretions from the intestines.

We know how uncertain is the operation of opium upon different individuals who are apparently suffering from the same forms of disease. In one case it is a pleasant soporific, in another the same dose causes obstinate wakefulness, while in a third it acts as a powerful cardiac depressant, and causes distressing nausea and faintness. Again, in cases of diarrhœa it may abruptly arrest the discharges, or it may prolong and increase the diarrhœa. I can conceive it possible that in some cases of the early stage of cholera opium may exercise a wholesome curative influence upon the nervous system, but it is acknowledged by those who most strongly advise its employment that its use requires extreme care and watchfulness. There is no reason to believe that opium has the power to relax arterial spasm. On the contrary, the fact that, in general, it diminishes all the secretions except that of the skin may possibly be a result of its exciting contraction of the small arteries, and this, perhaps, is in part the explanation of its aggravating the collapse of cholera. Dr. Murray's report and its supplement abound in facts illustrative of the injurious action of opium in cholera, while on the other side I find positive expressions of opinion as to its utility in the early stage of the disease, but this opinion confirmed neither by conclusive reasoning nor by a definite statement of facts.

The result of a careful study of Dr. Murray's interesting report has been to strengthen my conviction that the only way in which opium can be safely and usefully employed in the early stage of cholera is in small doses, combined with a laxative, or as a soothing agent after the expulsion of the morbid secretions. On the other hand, the true use of evacuants, whether emetics or laxatives, is not to increase the discharges from the blood, but to prevent the accumulation and retention of morbid secretions within the alimentary canal.

SCIATICA: ITS IMMEDIATE RELIEF AND RAPID CURE BY HYPODERMIC INJECTION OF MORPHIA.(a)

By HENRY LAWSON, M.D.,
Assistant-Physician to St. Mary's Hospital.

(*Continued from page* 656.)

Conditions under which Sciatica presents itself.

It may be objected to the employment of the term "natural history of" a disease that it is too general, since it should include the symptoms and pathology of the affection as well as the circumstances accompanying them. On the other hand, the expression "ætiology" appears equally unsatisfactory. I trust, therefore, that I may be excused for treating of the questions included usually in these divisions under the heading of the general conditions of the malady.

Sciatica being a disease of an essentially local character, the bodily circumstances which are its companions are of a very varying character. Hence it is difficult to determine those which are constant. It is, however, possible to indicate a few of the more regular conditions under which the disease occurs; and firstly, as to age. It is, I think, tolerably accurately laid down in most of our treatises that sciatica is a disease from which the young possess an almost absolute immunity. It is essentially an affection which attacks persons between 20 and 60. Nevertheless, I have met with one case of pure and well-marked sciatica in a boy of 14, who was addicted to aggravated habits of masturbation. But such cases are extremely rare, and the limits stated will be found to be correct in at least nine-tenths of the cases of sciatica *pur et simple*. It is not so easy to say whether it is more frequent in the old than in the adult or middle-aged, but if we take the age of 40 as the pivot of the scale it will be observed that the majority of instances occur between 40 and 20, and the minority between 40 and 60. Sex presents another determining condition of sciatica. Women are far less subject to this affection than men, I should say pretty nearly in the ratio of 1 to 3. The type of female constitution in which sciatica is oftenest met is in the case of younger women, that which may be styled the "leucorrhœal." Patients suffering from disordered menstruation of various kinds, accompanied by "the whites," occasionally contract sciatica, and I have not found that the removal of the menstrual condition relieves the pain in the direction of the nerve. Under a course of chalybeates and proper injection the case generally gets well, *quoad* menstruation, and the general strength is improved—but the sciatica remains. Another type is that so familiar to those who have charge of out-patients at our Hospitals. I refer to the sallow, shrivelled-faced, bright-eyed, and flatulent old tea-drinkers. These occur especially among the Irish population; they eat little more than a few bits of bread in the twenty-four hours, but they take tea (or rather a decoction of the leaves) three and sometimes four times a day. These are sometimes seized with sciatica, and they constitute very troublesome cases.

As to mental state, I can certainly offer no personal observations of a positive character. Intelligent and stupid people seem alike liable to the disease. Something has been vaguely written concerning the association of sciatica with central mischief, but, as I have stated [*ante*], I apprehend that this is an assumption purely gratuitous and certainly unwarranted by fair induction. If we exclude from our consideration those obscure pains which accompany disease of the central nervous system, and which are certainly not sciatica as I understand it, then there is no justification for the opinion that there is central nervous mischief in this disease.

Inheritance is a condition which certain writers—who, upon *à priori* grounds rather than on the results of clinical

(a) It may be as well to state that in advocating the method of treatment described in the following article I lay no claim whatever to originality. I merely give the results of my experience of a remedy which is as simple as it is effective. The application of the syringe to the hypodermic method we owe, I suppose, to Hunter and Wood. The hypodermic administration of morphia in sciatica was urged by Dr. Blakiston in these pages nearly fifteen years ago. It is too much the custom now-a-days to father upon a writer the discovery of a remedy or plan which he has merely taken secondhand from another, but which he may have been more successful than his predecessor in popularising; and writers themselves too frequently encourage the mistaken inference. This has happened so often of late that one almost despairs of that moral regeneration in Medical writers which leads to the discrimination between reticence and candour.

experience, group sciatica and tic in the same category—have lately enforced with some emphasis, and which therefore merits the attention of those who may in future study sciatica. For myself, I must say that the records of thirty cases lead me to believe that there is nothing to support the idea that sciatica is inherited—indeed, quite the contrary. To be sure, if we were to include sciatica among the common neuralgias, and we were to ask each patient whether his father or mother had suffered from faceache, we should get an answer in nearly every case in the affirmative. Who has had a father or mother who has not had faceache (or toothache)? But, I would ask, is this a legitimate method of accumulating Medical statistics? Is it not such statistics as these that give rise to the assertion that "there is nothing so false as facts except figures?" Inheritance, then, in sciatica I hold to be no condition whatever.

Another somewhat unsatisfactory condition of sciatica is that which is sometimes given—that of unilaterality. To say that a disease is unilateral is simply to predicate that which may be said of nearly all our ailments. It is only a small proportion of human ills which are bilateral, and it happens unfortunately for the supposed character of sciatica that sciatica is in some few instances present in both limbs. It may be stated that the right leg is oftener affected than the left. We may dismiss this also as without useful significance.

The state of the alimentary canal appears to me to supply us with a condition which has some constancy. I find in the great bulk of my cases that the function of the digestive tract is much impaired. This disturbance would not be surprising in advanced cases of the disease, for in all such the pain, sleeplessness, and anxiety gravely interfere with digestion. But I think it is worthy of note that in a very considerable number of cases, if the patient declares that for some time previous to the commencement of pain in the thigh he has suffered with "dyspepsia," further inquiry will show that constipation, pyrosis, and hæmorrhoids have had their way for a long while. The presence of piles in cases of sciatica has been often pointed out, and the fact is worthy of more consideration than it has received. The vascular relations of the sciatic and the rectum may, I doubt not, have important influence on certain cases of sciatica, though the exact pathological nature of this influence remains to be worked out.

Concerning conditions of diet, there is nothing to be said that can have any scientific weight.

Finally, as to the condition of the nerve itself, as I have said in an earlier page, we are not justified, as seekers after truth, in jumping to the pathological conclusion which is, I regret to think, so dogmatically laid down in some of our treatises. Sciatica is a disease of no rarity, yet only one or two cases have occurred in which the nerve has been examined. From the results of observation in these, it is concluded that, in all sciatica cases, the nerve-sheath is inflamed, swollen, and filled with a gelatinous fluid. But is this fair? It is less absurd than the generalisation of that proverbial Frenchman, who, finding the harmaid of an English hotel red-haired, immediately wrote down:—"English women have red hair." The matter is really a serious one, for not only is it damaging to the character of Medicine as a science, but it is attended with grave results to Medicine as an art. For what do we find? Why, that one Physician, unquestioningly accepting this mere hypothesis, treats his cases of sciatica with iodide of potassium to absorb the gelatinous liquid of the nerve sheath, and thus to prevent the lameness which follows pressure on the filaments; and another who, for the same reason, tells us that he cures his cases by puncturing the sheath with a large needle, and thus allowing the "gelatinous fluid" to escape. We cannot question the workings of the iodide, but I should certainly like to know how that Physician knows when he has reached and perforated the sciatic nerve. It is, certes, a delicate little bit of operating. In conclusion, and *en parenthèse*, I must express my opinion that the lameness in sciatica is not caused by pressure of the sheath benumbing the nervous filaments, as contended by a distinguished Physician. I have no doubt in my mind that the lameness is not the consequence of want of nervous power, but of disinclination on the part of the patient to move a muscle whose motion is extremely painful, and, with this belief, I fail entirely to see the *rationale* of the administration of iodide of potassium. It is perhaps unwise to offer any speculation as to the part of the nerve primarily attacked, but, if I may be permitted to say so, I have a strong suspicion that changes of nerve structure commence in those delicate filaments which form such exquisite reticulations on the surface of the sarcolemma.

(To be continued.)

ON PRURIGO.

By ERASMUS WILSON, F.R.S.

A RESPECTABLE widow, aged 68, was brought to me by her daughter on December 4, 1869, suffering under prurigo. Her Medical history is as follows:—She had always been healthy until the month of June in the present year, when she had a short attack of ordinary summer cholera. On her recovery from the cholera, she was troubled with a papular pruritic eruption in the sternal groove of the front of the chest, and, at the same time, with pruritus of the fingers and hands; and the pruritus extended in a short period to the whole surface of the skin. Her skin is naturally sensitive, and she has never been able to wear flannel underclothing.

At the present time, the skin of the whole body, with the exception of the face and scalp, is inflamed and irritable; it is red, dry, wrinkled, brownish in hue, hot, and harsh to the touch, somewhat infiltrated, roughened by desquamation on the limbs and hands, and covered with black scabs, scratches, and bleeding spots, caused by tearing with the nails. In two situations these appearances are more abundant than elsewhere, possibly from facility of reaching them with the nails—namely, on the scapulæ and buttocks. But, with all this local mischief, there is little disturbance of her general health—scarcely more than a sense of weariness from loss of rest and nervous exhaustion occasioned by the violence of the fits of itching. Her application for relief has reference to the pruritus of the skin, of which she complains bitterly. It comes on by paroxysms, and of these she may have as many as twelve in the course of the day; she considers herself fortunate when she has only two or three. The itching is, in fact, a kind of torture. She says that her body feels at the time of the attack like a "fire-coal;" that the itching is maddening; and, under the impulse of the fiercest suffering, she tears—the term "scratches" is not strong enough—she tears her skin with her nails until the blood flows from the excoriations. She observes that formerly the skin rose into whitish knobs whenever she scratched, but that latterly the skin excoriates under the process, and shows a tendency to desquamate, the desquamation extending to the palm of the hands and to the sole of the feet. She is correct in this observation, for the pathological state of the skin is undergoing a transition from the more chronic form of prurigo to the more active state of dermatitis with its accompanying exfoliation.

The neurotic characters of the affection in this poor woman are so obvious as to be calculated to strike the attention of the most unobservant; nevertheless, she had been subjected to examination, and disgusted with the inquiry, as to the possibility of the dependence of the irritation on lice. Of course no lice were found; but, nevertheless, she was submitted to the action of a sulphur vapour bath three several times. The sulphur vapour baths very much increased her sufferings; they made the skin tender and stiff, and to them may be attributed the drifting into dermatitis, with which the case is at present complicated. At no time have lice been discovered on her person, nor is there the least ground for any such suspicion. She resides with her daughter, with whom she is constantly in contact, and has free intercourse with her grandchildren; but no lice have ever been detected in any of the family, and there are no symptoms of cutaneous irritation among any of its members. The case is plainly one well recognised by the best dermatologists—namely, prurigo—and is, very clearly, a cutaneous neurosis.

HOUSEMAID'S KNEE.—Our scientific contemporary, the *Athenæum*, informs us that Medical literature contributes a new term to the "Slang Dictionary." That peculiar swelling of the knee which used to be called "housemaid's knee" is now, it is said, known among Surgeons as the "ritualistic knee." We venture to say that no Medical man has had the bad taste to indulge in this sneer at other people's religious practices.

VAGRANCY.—A proposal has lately been considered by the Leicester Board of Guardians that all vagrants on admission should have a bath, that clean linen should be provided for them, that they should be provided with beds, and that their clothes should be disinfected. Mr. S. Thomas Clarke, M.B., the Medical officer, addressed a letter to the Board, in which he stated that every vagrant affected with skin disease was detained for cure; and he drew attention to the increase in the number of sick casuals that had taken place with the general increase of vagrancy. The proposal was referred to a committee.

INJURIES OF THE SPINE.

By CHARLES ORTON, L.R.C.P. Ed., M.R.C.S.E., L.S.A.,
Physician to the North Staffordshire Infirmary.

I SEND the following cases and remarks in the hope of lessening that division which exists at the present time in the Medical camp concerning the severity and duration of the symptoms of those injuries of the spine where no lesion occurs, or is inappreciable, especially when such injuries are caused by railway accidents. Some Medical men seem to put but little faith in the haggard looks of the patient, and moreover consider that the prospect of damages may have some effect on the "countenance," while others take, perhaps, an exaggerated view of the dangers of the case. When such men meet, they necessarily differ to some extent. Now, if it can be proved that accidents slight in degree, causing little inconvenience at the time of occurrence, are yet followed by serious consequences, by long and lingering disease, it will go far, in my opinion, to prevent those differences between Doctors, a topic on which our legal brethren are never tired of dilating. Until lately, my sympathies were wholly with the railway companies, who, I used to think, paid heavily for "symptoms," but the opposite conviction has been forced upon me. A gentleman of my acquaintance was injured in a railway accident, and was attended in London by some eminent Surgeons, who recommended him to come into the country about five months after the accident. The journey down caused such a state of nervous prostration to supervene, that he was one month before he recovered from it, or rather, I should say, before he became in as good a state of health as he was before leaving London. About two months afterwards, when returning from the seaside by rail, I again attended him for an attack (his second) of hæmaturia. He is now quite unfit to work one year after the accident. However, I will only quote a few cases that have lately fallen under my observation, where the prospect of damages is *nil*, and where the individuals have nothing to gain, but much to lose, by being idle, as they belong to the working classes. I purposely refrain from sending any railway accident. For Cases 1 and 3 I am indebted to my colleague, Mr. Alcock, who kindly allowed me to make the following notes.

Case 1.—T. S., aged 28, collier; admitted into North Staffordshire Infirmary on June 13, 1868, under the care of Mr. Alcock. States that he always enjoyed good health until five years ago, when a roof fell on his back (lower part), knocking him to the ground. Finding that he could not rise, he was carried home, and for three months after the accident he had no power to move the left leg. The loss of sensation in it doubtful—does not remember. Could not digest food for nine months afterwards. Has never been well since; always suffered much pain in lower part of back and belly. Has sunk in flesh and strength.

Present Condition.—Much pain in back and belly. Slight tenderness on pressure over third and fourth lumbar vertebræ. Can bend to pick anything off the floor, but cannot rise without much difficulty. Says his memory is not so good as formerly. Complains of numbness and tingling of the left thigh, and twitching of both legs. Cannot walk one mile on account of the severe pain in back which moving brings on. He had frequently been blistered; had had issues on either side of spine, and during the time he was in Hospital was repeatedly blistered, and took iodide of potassium and cod-liver oil. He was discharged after two months, no improvement whatever having taken place.

Case 2 (from indirect violence).—H. H., female, aged 17, servant; admitted into North Staffordshire Infirmary under my own care, on March 20, 1868. Always had good health up to time of accident; had been very stout; never had fits or convulsions during her childhood; catamenia regular.

On February 23, 1868, she fell through a cellar opening, depth about six feet, on her right side and shoulder. She did not strike either her head, neck, or back; did not become insensible; was able to get out of the cellar alone; and apart from being frightened and slightly shaken, did not feel much inconvenience. Went on with her usual work, but soon became low and nervous, the slightest noise making her jump. Two weeks after the accident the first fit came on; the eyes were fixed; limbs highly convulsed. The fits becoming worse, and the girl much weaker, she was brought to the Infirmary one month after the fall, where the following remarks were noted down by the House-Surgeon, J. M. Taylor, Esq.

March 20.—Patient complains of pain in cervical region, chiefly over fourth and fifth cervical vertebræ. During the day has had frequent convulsive seizures, characterised by violent twitchings of the arms and mouth, eyeballs turned upwards under lids, and accompanied by a moaning cry, and lasting from three to four minutes. Ordered pot. iod. gr. v., pot. nit. gr. v., aq. camph. ʒj., three times a day. Blister to back of neck.

26th.—Convulsive seizures are less frequent during the night than during the day. She complains of soreness of the throat, with difficulty of swallowing; breathing oppressed and the inspiration attended with a crowing sound, similar to that heard in laryngismus stridulus. The face and lips become livid, and she seems in danger of suffocation. At the end of each attack the skin becomes bedewed with perspiration, and a quantity of glairy mucus expelled from throat. One grain of calomel ordered to be taken every four hours. A gargle of chlorinated soda, and a mixture of chlorate of potash and tincture of iron.

She remained much the same until April 9, when she suffered much from pain at the heart and palpitation. Blister to the region of the heart. Tinct. digitalis added to mixture.

16th.—Palpitation and pain better. Blister to neck. Bromide of potassium and morphia.

20th.—The breathing became much worse. Various inhalations tried.

21st.—So imminent did suffocation seem in every seizure that a consultation was called as to the advisability of performing tracheotomy. I was not present; the trachea, however, was not opened. Six leeches were applied to the throat. Chloroform inhalations continued. Ordered pot. bromid., vin. ipecac., acid. hydrocyanic. dil.

22nd.—Little or no better. Ordered tinct. conii ʒss. every few hours, to be increased by ten drops a dose. This apparently relieved her, but, thinking she would not recover, she determined to go home on April 28, although she was better at the time.

She continued to improve, and was able to attend the Infirmary as an out-patient on July 8, when her condition was as follows:—Tongue clean; bowels regular; catameuia regular; pulse 103; respirations 32 per minute; is much thinner; voice husky; deep inspirations croupy; pain in side and stomach, severe across forehead. Thinks everything around her is moving about. Occasionally sees sparks and flashes of light; humming in the head; giddiness, which she thinks would cause her to fall if she did not catch hold of something. (Has since fallen.) The right arm and leg jump and tingle, and are weaker than the left. "The right leg nearly throws me down sometimes," doubles under her. Cannot carry things. The right limbs feel colder than left, not appreciable to the touch. The appetite, which used always to be good, is now very bad. Never feels hungry, but constantly thirsty. Food lies very heavy and makes her feel ill. Cannot read or sew more than ten minutes at a time, the letters running together. Her memory is not so good as formerly. If she places anything out of sight, she does not recollect where to find it again. Ordered nux vomica and potassium (iodide).

16th.—Not so well; fits six or eight in a day. Back very painful. Ordered bromide of potassium.

23rd.—Much trembling of right arm, and occasionally of right leg. Had eight fits on the 22nd, in which she was violently convulsed.

August 20.—Breathing has again become very difficult and croupy; is obliged to be propped in bed. Blisters to the throat with relief.

September 24.—Fits stronger, but much less frequent; otherwise much the same.

Case 3.—G. P., aged 18. Had enjoyed moderately good health up to time of accident one year ago. He fell from a low roof. Did not hurt himself in any particular part, and felt only that he had been shaken. He went to work for about a fortnight, and then began to complain of weakness and pain in the back and legs, the latter feeling benumbed, prickling, and jerking. Head felt light. Could not bend his back. In three months he had nearly recovered, when, unfortunately for him, one evening, as he was about to sit down upon a stool, it was removed, and he came to the ground on his buttocks. He felt a great deal of pain at the lower part of the spine at the time, and nearly fainted, but soon recovered, and felt little of it. He went to work the next morning as usual, and continued to follow his employment for a month, when he became so ill that he consulted Mr. Alcock. He suffered from pain in back and right hip and leg, which was occasionally so severe as to draw him double sideways. Becoming worse, he was admitted into the North Staffordshire Infirmary on March 26, 1868. When there, he complained of pain in back and right leg, which twitched, felt colder than the other leg, and, when touched, had little or no feeling in it. He could not stand on it, as the

knee gave way and let him down. Lost flesh rapidly. He remained in the Infirmary nine weeks, when he was discharged but very slightly relieved.

Present Condition.—Twelve months after the first, and nine months after the second, accident, is pale and flabby-looking. Digestion bad. Bowels constipated. Appetite variable, but all better now than they have been. Memory good. Sight not so strong. Pulse 118. Pain on pressure over the last lumbar vertebra. Can walk a little, but not a quarter of a mile, on his best days, and then only with great pain and difficulty. His body is bent at the hips, but the back is straight. He cannot bend more, either to pick any article off the floor, or even to put his boots on. Cannot turn over in bed, or, if on his back, cannot raise himself without something to pull at. Suffers great pain from his back and right hip. The right leg, and occasionally the left, jumps and snatches, and goes very cold. There is always a feeling of cold and a pain in the back.

Case 4.—I regret that this is so imperfect, but I only saw the man twice in the out-patient department, and, not having his name or address, I cannot trace him, but, in all probability, the case has ended fatally. He was a collier, whose apparent age was 50, but he might have been younger. He was very pale, and his appearance extremely haggard, his face deeply furrowed, skin loose and flabby. From being strong and robust he had now become helpless and emaciated. He could barely drag his legs along, and they pained him continually, likewise his back. Appetite was gone, and what he ate he could not digest. Two years before he was pulling at a lump of coal, when he felt a sudden pain in his loins; thinking he had merely over-reached himself, he went on working, and continued to do so for a long time, hoping it would get better.

Case 5.—K. M., aged 18, female servant. Always had good health; catamenia regular; has fainted from pain, or at the sight of blood; excitable; never had fits or convulsions at any period of her life; bowels were quite regular. She consulted me on January 13, 1869, when she stated that she had fallen down some steps two months ago, hurting her head and back, but became quite well again in a fortnight.

On December 31, 1868, she fell for the second time down the same steps—all of them this time, twenty-four in number—hurting her head and back. She fainted at the time, and went to bed, where she remained for the remainder of the day. On the morrow, however, she felt well enough to recommence work, which she is still doing, but cannot go on. Her back feels straight and stiff; cannot pick anything off the floor, or turn round quickly, without it giving great pain. In bed her legs sometimes go stiff, and she cannot move them. When walking is obliged to stop very often on account of pain in back and legs, which jump and prickle, then go numbed. Her hands and feet have never felt warm since the accident. Head and eyes pain her; goes very giddy, and falls about against the chairs. On applying pressure to the spine, there was tenderness evinced in the lumbar region and upper dorsal. I recommended her to leave her place, and rest at home, and to attend me occasionally at the North Staffordshire Infirmary.

On April 8 she was in much the same condition—tenderness on pressure over the same vertebra, and could not put her hands behind her without difficulty and pain.

The subject of "injuries of the spine" is one which, though it has hitherto attracted but little interest from the great body of Practitioners, must in course of time arrest their attention, and receive from them that inquiry which its importance demands; for, in these days of excursions, there will soon be scarcely a spot in England, however rustic or remote from the great iron roads, that will not have, at one time or another, some one who has been unfortunate enough to take part in a railway smash, and whose case may bring the Surgeon into the witness-box. It is said to be difficult in some cases to establish the connexion between the symptoms and the accident where the former first show themselves long after the latter. *A priori*, one would imagine that the more severe the accident the sooner would the symptoms follow, and the more severe would they be. The above cases do not show such to be the case, but the interval, which is one of the principal bones of contention, was not great in any of the cases. Of the severity and tediousness of the symptoms they give ample proof. Of Case 1 I have not heard since he left the Infirmary, but after five years he is not very likely to recover. Case 2, after fourteen months, is improving but slowly; sometimes better, sometimes worse; two or three, or even more, fits one day, then none for several days; quite unable, of course, for service. Case 3, eighteen months after the first, and thirteen after the second accident, is making slow but certain improvement. He can walk about the streets with a stick. Case 4, which I considered slight, and gave four months for recovery, is no better at the end of fourteen weeks, but she is obliged to help at home. Treatment has consisted of bromide of potassium and tonics internally, externally blisters, warm and cold effusions to the spine—the latter being attended with more relief—and rest, the most important of all.

Newcastle-under-Lyme.

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Medical Times and Gazette.

SATURDAY, DECEMBER 11, 1869.

MR. ACTON ON PROSTITUTION.

Has the State any public duty to perform with regard to prostitution? On what basis does such duty rest? To what legislative acts does it prompt? These are questions with which we are brought again face to face by the issue of a second edition of Mr. Acton's well-known book upon this subject. Our own opinions are tolerably well known, and although, in placing before our readers, as fairly as we can, the views held by Mr. Acton, it will be impossible altogether to avoid their demonstration, we shall not now intrude them more than appears absolutely necessary. The subject is one of so much importance in its social, hygienic, and moral aspects, so thoroughly and, let us add, so honestly discussed in the work before us—discussed, too, in a spirit of such obvious philanthropy—that, in bare justice even to one who thinks differently on some points from ourselves, it is incumbent upon us to give prominence for the time to those results which have elaborated themselves in the mind of this laborious and enthusiastic inquirer. It is one perhaps surrounded by more difficulties than any other social question of the day; and if it were only on this account, we must hail every addition to the sum of our knowledge respecting it, and every new argument adduced on both sides of the matter in controversy.

When Mr. Acton first published his standard word on prostitution, his watchwords were *recognition, regulation*. They now are *recognition, prevention, amelioration*, and *regulation*—the three last as consequences of the first. Twelve years have elapsed since his first edition, and during the latter part of this period a step has been taken by the Legislature which involves recognition as a principle, and to a certain limited extent has interfered, in the hygienic interests of some of our troops and seamen, between the prostitute and her frequenters. The State thus being committed to the principle, and having acted upon it for the benefit of one section of the community, the argument of Mr. Acton now is that a similar intervention should be extended to the whole, and that the Contagious Diseases Act of 1866, which has recently been amended, should be made available for the protection of the population at large, and for the amelioration of the unhappy lot of the prostitute. He advo-

cates the formation of a Government Board, to which might be entrusted the working of amended bastardy laws and of the Contagious Diseases Act, the care of illegitimate children, and the amelioration of fallen women.

"My proposals," he says in his preface, "go to this extent, and no further—viz., to make the evil that we cannot repress as little injurious as possible. I desire to protect both society at large and the individual from the permanent injury at present inflicted by a highly contagious and virulent disorder. I desire also to heal the sick prostitute and to cleanse her moral nature. The State must, moreover, set its face against any one man or woman making a profit of another's prostitution. . . . If, in spite of all the precautions that can be taken, the woman becomes a prostitute, our next object should be to attempt to ameliorate her condition, so as to enable her to pass through this stage of her existence with as little permanent injury to herself and as little mischief to society as possible. This is the more important because I prove that the great mass of prostitutes in this country are in course of time absorbed into the so-called respectable classes."

There are some points on which we thoroughly agree with Mr. Acton. With him we would strive, by a better kind of industrial education of young girls of the lower classes, to fit them for, and induce them to enter upon, domestic service, in which they would not only find fitting occupation, but be protected to a great extent by wholesome supervision and control from temptation to err. We would foster every practicable project for improving the condition of their home, whether this be the cottage of the agricultural labourer or the tenement of the artisan in towns, in both of which promiscuous herding of the sexes of all ages is but too common, where ordinary decency can have no room for exercise, and where female modesty must of necessity be crushed in its bud. We would strive to make the seducer feel socially, if possible, but at all events pecuniarily, and in a degree proportionate to the part he has had in the primary fault and to his means, the responsibility he has morally incurred. We would prohibit by strict enactment the practice of "making a profit by the prostitution of another," and we would, above all, prohibit the flagrant exhibition of vice and the open temptations to sin which disgrace our public streets and corrupt the unwary and unstable. But for the prevention of prostitution more than even this must be done. So long as there is male demand there will be female supply, and the principal remedy against prostitution must be sought through agencies operating not upon the latter, but upon the former.

The principal reason adduced for the regulation of prostitution, such a sort of regulation as is provided for by our Contagious Diseases Acts, is its adaptation for preventing the spread of venereal diseases among our population. The argument is mainly based upon hygienic grounds, and appeal is made to the success which has attended the operation not only of these Acts at certain of our military and naval stations, but in other places, such as Malta, where similar laws have been in force. We cannot, we do not wish to deny that to a certain extent they have succeeded in suppressing venereal diseases in these places, but we must still be permitted to doubt whether other causes have not aided considerably in the result, and whether sufficient time has yet elapsed to permit of a final and conclusive opinion being formed upon the subject. Besides, it is not to be forgotten that the women are not alone to blame in the spread of these diseases, when the extension of the Act to the civil population is being considered. The civil male population is not subject to the discipline of the soldier. It has already been found necessary, in some of the military stations where the Act is in force, not only to make a periodical examination of common women, but also of the men, and this proceeding has been strenuously urged by high military authorities as an essential supplement to the operations sanctioned by the statute. Indeed, it has been suggested that merchant seamen quitting their ships on arrival in port should not be permitted to mix with its population until subjected to a similar examination; but, were even this practicable, how could any statute be framed which would reach the other dangerous male elements of our community? Again, it has been urged that clandestine prostitution will never fail to baffle all our endeavours to repress the extension of venereal affections. Nowhere has regulation (in the form of licensing) been more completely systematised than in France, yet we are told by Mr. Acton himself that the authorities in Paris have failed to exercise any control not only over large sections of superior professional prostitutes, but also over "vast hordes of the lowest class of strumpets who throng the low quarters and the villages of the Banlieue." "But," says Mr. Acton, "half a loaf is better than no bread;" "it is an objection of little weight, because the facts are clear that several thousands of women are thereby rendered physically harmless—that is to say, not merely a small, but a very large, amount of good is done." Possibly; but, curiously enough, in a note to an account which he gives of an examination of *filles des maisons* which he witnessed, we have the following statement:—

"I was informed that, on the day after these inspections, the houses are specially frequented by the public, in the belief that there is then less chance of contracting disease. It is therefore reasonable to suppose that, under the French system, many yield to indulgence whom the fear of the natural penalty would otherwise deter. In considering the advisability of introducing health inspectors among the civil population in England, this should not be lost sight of."

The extension of the Contagious Diseases Act to the civil population cannot be discussed without reference being made to the Hospital accommodation required. We believe that it will be conceded on all hands that it is more than undesirable to treat prostitutes as out-patients; for, in the first place, their cure is retarded and commonly incomplete, and, in the second place, by continuing on the streets they continue to propagate disease. Beds, then, must be found for them somewhere. Mr. Acton thinks that for London and seaport use floating Hospitals might be provided, and that the annual cost per bed would be about £25. The suggestion is a good one, as there are plenty of old war vessels now serving no useful purpose. But in towns Hospitals would have to be built, either temporary, in the hope of a reduction in disease, or permanent; and apart from the first cost of these, the annual expense of keeping up the beds requisite for a population such as that of London would be, according to Mr. Acton's calculation, from £32,000 to £44,000. He suggests that, this being done, the beds in the civil Hospitals now occupied by females may be devoted to the sole treatment of males who may contract syphilis, adding, with much reason—"If public institutions do not offer greater facilities for the treatment of men labouring under primary symptoms and chancres, all the precautions now and hereafter to be taken to prevent syphilis spreading among prostitutes will be foiled by unsound men going about diseasing them."

Mr. Acton severely criticises Mr. Simon's report on this subject, urging in a few minatory sentences that the Government, having once put hand to the plough, must go forward.

"Supposing," he writes, "the Government, at the suggestion of the Medical officer of the Privy Council, refuse acquiescence in the proposal to extend the Contagious Diseases Act to the civil population, does not that gentleman see that on the Lock Hospitals in the different garrison towns will be thrown the duty of disinfecting all the prostitutes in England? If Mr. Simon in his official position does not foresee this, it remains for me, a civil Practitioner, to show the Government that such must be the case. . . . If Hospital provision is not made for the prostitute living outside the naval and military districts, every parish officer, Medical man, clergyman, or ratepayer has but to recommend a sick girl to enter one of the garrison towns, and the Government inspector, always on the look-out for such persons, will at once take charge of her, in the interest of the army, if not in that of society, and then the expense will be shifted at once on the consolidated fund—and the ratepayer will no longer have to complain that he 'pays the expense of making prostitutes clean for hire.'"

There is a great deal of force in this. It is perfectly

evident that if, on further experience, it be found that by the measures now adopted at a few stations, the country is really saved from the loss of military service, every garrison town will have to be included within the operation of the Act. Our own notion is that in this way everything that can reasonably be desired will be obtained; at any rate, such an extension would afford an official loophole for escape by the Government from what may, if Mr. Acton is right, turn out to be a dilemma.

We have now done with Mr. Acton, not that we have exhausted the subject matter of his admirable volume of painstaking research, but because we wish to say a word on our own account. Whether or not State intervention be desirable in the regulation of prostitution, we maintain that the chief hope of amelioration lies in an improved moral tone of society, which must commence in its higher strata. There was a time in the memory of many of us when intemperance was a leading vice of the age. We have lived to see the day when, the drawing-room being purified, drunkenness has become less prevalent among the lower orders of the people. Virtues and vices have both a tendency to gravitation. Is it too much to expect that the virtue of male chastity throughout our population may be promoted and extended by means similar to those which have succeeded in making us now a comparatively temperate people? Is it too much to ask that the leaders of female society in the metropolis should make a beginning in this direction? that they should refuse admission into their *salons* of the notorious profligate or seducer, just as they would to the same man if he intruded his presence when debased by indulgence in the bottle? that they should extend their disgust of the drunkard to the man whom they know to be living a sexually immoral life? Till this is done, till the axe is laid to the root of the tree, we have little hope of destroying the vicious trunk by the mere lopping off of its branches.

MEDICAL ETHICS IN AUSTRALIA.

Some time since, it will be recollected, actions were brought against the *Melbourne Age* and the *Melbourne Leader* for libel. The plaintiff was a person of the name of Jordan, who was the proprietor of an exhibition called the "Anthropological Museum." This had been held up to public reprobation by the editors of the above journals, and Jordan sued for damages. At the trial the only Medical witness who appeared on behalf of the defendant was Dr. Barker, of Melbourne, one of the Surgeons to the Hospital, and of high standing generally. It appears that Dr. Barker had attended Mrs. Jordan on several occasions, and at the trial referred to he was called for Jordan. The evidence given by Dr. Barker, and which was much criticised at the trial, was as follows:—

"As a Medical man, and having regard to the character of the exhibition, I don't consider that there is anything improper about them (the models). I don't think there is anything about the museum to justify the statement as to the accumulation of 'models and casts of the filthiest kind.' In England I was House-Surgeon, and assisted at demonstrations in the dissecting-room at the University College Hospital, Oxford. I have not seen establishments at home like this, but there was one like it got up here by Mr. Kreitmeyer, and exhibited in Hoekin's Assembly-rooms. There is nothing, in my opinion, in the exhibition to encourage pruriency, but rather the reverse. The models are suitable for the illustration of disease. I have known Dr. Jordan since he came out to the colony. I have never met him as a Medical man, but from what I know of him there is nothing about his character that is not respectable."

A meeting of the Medical Society of Victoria was held on September 16 last, at which the subject of Dr. Barker's evidence was discussed. The meeting passed a resolution in favour of the *Age* and *Leader*, and then a resolution was proposed expressing strong disapprobation of Dr. Barker's evidence in support of "a notorious quack." Dr. Barker made a statement, in which he spoke of the way he became acquainted with Jordan, that he knew very little of the museum, that he "had reason to regret very much that he gave evidence at the police-court in the case of Jordan *v.* Syme." A somewhat stormy discussion followed this statement, and some personalities of a most offensive nature were resorted to. A motion was made to expel Dr. Barker from the Society, but this was negatived in favour of one which "placed Dr. Barker's explanation and expression of regret on the minutes of the Society."

Now, we think the Society acted with leniency towards Dr. Barker. It must be remembered that he is a representative man, and that he occupies important public posts in his Profession. That he could have given such evidence in such a case at the police-court is indeed incomprehensible. It must be remembered that the "exhibition" was open to the public, was connected with a practice of the most objectionable kind, and was notoriously a scandal to all Melbourne. What, does one of the chief Surgeons of Victoria see nothing objectionable in models of disease affecting mainly the genital organs being exhibited to the youth of the city indiscriminately? Mr. Barker must have singular notions of Professional and general propriety. However, he has expressed his regret, and that has been accepted by his brethren of the Society. But we still think he has been treated with leniency—a leniency which we hope will not be regarded too lightly by any one who may in the future violate Professional ethics by giving evidence in support of such a nuisance as the "Anthropological Museum" of Melbourne.

BRITISH SPIRITS DISGUISED AS SPANISH SHERRY.

In a late leading article, as on many former occasions, we have urged upon our readers the essential distinction between wine and spirits. By wine we mean the pure, dry, thoroughly fermented juice of the grape, with no heat, and little intoxicating power—a refreshing beverage of which we find the best specimens in the pure wines of France, Germany, Hungary, and Greece. Spirits are met with in many forms. There are the gin, and whisky, and rum; the class of "liqueurs"—*i.e.*, spirits sweetened and aromatised; the fortified ports and sherries of Spain and Portugal; and the abominable forgeries of Hamburg, where, as a correspondent at p. 701 assures us, they make "wine" out of spirits and various chemical concoctions, and send it to England to figure in the plausible lists of wine merchants and grocer wine-sellers as cheap sherry. As for port and sherry proper, they are useful medicines when old and mature. Unluckily, as the quantity of alcohol they contain is more than doubled, and as their fermentation is checked artificially, they cannot be otherwise than unwholesome if new, as cheap wine is sure to be. Moreover, if it be granted that ardent spirits are unwholesome, and that, as matter of revenue and of policy, they should be taxed highly, we cannot see how they can be any the wholesomer, or why they should be exempt from tax, merely because they are exported to Spain or Portugal, there mixed with young wine, to make it travel without turning sour, and then brought back to England in the form of sherry. Now, there is a question we should like to ask the advocates of a reduction of the duties on fortified wine. If we turn to the Blue-book "Statistical Tables relating to Foreign Countries, compiled chiefly from the Official Returns of the various Countries, Part XI., London, 1868," we find, page 277, a return of the principal articles imported into Spain, from which we extract the following:—

Articles imported.	1862. Value in reales.	1863. Value in reales.	1864. Value in reales.
Spirits, common and unsweetened	24,322,550	38,840,558	34,772,903

Now, reales count 100 to the pound sterling. Spirits may be exported from London or Hamburg to Cadiz at about 1s. 6d. to 1s. 8d. per gallon. For the sake of round numbers, let us say that each gallon costs 2s.—that is, ten for £1. Hence in 1863 the Spaniards imported 3,884,055 gallons of spirits. Now, we

crave leave to ask what did they do with this immense quantity? Did they drink it? If not, what did they do with it? Did they use it to make cheap sherry, especially the hot ethereal flavoured liquids palmed off upon the ignorant as "dry sherry," at 24s.; do. do. Amontillado flavour, at 30s.; do. do. Manzanilla, at 28s.; and the like? When we see these new fiery potations, the lines of Horace occur to us involuntarily:—

"Post ignem æthereâ domo
Subductum, macies et nova febrium
Terris incubuit cohors."

THE WEEK.

TOPICS OF THE DAY.

It is announced in the *London Gazette* of Tuesday last that the Queen has been pleased to appoint George Hornidge Porter, Esq., M.D., of Meath Hospital and County Dublin Infirmary, and ex-President of the Royal College of Surgeons, Ireland, to be one of her Majesty's Surgeons-in-Ordinary for Ireland. We congratulate Dr. Porter on receiving this well-earned mark of royal favour.

It is understood that the scheme for the constitution of a joint Board of Examiners for a general licence to practise Medicine, Surgery, and Midwifery will be accepted by the Universities of Oxford and Cambridge. This will, in some measure, smooth the difficulties of which we spoke last week. It remains to be seen whether the University of London, which confessedly has a larger stake in Medical examinations, will be induced to give its sanction to the measure. The belief that this University will not refuse its assent seems, however, to be growing. As we have on more than one occasion repeated, we trust, both in the interests of the Profession and the public, that the merging of the different examining bodies in one Board will not—by destroying that wholesome spirit of rivalry which has, at least of late years, distinguished some of them—have the effect of reducing the pass examinations to a lower level than in the majority of instances has been of late years maintained. If the examination instituted by the joint board is, as it should be, of a high character, it cannot but have the effect, in a few years, of obliterating all distinctions of grade and class in the Medical Profession. If, on the contrary, it only maintains a mediocre level, it will be of no benefit to the public and the Profession at large. A greater distance will separate the general Practitioner from the "pure" than heretofore; for the sentiment of honourable rivalry, which, in some instances at least, has endeavoured to render the examination of the general Practitioner comparable with the examination of the Physician, will be lost, and there will be nothing to supply its place, for it cannot be supposed that it will be to the interest of universities and colleges to render the examination for a general licence as good in every respect as their own examinations for degrees and Fellowships. If, therefore, the present apparatus is to be swept away, it will be necessary that any new machinery should be provided with checks to prevent the examination of general Practitioners for the only document which is to give them the legal right to practise sinking below the point to which it has gradually been raised by the efforts of rival institutions. Of course the due and full representation of all existing examining bodies at the board could not fail to have a wholesome influence in this direction.

From America we received our first specimens of Medical women. From America the first loud remonstrance on the part of Medical men against the intermingling of the sexes in clinical study has just now reached us. Our transatlantic brethren have been the first to try the system, and a protest against it, signed by the Medical and Surgical staffs of twelve Hospitals and Medical Schools and by between sixty and seventy Physicians practising in the city of Philadelphia, now lies before us. The protesters, amongst whose names will be found many of world-wide reputation, speak in no measured terms of the utter indecency of clinical teaching in classes composed of both sexes. They show that in such a class efficient instruction can only be given at the expense of modesty. They write, in reference to Medical diseases:—

"A thorough investigation, as well as demonstration, in these cases—so necessary to render instruction complete and effective—is, by a mixed audience, precluded; while the clinical lecturer is restrained and embarrassed in his inquiries, and must therefore fall short in the conclusions which he may draw, and in the instruction which he communicates."

Whilst of Surgical practice they say:—

"In many operations upon male patients, exposure of the body is inevitable, and demonstrations must be made which are unfitted for the observation of students of the opposite sex. These expositions, when made under the eye of such a conjoined assemblage, are shocking to the sense of decency, and entail the risk of unmanning the Surgeon, of distracting his mind, and endangering the life of his patient. Besides this, a large class of Surgical diseases of the male is of so delicate a nature as altogether to forbid inspection by female students. Yet a complete understanding of this particular class of diseases is of pre-eminent importance to the community. Moreover, such affections can be thoroughly studied only in the clinics of the large cities, and the opportunity for studying them, so far from being curtailed, should be extended to the utmost possible degree."

The protest thus concludes:—

"By the joint participation, on the part of male and female students, in the instruction and in the demonstrations which properly belong to the clinical lecture room, the barrier of respect is broken down, and that high estimation of womanly qualities, which should always be sustained and cherished, and which has its origin in domestic and social associations, is lost by an inevitable and positive demoralisation of the individuals concerned, thereby entailing most serious detriment to the morals of society.

"In view of the above considerations, the undersigned do earnestly and solemnly protest against the admixture of the sexes at clinical instruction in Medicine and Surgery, and do respectfully lay these their views before the boards of managers of the Hospitals in Philadelphia."

The document from which we have quoted so largely was adopted at a meeting of the University of Pennsylvania and of Jefferson Medical College. Amongst the appended signatures are the names of Carson, Leidy, Stillé, Gross, Meigs, Da Costa, Ashhurst, Weir Mitchell, and many more who are equally known in Professional circles and in Medical literature on both sides of the Atlantic. It is only fair to notice that "Ann Preston, M.D., Dean, and Emeline H. Cleveland, M.D., Secretary of the Women's Medical College, Philadelphia," in reference to a "recent disturbance between the young men and women Medical students at the Pennsylvania Hospital," have published a report in which they state that, in their opinion, the special diseases of men should be treated by men in the presence of men only, and the special diseases of women, where practicable, by women, in the presence of women only. But they naïvely state:—

"In nearly all of the great public Hospitals, however, by far the larger proportion of cases suited for clinical illustration—whether Medical or Surgical—is of those which involve no necessary exposure, and are the results of diseases and accidents to which men and women are subject alike, and which lady Physicians are constantly called upon to treat."

The ideas of these ladies either on the subject of physical examination in disease, or else of what female modesty requires, must be, we think, in a remarkably rudimentary condition. Good female nurses are the ministering angels of the sick room. If ladies wish to be doctors, as long as they will get educated and examined apart from men we have no wish to hinder them; but the idea of young men and women examining together in the same wards the chests and abdomens of male and female patients, and experimenting on their excretions, is simply revolting. We are glad that the Medical

men of Pennsylvania have come forward to protect at least the modesty of their own sex. We hope that their example will not be lost on the other, and we commend the whole position to the consideration of the Universities of Edinburgh and Paris.

In reference to the claims of Dr. Wallich to the discovery of animal life at great depths in the ocean, and that gentleman's complaint against Dr. Carpenter and the gentlemen associated with him in the recent deep-sea explorations, that they had not given him full credit for priority, Dr. Carpenter has sent to the *Times* an extract from a letter published in the *Athenæum* of December 26, 1868, wherein Dr. Wallich writes:—

"I have to-day been favoured with a perusal of Dr. Carpenter's revised and extended 'Preliminary Report in Deep-sea Dredgings,' and feel great pleasure in being enabled to state that I consider my claims in connexion with the discovery of animal life at great depths in the ocean have now been clearly and fully recognised by him."

It seems extraordinary that Dr. Wallich, after having made this avowal in a leading scientific journal, should again bring the same charge against Dr. Carpenter. It is simply impossible that every record of new observations should be burdened by a recapitulation of all that have preceded them, unless, indeed, scientific literature is to exceed in bulk and ponderosity all others.

A somewhat remarkable case of suicide was reported last week. A journeyman tailor appears to have cut his throat in such a manner that the wound extended into the larynx, and is said to have "divided the principal organs of the throat." He then ran some distance, got over a gate, and sprang into a canal, from which his body was taken a quarter of an hour afterwards. Blood was found on the spot where he had inflicted the wound, which was 2½ inches long.

We are sorry to notice, in the report of the case of Harris *v.* the London and Brighton Railway Company, that a Medical man, Dr. Budgett, of the Commercial-road, laid himself open to the reflections of the court by what certainly, at first sight, seem to have been extravagant charges. Dr. Budgett was called in on June 24, and the following are reported to have been his charges for that day's attendance:—

"Visit, 5s.; powders, 1s. 6d.; mixture, 2s. 6d.; examination, 5s.; lint, 1s. 6d.; lotion, 2s. 6d.; bandage, 2s. 6d.; visit, 5s.; application, 5s.; curatio, 5s.; second visit, 7s. 6d.; repeated mixture, 2s. 6d.; repeated lotion, 2s. 6d.; total, £2 8s."

The patient was a beershop-keeper's daughter in Whitechapel. Her symptoms seem to have been principally of an hysterical character, in which the jury could not be brought to believe, for they decided the case against her. Dr. Budgett claimed in all £220, and he said that he charged on a higher scale because he looked upon a railway company as a rich patient. We know that immoderate charging is not a fault of the Medical Profession—in fact, they often demand less than they are warranted in charging. In dealing with accidents on railways full charges according to an ordinary tariff ought certainly to be made; but to heap up items for the purpose of making an exorbitant demand is contrary to Medical ethics. We do not say that this was the course pursued by Dr. Budgett, but undoubtedly the case leaves a disagreeable impression.

Several persons have been fined at the Thames Police-court for infringement of the Vaccination Act. There is but little doubt that the compulsory clauses of the Act have had the effect of organising opposition to the enormous benefit offered by vaccination, and we must expect to have the whole matter redebated during the next session of Parliament.

A case of supposed poisoning by opium has been recently tried at Leicester. A woman named Woodford was charged with poisoning her illegitimate child by administering opium to it. She was proved to have illused the child on various occasions, and the Medical Officer of the Union workhouse in which she was, suspected, from the symptoms which the child presented, that it was being poisoned by opium. It was also proved that she had obtained opium. The jury, however, did not think the evidence conclusive, and acquitted her.

It is a very good thing that the students of King's College were not present in the dining-hall when the roof fell in, on Monday last, or we should have had to record a catastrophe unparalleled in the history of colleges and schools. As it was, the hall was empty, and no one was hurt. We have seen no satisfactory explanation of the accident, beyond the supposition that it was the result of the operations which are being carried on in connexion with the embankment and railway.

THE DRESSING OF WOUNDS WITH DRY EARTH.

Whilst in this country the so-called antiseptic system of dressing wounds would seem to be carrying all before it, in America a system but little known in this country has had some enthusiastic advocates. Dr. Addinell Hewson, one of the Surgeons to the Pennsylvania Hospital and one of the principal contributors to that Hospital's reports, would seem to be of an inventive turn of mind. He first of all introduced paper as a substitute for lint, and this he praised highly, but he was not satisfied with his results, and introduced a new plan of dressing wounds with dry earth, probably taking the idea from the earth closets. With this plan he was also much enamoured, but a recent trial would seem likely to shake the faith of his followers. In June last a young woman, whilst intoxicated, flung a burning kerosene lamp at a young man's head; the lamp struck the wall just above him, exploded, and covered him with burning oil. He suffered severely, and was carried to the Pennsylvania Hospital, where he came under the care of Dr. Hewson, who ordered the burn to be dressed with dry earth daily. The patient soon complained of great pain and irritation in the wound, and on removing the earth which was crusted and baked by the discharge a large number of maggots were found in the raw surface. After this, apparently, the wound was washed by a continuous stream of water, but tetanus set in, and death followed.

No doubt the patient died of the tetanus; but how was this induced? Some held that the original injury was slight, others that it was severe; Dr. Hewson considered it mortal. On cross-examination Dr. Hewson admitted that the only effect of the earth would be to exclude air, and said that the pressure of the earth dressing did not affect the tissues beneath. Dr. Hewson's assistant, who euphoniously styles the dressing "dirt dressing," stated that he had adopted the practice "right through," that it seemed to increase the pain, except when first applied, when the patient said it felt cool. He had only obeyed orders, and would not have used this mode of dressing of his own accord.

No doubt Dr. Hewson acted in good faith, and thoroughly believed in what he did; but the result shows that the process is unfortunate, and nowadays, when we have got so many methods of dressing wounds, something else might be adopted which *à priori*, at all events, is more likely to succeed. Not a few among us are coming round to the practice of complete exposure of the wound from first to last, especially after operations, and the results thus obtained in the hands of some have been very encouraging; but were the germ theory in its totality true, such a plan would be neither more nor less than exposing an innocent being to certain death.

DR. BELL ON THE CONTAGIOUSNESS OF CHOLERA.

The following quotation is from a book called "New Tracks in North America," by Dr. W. Bell. The facts it brings forward will go a long way to disprove the non-contagiousness of cholera.

"The day after our arrival a hunting party of gentlemen arrived from the East. They had had very poor sport on the way, and brought the unwelcome news that cholera had broken out on the plains, and was rapidly advancing westward. The

38th Regiment of coloured troops had been ordered from Fort Leavenworth, in Eastern Kansas, to Fort Union, in New Mexico; just before starting, this terrible scourge showed itself among the soldiers. A regiment thus infected ought certainly not to have been allowed to traverse the country and spread the contagion; but all efforts to stop it proved of no avail, so that these troops brought death and mourning, first among the new towns and settlements and the railway employés along the Smoky Hill River, and then infected Fort Dodge and other places in Arkansas. In this latter district the hunting party came in contact with it, and suffered much from choleraic diarrhœa in consequence. While camped at Fort Lyon, the tent of our geologist and that in which I lodged happened to be situated next to the new arrivals, and we both suffered considerably from diarrhœa in consequence."

Dr. Bell is a graduate of the University of Cambridge, and was attached as Physician to this surveying expedition, and his statements must be accepted as a proof that cholera may be communicated by personal contact. Dr. Bell's work is worth reading.

SIR WILLIAM MANSFIELD ON THE ARMY MEDICAL DEPARTMENT.

It is stated that, in the present depressed condition of Indian finance, among other measures of retrenchment proposed by Sir William Mansfield for the consideration of the Government of India is the reduction of the administrative staff of the British Medical service in India to its former utterly inadequate establishment of one Inspector-General and two Deputy Inspectors-General of Hospitals for Bengal, and one Deputy Inspector-General each for Bombay and Madras. The present establishment in India has, since March, 1869, consisted of three Inspectors-General, being one in each Presidency; twelve Deputy Inspectors-General—six in Bengal, three in Madras, and three in Bombay; there are in addition four Surgeons-Major in charge of districts—two in Bengal, one in Bombay for Kurrachee, and one in Madras for Rangoon. So long as a large European force is necessary for the maintenance of our authority in India, it would be an extremely short-sighted policy to reduce the Medical and sanitary supervision of that force below the scale applicable to our army at home or in temperate climates. Such would be the result of Sir Wm. Mansfield's suggestion, and we trust that the home Government may not be induced hastily to adopt measures which, however attractive the prospect of immediate retrenchment to be effected by them may appear, would ultimately result in injury to the health and efficiency of our army in India. Although the proposed reduction might assist in temporarily relieving the embarrassments of the Indian Minister of Finance, it would, in addition to its injurious effects on the army in India, entail such detriment to, and actual breach of faith with, the Army Medical Department on the part of the Imperial Government, as would render the adoption of Sir Wm. Mansfield's vicariously economical scheme extremely questionable.

CHOLERA IN PESHAWUR.

The British force at Peshawur has, from cholera alone, in the six weeks between September 12 and October 24, lost 93 per 1000 of its total strength, equivalent to an annual death-rate of 810 per 1000 from this cause. In a garrison of 2160 men, there occurred during the above period 320 cases and 202 deaths from cholera and choleraic diarrhœa. The mortality was greatest in the 36th Regiment, in which it amounted to 126 per 1000 of the strength; in the 104th Regiment it was 81, and in the Royal Artillery 61 per 1000. Sanitarians and Physicians, while they stand abashed in the presence of such vast mortality, join in demanding how much longer are our troops to be quartered in unhealthy localities, to be swept off by disease the ravages of which their best efforts have been unable to diminish or avert? Allahabad, Morar, and Peshawur have, as usual, been the principal sufferers during the present epidemic. Are the imperial necessities so urgent, and the financial resources and the population of this country of the military age and class so inexhaustible, that they can continue to supply such frequently repeated demands upon them? It is estimated that during the present epidemic of cholera the strength of a full regiment of British infantry has been carried off by it, exclusive of the deaths of officers, women, and children.

OVARIOTOMY IN SWEDEN.

We have given in another column a table recently published by Dr. Sven Sköldborg, of Stockholm, which shows the results of all the cases of ovariotomy he has performed. His first was in November, 1866, the twentieth in October, 1869. Of these twenty cases there were seventeen recoveries and only three deaths. In four other cases an exploratory incision was made, death resulting in one of the four. There was a fifth death in another case, which proved to be one of cancer. This gives a total of five deaths in twenty-five operations—a really brilliant success. When we consider how the extension of ovariotomy all over the world is due to the example set by Mr. Spencer Wells and Dr. Keith, and how freely the influence of their teaching and practice is acknowledged by Continental Surgeons, we must not forget, now that the operation is becoming so general here, how it was decried a few years ago, what a storm of opposition it triumphed over, and we may take just pride in its extension abroad as one of the greatest victories of British Surgery.

MR. LIDDLE ON LONDON IMPROVEMENTS.

Mr. Liddle, in his last quarterly report on the health of Whitechapel, intimates that London improvements have begun at the wrong end, and there are many who agree with him.

"There are," he says, some places in this district where the houses are so old, ill-constructed, and confined, that, from the want of efficient ventilation and of proper privy accommodation, persons occupying them cannot enjoy good health, and as it is impossible to improve these houses, they ought to be taken down. They would soon be demolished if the same anxiety were displayed by the public authorities for the improvement of the health of the people as such authorities now manifest in improving the traffic and embellishing the metropolis. Upwards of six millions have been expended in ornamentation and in traffic convenience, whereby the wealthy are principally benefited, but not one single street, court, or alley, where the poor are compelled to dwell, has been improved at the public expense in order to advance the physical condition of the people. In the densely crowded streets in London, fever and other contagious or infectious diseases are very seldom or never absent, and such diseases extend over the whole metropolis when they prevail epidemically; the whole community, rich and poor, then suffer alike from their influence. It is surely time that public attention should now be directed to this matter, so that something effectual may be done to improve the existing state of things. I may further add, that a great number of the houses in this district are used as common lodging-houses, which are under the inspection of the police, and are principally occupied by tramps and persons of the lowest class. There are also many of the houses which, from their almost inaccessible situations, afford shelter to thieves and vagrants, who make their way into London from all parts of the country; the former to obtain a larger field to carry on their depredations, and the latter to live upon the charity which is so indiscriminately bestowed by the unthinking members of the community. Almost the only persons who enter these abodes of wretchedness are the police officers, the relieving and sanitary officers, and the Medical officers of the Union."

ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.

At the next meeting of the Association of Medical Officers of Health, at the Scottish Corporation Hall, Crane-court, Fleet-street, on the evening of Saturday the 18th, at 7.30 p.m., Mr. Acton will read a paper on "The Contagious Diseases Act, and its Extension to the Civil Population."

INDIAN MEDICAL DEPARTMENT.

We hear on good authority that it is not the intention of the Indian Government to call for candidates for service in the Indian Medical Department in February next.

TOOTHACHE AMONGST THE ANCIENTS.

One by one our illusions as to the "good old times" vanish. Long had we cherished an idea that at least decayed teeth were unknown to our hardy ancestors, and were the peculiar privilege of our frivolous civilisation. Mr. Mummery, in an able paper before the Odontological Society, has shown, however, that teeth were at times unsound even when the ancient inhabitants of the British islands lived on coarse meal or the produce of the chase. Mr. Mummery has examined all the ancient skulls within his reach in order to determine this point. Beginning with the long-headed race, who are the earliest known human inhabitants, and who have been supposed to be of a Basque type, he found few instances of real decay, not many of wearing down, and none of dental irregularity amongst sixty-eight Wiltshire skulls; whilst amongst the round-headed skulls from the same county, supposed to belong to the later Belgic immigrants whom Cæsar found in possession of the southern part of the island, there were many more cases of caries, more also of wearing away, and some of irregularity, which Mr. Mummery believes to be indicative of a coarse vegetable diet and scarcity of animal food. Oddly enough, in Yorkshire the skulls of the earlier or long-headed race exhibited many signs of dental disease, both caries, wear and tear, and signs of abscess. As for the Romans in Britain, the practice of burning their dead makes collecting of skulls by no means easy, yet out of 143 Britanno-Roman skulls 41 had carious teeth; irregularity and abscess were also common, but not wearing away. No traces of stopping or of artificial teeth have been found. Amongst Egyptian skulls wearing of the teeth is very common, from the gritty, sandy character of the flour, and caries is by no means unfrequent. There are no traces of stopping, and it seems that the art of dentistry was almost confined to the extraction of teeth. Mr. Mummery's conclusion is that dental disease is not the exclusive privilege of a high state of civilisation.

FROM ABROAD.—DIPHTHERIA IN BERLIN—THE DEBATE ON ANIMAL VACCINATION—PARIS REGISTRATION RETURNS.

Dr. Albu recently read an interesting paper at the Hufeland Society on the epidemic diphtheritis prevailing in Berlin. Since 1863 the disease and analogous affections have prevailed endemically in that city. According to the police mortuary lists, there died in

	From Diphtheria.	From Croup.	From Angina tonsillaris.
1863 . . .	269	275	96
1864 . . .	235	184	104
1865 . . .	325	187	70
1866 . . .	220	119	75
1867 . . .	291	184	45
1868 . . .	1030	441	156
Jan. to April, 1869 .	361	161	33

The ages prior to the fifth year were especially liable, but all ages have suffered from it. Before the fifth year there was no remarkable difference in the sexes, but after this females became oftener the subjects than males. Thus in 1868-69 there were 181 females between five and ten to 128 males. The children of the poor inhabiting close dwellings, where contagion and inoculation were of easy occurrence, were especially the subjects. In two of the worst districts the deaths from diphtheria amounted to 52 and 48 per cent. of the whole mortality. The actual number of cases during the present epidemic has not been ascertained with accuracy, but the mortality is supposed to be about 47 per cent. In accordance with Hirsch's observation that in every epidemic of diphtheria there are great varieties in severity, Dr. Albu found of 82 cases which came under his care 10·98 per cent. were mild cases, 56·09 croupous cases, and 32·93 typhous cases. He suggests that the first of these should be called diphtheroid, the second diphtheritis, and the third diphtheria. In the discussion which followed, Dr. Zülzer declared that the police returns were not to be relied upon, and that the mortality of the disease was far higher than had been stated, it being usually from 70 to 80 per cent. Moreover, the distinctions laid down between diphtheria, croup, and angina were not sufficiently strict to render the returns reliable.

The discussion on animal vaccination which began two years and a half since, and which would have worn out the endurance of any mortals less happily constituted than French academicians, terminated its lingering and, we are afraid we must add, its worthless, career amidst yells and cries which eye-witnesses could only compare with those heard at the recent Paris election meetings. A dozen voices voiciferating at once refused to yield to the frantic ringing of the President's bell, who, tired out at last by his efforts, clapped on his hat, and declared the sitting closed. It was inferred, rather than understood, that the thirty-seven resolutions of M. Depaul, the reporter, had been carried *en bloc*. This, indeed, was a grievance, although, perhaps, the only mode of preventing the discussion becoming literally interminable; for, while those of the resolutions declaring that the trials of animal vaccination had been successful, and that this is a valuable adjunct to the means we already possess, would have passed muster, others, in which groundless imputations were thrown upon Jennerian vaccination, and assuming, in the most free and easy way, the danger, reality, and frequency of vaccinal syphilis, would never have got through the ordeal of a separate discussion. As it is, they have had a hard struggle enough, for M. Guérin—certainly the ablest debater in the assembly, and gifted with a flow of language which, whether by friend or foe, can only be characterised as terrible—laid bare the fallacies they contained, and showed their utter baselessness whether in science or in fact. But such reiteration of arguments, such repetitions of statements, and such prolixity of detail, whether on the one side or the other, could only be endured by those to the matter bred.

Unfortunately, it would seem that we are not certain that the subject is yet done with, for as the Government have offered funds for further trials of animal vaccination, when the acceptance of these comes under the consideration of the Academy it is said that the whole question will be reopened. Moreover, another question has been raised—viz., whether diseases may not also be conveyed through the medium of animal vaccination, and upon this point a debate is imminent. Indeed, it may almost be said to have commenced; for while M. Colin declares that *charbon*, glanders, and farcy can be communicated through animal vaccination, M. Bouley utterly denies it. But M. Blot inquires, "Are young animals ever the subjects of these diseases?" "Most certainly," replies M. Colin; "I have seen *charbon* in calves and heifers two or three months old." "Certainly not," exclaims M. Leblanc, "for in my long practice I never met with anything of the kind." It is evident that, with the normal amplifications and repetitions of French discussions, we have here the material for a year or two's debate.

So little satisfaction is felt at the results which have emanated from these prolonged discussions that the editor of the *Union Médicale* has resolved to take the matter into his own hands, and intends addressing a series of queries to the Practitioners of all countries, as he believes that the whole truth on either side has not come out at the Academy. The answers he receives he pledges himself to report faithfully and independently. "This," he says, "is one of the gravest of questions; Medical opinion is held in suspense, and the public is all anxiety. All of us, great and little, ought to contribute our aid to the solution of this important social and hygienic problem; and this is why, without any other object than to serve the cause of science, truth, and humanity, we propose to furnish this

means of publicity. The press, unless it abdicates its position, cannot feel uninterested in such a question. Universal suffrage has become imbedded in our manners. Let us appeal to it." A circular containing the queries in a simple form, and accompanied by directions, is to be forthwith issued. We recommend our *confrère*, in framing these, to consult Mr. Simon's valuable "Papers on Vaccination," founded on a similar set of queries forwarded to the *élite* of the Profession, both at home and abroad. M. Lanoix, the introducer of animal vaccination into France, highly approves of this proposal of the *Union*, and is ready to exhibit the results of his five years' persevering investigations, or, if deemed preferable, to offer every opportunity for additional researches.

A few years since, the Paris municipality commenced the publication of a Monthly Bulletin of Births, Marriages, and Deaths, and, although its system of classification and nomenclature of diseases might be amended, it constitutes a very interesting and useful document. It contains, besides these mortuary returns, much valuable information in the shape of meteorological observations, the price of food, the receipts of the octrois, and various questions bearing on public health. The Medical press, however, having represented how desirable it was that a more frequent statement of the deaths should be published as a guide to Practitioners, their suggestions were complied with, and a weekly supplementary bulletin was recently issued, giving the returns of the deaths from some of the principal diseases. It was freely circulated throughout the Profession, and was deemed by most an acceptable boon. Not having been accompanied, however, by any explanation as to its supplementary character, it has met with a good deal of severe criticism on the part of some of the journals, who have pointed out its defective character, and in some instances have declined publishing it—a curious mode, indeed, of securing its amendment. The *Archives Générales*, while deprecating this step, calls attention to the omissions of important causes of death, such as phthisis, operations, apoplexy, etc., and ridicules the referring these to the *omnium gatherum* of "other causes," while some fourteen or fifteen diseases only are specified. A writer in the *Gazette des Hôpitaux* explains that this criticism springs from its authors being ignorant of the existence of the monthly bulletin in which all diseases are specified, and of the fact that the weekly bulletin is intended merely to make Practitioners and the Medical press aware of the movement of acute diseases, especially such as are endemic and liable to epidemic increase—in fact, the zymotic diseases of the London tables. The weekly bulletin is merely an anticipation of some of the facts to be more fully given in the monthly one, and is not intended to serve for statistical purposes. Endeavours have been made to form comparisons with the returns of the other capitals, but at present Berlin and London only have reciprocated these with regularity. Amendments in the construction of the returns are doubtless required, and will be made; but the sharp criticism they have met with has arisen in a great measure from ignorance of the object with which they have been published.

ELCHE AS A HEALTH RESORT.

Some inquiries have been made of us about Elche, in Spain, whither, somewhat to the perplexity of his acquaintance, one of our most experienced diplomatists has betaken himself for his winter resort. From its privileges of climate and situation it is not at all unlikely, indeed, that this small place may soon obtain the rapid celebrity of Cannes. An entirely Moorish-looking town, seven miles away from the sea, and situated in a forest of palms, in number past all computation, and many of them of enormous age—placed in the garden of Valencia, the most beautiful spot in all the earth, no place could be better adapted, as Dr. Francis has said, for "those who, with impaired general health, require during winter months some remedy for the wear and tear of mind."

If this was well said by him of Valencia, which was once styled "the city of mirth," it holds good of the entire country, the gardens of Valencia and Murcia, the whole wearing the aspect of cheerful fruitfulness. The saying of Cardinal de Retz holds true to the same extent—"J'entrais dans le royaume de Valence, qui se peut dire non pas seulement le pays plus sain, mais le plus beau jardin du monde." It is the Cashmere of Europe, one of the brightest spots in existence.

Elche is the *Illice* of the Romans; it wears a thoroughly oriental appearance; the Moorish houses with flat roofs, the palms, the thoroughly delicious air, the absence of rain and fog, transport one in idea to the further Mediterranean shore; only the Bedouin appears wanting to make the realisation complete. The ravine that courses through the town is spanned by a handsome bridge. The church is fine and curious, the ceremonies most striking and picturesque. There is high employment for the botanist and mineralogist in all the surrounding country, and very much in local history to interest and occupy the *littérateur*. But the palms form the principal feature in the place; they grow to fifty feet, and tell as sure a tale about climate as strict thermometrical data—not but that we desire and solicit confirmation of this kind. The trees are raised from dates; the fruit which they bear is a little inferior to those of the coast of Barbary. Dr. Francis has merely said of Elche "that every European may well make some exertion to behold it." Some miles further towards Murcia, through the forest, is the larger town of Orihuela, of the same oriental character, with palms, square towers, and domes. The *Segura*, which divides the town, makes it quite independent of rain, as attested by the gigantic vegetation. The constancy of climate is the same; rain and fog are scarcely known. The dusky peasantry in their *bragas* and striped *mantas* look like Greeks. The *Alameda* is a charming promenade. From Elche to Alicant across an extensive plain the distance is thirteen miles. It lies in the southern part of the province of Valencia. Some capacity of putting up with rough accommodation, and some knowledge of Spanish, would be necessary to the visitor. It is probable, if our space admits, that we may early give some accounts of other health resorts in Spain of which we have more minute particulars than at present we possess of Elche, for which we are greatly indebted to the pages of Ford.

STATISTICAL REPORT ON THE HEALTH OF THE NAVY FOR THE YEAR 1867.

This report has this year been published rather earlier than usual. It has been before us for some weeks, but want of space has until now prevented us from noticing it. Considering the length of time which must elapse, before the immense mass of material in the shape of the individual reports of the Medical officers of our navy scattered all over the world can be received in this country, and then the amount of care necessary for their proper compilation, and for the selection of such parts as from their interest and importance are worthy of being published as official records, it ceases to be matter for surprise or remark that several months generally intervene between the close of each year and the appearance of the report chronicling its events. That Dr. Mackay has efficiently discharged the task, to the performance of which he has devoted so much ability and zeal, is abundantly proved by the great value and interest of each of the annual reports which he has compiled. It also affords us pleasure to observe that the lay and military journals are each year becoming more fully alive to the value of the vital statistics of our sea and land forces, and that it is now habitual with the more influential of them to express their full appreciation of the valuable services rendered by the Medical officers of the army and navy.

The report now before us contains, if such be necessary, still further proof of the advantages to be obtained from the steady and intelligent application of hygienic rules, and affords satisfactory evidence of continued improvement in the sanitary state of her Majesty's navy. The total force afloat in the year 1867 was 51,000, and the total number of cases entered on the sick list was 65,045. In estimating the ratio of cases, however, it was necessary, in consequence of defective returns from small vessels on the North America and West Indies, West Coast of Africa and China stations, to take the strength as 50,110, giving as the

ratio of cases 1298 per 1000 of the force. The full force, however, is taken in calculating the invaliding- and death-rates, the returns on these points being complete. The total number of deaths was 587, of which 432 were from disease and 155 from violence, giving a total death-rate of 11·5 per 1000, of which 8·4 resulted from disease alone and 3 from violence.

The total number invalided was 1492, which is in the ratio of 29·2 per 1000 of force, being a decrease as compared with the preceding year of 5·1 per 1000.

The average daily sick-rate of the total force was 49·5 per 1000, being a reduction, compared with the preceding year, equal to 1·2 per 1000. The lowest sick-rate, 37·7, was on the home station, and the highest, 73·3 on the West Coast of Africa. Each case was on an average 14·1 days under treatment, and each man spent 18 days on the sick-list, being less than in 1866 by half a day to each man.

The West Coast of Africa retains its pre-eminence as the station on which continued and remittent fevers most abound, and the greatest mortality from these diseases occurred on that station. On the Mediterranean, the South-east Coast of America, and the Australia stations there was an increase of mortality from enteric fever, as compared with the preceding year. On the South-east American coast this form of fever may be said to be endemic in the River Plate; in Australia it was contracted at Sydney, where it prevailed on shore, and was attributed to defective sewerage.

Of sixty-one cases of yellow fever, fifty-four occurred on the North American and West Indian Station, five on the Pacific, and two on the West Coast of Africa. The proportion of deaths to cases indicates, as was the case in the previous year, that many cases of a milder form of the disease were not returned as yellow fever, and this is admitted by the Medical officers, some of whom only returned those as yellow fever which proved fatal. We may here remark that the appendix to the present report contains an exceedingly valuable and almost exhaustive treatise, by Dr. Donnet, Deputy Inspector General of Naval Hospitals, on this disease as it prevailed in the epidemic form in the Royal Naval Hospital at Port Royal, Jamaica, during the latter part of 1866 and the year 1867.

Small-pox in the epidemic form appeared in two vessels, the *Vestal* on the West Coast of Africa, and the *Princess Royal* in China. On the latter station no fewer than thirteen vessels of the squadron were more or less affected by this disease. It is remarked that the risk incurred by ship's companies in the Japanese and Chinese seaports of contracting small pox is very great, as the practice of the inoculation of children is general among the natives during the winter months, and that thereby small-pox is produced in the epidemic form. As Dr. Mackay very justly observes, this indicates "the necessity of every precaution being taken to insure as far as possible the safety of ship's companies proceeding to that station, by ascertaining that every man is protected by effective vaccination." We have not yet learned, however, that the practice of revaccination of every man and boy entering the navy has become the rule of the service, as it has been in the army for many years with most satisfactory results. Until such be the case, we shall continue frequently to hear of epidemics of small-pox in our vessels of war, particularly in those on foreign stations, where the unprotected crews come much in contact with the natives, among whom the disease is naturally epidemic, or artificially produced by inoculation, as in China. We hope in time to see that Dr. Armstrong, the Director-General of the Naval Medical Department, will have given to this subject the attention which its importance demands.

Diseases of the heart and blood-vessels caused 640 admissions, or 12·6 per 1000, 161 invalids, or 2·9 per 1000 (137 being from functional and organic diseases of the heart, 3 from hæmorrhoids, 18 from varicose veins, and 3 from aneurism), and 46 deaths; of the latter, thirty-six were from diseases of the heart, and ten were from aneurism, being respectively 0·7 and 0·1 per 1000 of the strength. Compared with the preceding year, there was a slight increase in cases and mortality, but the invaliding rate was lower.

Of thirteen cases of cholera, six proved fatal, distributed as follows:—

	Cases.	Deaths.
Home station . . .	2	0
South-east Coast of America .	2	2
China	6	3
Irregular Force . . .	3	1

With reference to the epidemic of cholera in the River Plate, Assistant-Surgeon Alexander M'Donald, M.D., of H.M.S. *Linnet*, reports that in the city of Buenos Ayres, and in the river-side cities and provinces of the Argentine Confederation generally, the origin of the epidemic "was clearly traceable to the military camps in Paraguay, where both armies suffered very great loss during its visitation;" and it is an interesting fact that cholera was established in the ports of Corrientes, San Lorenzo, Rosario, and Buenos Ayres, which are in the direct route of the steamers, which were constantly running with provisions and stores for the army, and in the habit of calling at these ports without any attempt at surveillance or restriction, before it spread to any of the interior towns of the republic. The two fatal cases occurred on board the *Sharpshooter*, at Rio Janeiro, while the ship was in what ought to have been a dry dock, but in which, in consequence of defective machinery, the water not having been pumped out after the expiration of six days had become very offensive. The dock was also unhealthily situated. Assistant G. W. L. Harrison gives a full account of the circumstances under which the disease appeared; also of the preventive measures, which were judicious and so successful that no other cases occurred, although diarrhœa had become rather prevalent.

Dr. Mackay remarks that "the immunity enjoyed by the vessels of this squadron, stationed as they were on a coast and even up rivers where the disease prevailed epidemically in the most virulent form, is very remarkable, and shows how much is to be gained by adopting the strictest precautionary measures while in its vicinity." Among these were the stoppage of leave to go on shore, strict observance of personal and general cleanliness, the application of chloride of zinc where required, abstaining from fruit, and using condensed water.

There was a reduction in the cases of primary syphilis in the total force to the extent of 2·8 per 1000, but there was a trifling increase in the ratio of secondary syphilis. There was also a slight increase in the ratio of cases of gonorrhœa. It is especially gratifying to observe the progressive diminution of primary syphilis in the home ports, the Medical officers in which have generally evinced the desire to see the operation of the Contagious Diseases Act much extended.

During the Christmas quarter of 1867 a rather extensive epidemic of enteric fever occurred among the Marines at headquarters at Plymouth. Impure drinking water appears to have been the chief agent in the development of the disease. Analyses of the water used by the Marines were made by Professors Abel and Letheby, and agreed in showing that it was charged with matters derived from surface drainage and from sewage, and was unfit for drinking purposes. There were other local and temporary causes at work which probably aided in the causation of the disease.

The occurrence of eighteen cases of jaundice among the boys on board the *Impregnable*, the training ship at Devonport, twelve having been during the Christmas quarter, gives rise to some interesting observations on the difficulty of accounting for the simultaneous appearance of a number of cases of this disease. No satisfactory reason has yet been assigned for such a singular phenomenon, which, however, is said to be not unusual among sailors. Only five deaths, or ·09 per 1000, are attributed to suicide. As compared with the mortality from this cause in the army—amounting in 1867 to ·34 per 1000 of the forces at home—this proportion appears very low. It is difficult, however, to estimate how many of the 82 deaths recorded in the naval report before us as having been caused by drowning may have been suicidal.

The appendix contains a paper by Staff-Surgeon C. K. Ord, M.D., giving a detail of the examination of 6000 boys for admission into the navy, and contrasting the results with those of the recruiting for the army; Dr. Donnet's account of the yellow fever at Jamaica; Dr. Rattray's remarks on the dieting of seamen; observations on the ventilation of ships, by Staff-Surgeon Macdonald; an account of a visit to the Mauritius during the epidemic of 1867, by Surgeon F. H. Blaxall; and Medical and Surgical notes on the Royal Dockyard, Sheerness, by Staff-Surgeon R. T. C. Scott—all of great interest, and we trust to be able shortly to notice some of them more fully.

THE LATE DR. PENNY.—At a meeting of the managers of the Andersonian University, Glasgow, held on the 3rd inst., the following minute was entered:—"The managers agreed to record in their minutes their sense of the loss the University had sustained by the death of Dr. Penny, who had so ably filled the chair of Chemistry for upwards of thirty years, and their sincere sympathy with his widow and daughter under their great bereavement." The secretary was instructed to send a copy of the minute to Mrs. Penny.

OVARIOTOMY IN SWEDEN.

CASES OF OVARIOTOMY PERFORMED BY DR. SVEN SKÖLDBERG, OF STOCKHOLM.

I.—20 *Cases of Completed Ovariotomy:* 17 *Recoveries*, 3 *Deaths.*

No.	Date of operation.	Age.	Condition.	Number of tappings; Nature and Weight of Tumour; Length of Incision; Adhesions; Treatment of Pedicle.	Results.
1	1836. Nov.	30	Single ...	Preliminary tapping; unilocular cyst growing from the posterior surface of both the broad ligaments and of the uterus, 10·20 kil.; incision 10 c. m.; no adhesions; cautery and ligatures.	Recovered.
2	1837. Jan.	39	Married, no children	1 tapping and preliminary t.; multilocular cysts, 19·12 kil.; incision 18 c. m.; very firm and extensive parietal, intestinal, and pelvic adhesions; cautery and "serre-noeud;" both ovaries removed.	Died, 3 hours, of exhaustion.
3	July	33	Single ...	9 tappings; multilocular cyst, 14·87 kil.; incision 13 c. m.; extensive parietal adhesions; cautery ...	Recovered.
4	Aug.	24	Single ...	Preliminary tapping; dermoid cyst 12·75 kil.; incision 23 c. m.; no adhesions; cautery and ligatures ...	Recovered.
5	Aug.	34	Single ...	1 tapping; dermoid cyst, the size of an adult head; incision 8 c. m.; no adhesions; cautery	Died, 6th day, of peritonitis.
6	Nov.	23	Single ...	Preliminary tapping; colloid cyst, 20 kil.; incision 12 c. m.; parietal and omental adhesions; cautery and ligature.	Recovered.
7	1868. April	55	Widow, 4 children	Preliminary tapping; multilocular cyst, 10·20 kil.; incision 10 c.m.; parietal adhesions; cautery... ...	Recovered.
8	May	49	Married, 8 children	Preliminary tapping; multilocular cyst, 4·25 kil.; incision 13 c. m.; no adhesions; cautery and ligatures	Died, 15th day, of peritonitis.
9	May	24	Single ...	1 tapping and preliminary t.; multilocular cyst growing from the posterior surface of both the broad ligaments and of the uterus, 21·25 kil.; incision 10 c. m.; no adhesions; cautery and ligatures... ...	Recovered.
10	June	37	Widow, no children	1 tapping and preliminary t.; multilocular cyst, 25·50 kil.; incision 15 c. m.; extensive parietal and pelvic adhesions; cautery and ligatures.	Recovered.
11	Aug.	37	Single ...	Preliminary tapping; multilocular cyst, 9 kil.; incision 11 c. m.; parietal adhesions; cautery	Recovered.
12	Aug.	29	Single ...	8 tappings (ascites) and preliminary t. of the tumour; semisolid, multilocular cyst, the size of an adult head, surrounded by a large quantity of ascitic fluid; incision 21 c.m.; no adhesions; cautery.	Recovered.
13	Sept.	28	Single ...	Preliminary tapping; multilocular cyst, 13·17 kil.; incision 11 c. m.; parietal adhesions; cautery ...	Recovered.
14	Dec.	32	Single ...	Preliminary tapping; multilocular cysts; 14 kil.; incision 10 c. m.; very firm parietal and pelvic adhesions; cautery; both ovaries removed.	Recovered.
15	1869. Jan.	50	Married, 2 children	2 tappings; multilocular cyst, 21·65 kil.; incision 15 c. m.; parietal, omental, and pelvic adhesions; cautery.	Recovered.
16	June	28	Single ...	No tapping; multilocular cyst, 3·40 kil.; incision 10 c. m.; no adhesion; cautery	Recovered.
17	July	65	Married, 1 child	2 tappings; multilocular cyst, 14·87 kil.; incision 12 c. m.; parietal and omental adhesions; cautery ...	Recovered.
18	July	39	Widow, 1 child	1 tapping; multilocular cyst, 12·75 kil.; incision 15 c. m.; extensive parietal adhesions; cautery... ...	Recovered.
19	Aug.	27	Single ...	1 tapping; multilocular cyst, 9·35 kil.; incision 10 c. m.; parietal and omental adhesions; cautery ...	Recovered.
20	Oct.	35	Married, 6 children	No tapping; multilocular cyst, 8·50 kil.; incision 10 c. m.; parietal adhesions; cautery and ligature ...	Recovered.

II.—*Cases where an Exploratory Incision was made.*

No.	Date of Operation.	Age.	Condition.	History, etc.	Results.
1	1867. June	50	Married, no children	Multilocular cyst; the operation abandoned in consequence of firm and extensive adhesions	Recovered.
2	July	48	Married, no children	Unilocular cyst with enormously thick walls, growing from the posterior surface of both the broad ligaments and of the uterus.	Recovered.
3	1869. July	44	Married, no children	Large soft, solid tumour, probably from the uterus	Recovered.
4	Sept.	42	Married, no children	Ovarian cyst and cancer, surrounded by ascitic fluid; the tumour impossible to remove	Died, 50 hours, of peritonitis.

III.—*Case of Solid Ovarian Tumour* (*diagnosis made before the operation*).

No.	Date of Operation.	Age.	Condition.	History, etc.	Result.
1	1868. Aug.	12	Single ...	Cancer of the right ovary, the size of an adult head, surrounded by ascitic fluid	Died, 20 hours.

REVIEWS.

A Physician's Problems. By Charles Elam, M.D., M.R.C.P. London: Macmillan. 1869. Pp. 424.

Dr. Elam has here presented the public with the results of his thoughts on some questions of the day. The problems which he states are seven in number, and an essay is devoted to the elucidation of each one. They treat on subjects which are always full of interest, such as the causes of the moral condition of man socially and individually, and those states of mind which seem to lie on the neutral ground between sanity and insanity, between waking and sleeping. It is of the highest importance that the question of what we inherit from our parents should be taken into full consideration, both to the individual and to the State. How far is a man responsible for his moral nature? How far can he improve himself or be improved? Such are the questions which Dr. Elam proposes in his first two essays.

In all nature we find, he says, two principles in operation —similarity and diversity. In obedience to the former both bodily and mental qualities are transmitted from parent to child, and by the operation of the latter old characteristics die out of families, and new ones are admitted. Vice in one generation is sure to exhibit some effect in the next, in either bodily or mental infirmity, and renders the mental struggle to the offspring against evil more difficult. We are reminded at the end of the first essay, on "Natural Heritage," that this is not to be construed into an attempt to do away with man's responsibility, and that, however much evil he may have in his nature, he is not left incapable of good.

In the second essay, on "Degenerations in Man," those causes are inquired into which tend to deteriorate races, nations, and families. The chief are found to be bad situations for dwelling in, bad food, unhealthy occupations, the use of narcotics and stimulants, and the various epidemics which from time to time ravage countries. All these, with vice and its immediate results, increasing in strength with each generation create the "dangerous classes" of society. The practical result of the essay is, that it is hopeless to attempt the cure of these classes without taking causes into the fullest consideration.

The next essay inquires into the causes of "Moral Epidemics." The chief one is found to be the imitative part of man's nature acting in union with those predisposing causes of crime which have been pointed out in former essays; while the press, the pulpit, the bar, the legislature, and science itself, are not found free from blame in exciting men to crime in their different ways.

"Body *v.* Mind" is intended to upset the popular notion that hard brain-work is *per se* something incompatible with health of body. The failure in after-life and the early deaths of many men who have made a good show at school or at the university are shown to be due to a pre-existing taint in many cases, which would have carried them off sooner or later, hard worked or not. Doubtless the brain both may be and is overworked in early life, and many men shorten their lives in this

way; but the fault is to be laid to improper management, not of necessity to the work.

"Illusions and Hallucinations" is the title of the fifth essay, which is intended to show that a man may have an hallucination and yet not be mad. To it is appended an essay on the demon of Socrates, and one on the amulet of Pascal. Dr. Elam would make out that the demon was but the voice of conscience personified. This is unsatisfactory, for it does not seem probable that conscience should have warned Socrates which way to take in his flight after the battle of Delium.

The last two essays, on "Somnambulism" and on "Reverie and Abstraction," deal with those states of existence in which the mind appears to be awake while the body is asleep. The sum total of the essays is, that we can know but little about these conditions.

On the whole, we must confess that "A Physician's Problems" is a disappointing book. The luxurious Macmillanesque "get-up" of the book, with lines round each page and marginal notes to each paragraph, is very disproportionate to the results of the various investigations. Various points are passed over "for obvious reasons," in a way unbecoming in a writer who aims at a philosophical treatment of his subject. The Greek quotations would not have been less intelligible if they had been accented.

With much that is good and true, there is much that is vague, discursive, and overladen with opinions which do duty for arguments. We have again read with great attention the essay on "Moral and Criminal Epidemics," and can only repeat our sentiments of disappointment. It begins with a rhetorical prelude, asserting the universal rule of law even over those occurrences which seem most abnormal. It affirms the existence of moral epidemics, sweeping over continents and affecting the minds of men as plague and pestilence do their bodies, of which religious wars may be taken as examples; and of criminal epidemics, such as forgery and murder — more limited, but equally disastrous. This proposition is supported by quotations from newspapers of the year 1856, and from the address of the Recorder at the Old Bailey on March 3, of what year not stated. It is said also that a criminal epidemic raged in 1856, but we have no account of its beginning or end. So far, all is exordium, rhetorical and appetising. We next come, as we hope, to business; for we find the author proposing "to make use of the same *calculus* which we have seen to be of such signal service in physical science"—that is, the collection of analogous instances and their analysis; and, as the result, he promises to answer four questions, though it is in vain that we look for a formal categorical answer to any one of them. The "collection of analogous instances" is given in forty pages of miscellaneous examples, which show a wide and discursive, but by no means deep, kind of reading. We confess to a feeling of tantalisation when, after the exact scientific term *calculus*, we find it stated as the earliest moral epidemic that, "according to Maimonides, the earth had not been peopled 300 years when *all* turned with one accord to idolatry." After the Flood, continues Dr. Elam, there was a second falling away, including the falling away especially of the chosen people to the worship of the Golden Calf. We confess our astonishment at finding the Rabbi Moses Ben Maimon quoted as an authority for something which took place "within 300 years" after the earth had been peopled. Perhaps the Rabbi may be invoked to tell us the exact date when the earth was first peopled. Page upon page is filled with quotations respecting "moral epidemics," including monachism, witchcraft, poisoning, and the like, down to Mormonism and spirit-rapping. We gather that an infantile state of the popular mind is the predisposing cause, that education is the chief prophylactic, and that all that makes crime celebrated—the ballads, romances, sermons, and even barristers' speeches in defence of criminals—are the excitants and propagators. The author quotes from Hecker and Forbes Winslow; but we do not learn much that we do not know already. Nothing, save the ridiculous appeal to Maimonides, shows research into authors not already well known.

The choice of Dr. Elam's subjects is creditable to him as a Physician's problems; but, considering that some of the essays must have been written thirteen years ago, we marvel much that he has not recast his materials, gone deeper into things, pruned his language, and aimed at greater precision and lucidity. We give him credit for being able to give the public a much better sample of a Physician's problems than this volume gives.

THERE has been an outbreak of cholera at Kieff, in Russia. A fatal case has also occurred at Orla.

GENERAL CORRESPONDENCE.

THE NATURE OF TUBERCULOSIS.

LETTER FROM DR. W. H. MADDEN.

SIR,—Twenty years ago I published a small work, entitled "Thoughts on Pulmonary Consumption," in which I endeavoured to trace out, with some minuteness of detail, the analogies which I believed to exist between tuberculosis and those diseases which are acknowledged to be the results of morbid poisons, and argued that they all should be included in the same category. At that time I stood very much alone in my opinions; it was, therefore, with no little gratification that I read the other day, in the November number of the *Edinburgh Medical Journal*, Dr. Burdon Sanderson's most able and interesting *résumé* of "Recent Researches on Tuberculosis." In that article I find the following paragraph:—

"In what way do these facts as to the course followed by the infective agent aid us in arriving at a conclusion as to its nature? I hold, with Waldenburg, the material to be solid matter in a state of extremely fine division, but do not agree with him in separating tuberculosis from the infective processes which constitute the specific infective diseases—*e. g.*, small-pox, scarlet fever, glanders. By proving that the infective material is necessarily solid, not in solution, we establish and strengthen the analogy with other infective diseases. It appears to me certain, from the experiments of Chauveau, that the contagium of small-pox is an insoluble substance, and exists in the state of minute particles, and that the contagia of vaccine, of glanders, and of ovine small-pox, are of a similar nature. All our researches, therefore, tend to bring tuberculosis into the category of infective diseases; but, on the other hand, they lead us to believe that the infective matter is infinitely more common, and that the conditions for its production are probably of much more frequent occurrence than those which generate the other morbid poisons."

A fuller or more perfect confirmation of my views, in the general, it would, I think, be impossible to desire. I say in the general, because the progress of science, both chemical and histological, has cut away much of the ground on which I rested. For instance, I adopted, because my own observations served to confirm, Lebert's account of the peculiar tubercle-corpuscles; but it now seems that no such bodies really exist. I do not, of course, pretend to contradict what the eminent histologists of our day so positively affirm, but I confess myself considerably puzzled to make out what it was that we really saw. Assuredly these corpuscles were visible—I measured them, and drew them, and experimented on them with different chemical reagents, and believed that I could unhesitatingly distinguish them in any situation from all other microscopical entities. But if this was a mere illusion, then, of course, all argument based upon it was also fallacious.

Be this, however, as it may, and frankly acknowledging that the honour of demonstration belongs to others, not to myself, I think I may fairly claim the credit of having, by a process of inductive reasoning, indicated at least the direction in which the truth was to be found.

I am, &c.

Torquay, December 1. W. H. MADDEN, M.D., &c.

EPIDEMIC OF SMALL-POX AT DEVIZES.

LETTER FROM MR. R. S. THORNLEY.

[To the Editor of the Medical Times and Gazette.]

SIR,—In reference to a statement which appeared in the *Medical Times and Gazette* of last week, respecting the prevalence of small-pox in Devizes, I write to say that I have had about one hundred and fifty cases of small-pox, some very severe, but the majority mild. I should think altogether there cannot have been less than two hundred cases in the town. The first I had was on May 28; it has been creeping about insidiously ever since. In the severe cases not one had been vaccinated at any time; in the mild cases all had been at some time. During the last quarter I have vaccinated and revaccinated upwards of three hundred cases. On the first vaccination, where small-pox was prevalent in the house, several took the disease, and most of them had good vaccinal vesicles as well; in fact, the two eruptions ran their course at the same time, but the variolar was modified. In the cases of revaccination—and nearly all were successful so far as I observed (and I was very careful)—

not one took small-pox. There has not been a fatal case in the town or neighbourhood, but the disease has been prevalent in several neighbouring towns. From my own experience I am sure vaccination (primary and secondary) is the effectual remedy for checking this loathsome complaint."

I am, &c.

Robert S. Thornley, Medical Officer and Public Vaccinator 1st District Devizes Union.

Devizes, December 7, 1869.

NEW CLAMP FOR HÆMORRHOIDS.

Letter from Messrs. Matthews Brothers.

[To the Editor of the Medical Times and Gazette.]

Sir,—In your paper of last week we observe the drawing and description of a clamp for hæmorrhoids, which Mr. Sydney Jones states is superior to the clamps now in use, inasmuch as its blades press together more evenly. This desideratum has not been lost sight of in the clamp of Mr. Henry Smith, with which, from the letterpress, we should think that Mr. Sydney Jones is unacquainted, and is particularly pointed out in Mr. Smith's Lettsomian Lectures, 1865, in the following terms:—"It is very essential for the right action of the clamp that the blades should be so constructed as to have their parallelism complete when they meet; otherwise some portion of the enclosed membrane may slip after the tumour or prolapsus has been cut away." As Mr. Smith insisted so strongly upon this point, our late father took especial pains to effect the object desired, and the clamps, before they are finished, are tried in such a manner that even very thin paper will not slip from their blades.

The double joint in Mr. Henry Lee's clamp is nearly the same as that employed by Mr. Sydney Jones; in other respects the instrument resembles an old form of Mr. Henry Smith's clamp, which has since been improved in many respects. Mr. Sydney Jones has added a pair of scissors with a double curve to be used with his clamp, similar to those used for horse clipping. Sir William Fergusson has invented a simpler and more effective pair of scissors, which has long been used for removing hæmorrhoidal tumours by Mr. Henry Smith after the clamp has been screwed up.

Apologising for intruding on your valuable space,

We are, &c. Matthews Brothers.

8, Portugal-street, W.C., December 7.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, November 23, 1869.

George Burrows, M.D., F.R.S., President, in the chair.

Mr. Marshall communicated a paper by Dr. Wilhelm Meyer, of Copenhagen, on

adenoid vegetations in the naso-pharyngeal cavity; their pathology, diagnosis, and treatment.

There exists a peculiar form of defective speech, often accompanied with imperfect hearing, which is found to be dependent on the presence of exuberant growths or vegetations in certain parts of the naso-pharyngeal cavity. These vegetations, when examined microscopically, are found to be composed of the so-called "adenoid" tissue, and are accordingly to be regarded as overgrowths or morbid growths of the closed glandular structures allied to the lymphatic glands found naturally in or beneath the mucous membranes of the pharynx, the fauces, and the base of the tongue. Hence the term "adenoid vegetations" is suggested for them. The presence of these vegetations in sufficient quantity impairs the power of pronouncing the nasal consonants, and gives a "dead" character to the speech. They also impede respiration through the nose, and compel the patient to keep open the mouth, thus giving a vacant aspect to the face. If accompanied by deafness, the vacant look is still more remarkable. The nostrils are usually compressed. Other signs and symptoms are present, and the affection is sufficiently serious to merit attention. The author has briefly described the naso-pharyngeal cavity, in order to define with accuracy the usual seats of these overgrowths. The character of the vegetations themselves is next described. These vary in form and consistence in different situations, being sometimes cristate, and at others cylindrical or flat; sometimes they are solid and firm, and at others soft and highly vascular. The latter easily bleed when examined with the finger. Their microscopical structure also varies slightly, the firmer kinds containing the most characteristic adenoid tissue. Their relation to the normal structures in the naso-pharyngeal mucous membrane is very apparent. Certain accompanying changes in the surrounding mucous membrane, the tonsils, the soft palate, and the nasal fossæ, have been noticed, and must be taken into account. The symptoms depend on the seat and size of the vegetations. Besides the peculiar effect on the speech and the open state of the mouth, the nostrils are flattened, so that the nose appears compressed. Moreover, the patient often has a deficient secretion from the nostrils, and sometimes blood accumulates in the mouth. Deafness is occasionally combined with these symptoms. In using an ear-catheter in such a case, the stream of air entering the tympanum is arrested temporarily, without any apparent reason; and sometimes a bubbling sound is heard during insufflation. The diagnosis of such cases is, of course, partly dependent on the presence of the above-mentioned signs and symptoms in a persistent or chronic form. These, however, may also indicate other affections of the nasal organs, such as chronic inflammation of the mucous membrane, and polypi, or chronic inflammation of the soft palate, or enlargement of the tonsils. Hence, the physical examination of the parts concerned is indispensable as a means of diagnosis; and of these, touch is more easy and more sure than sight as a method of research. Digital examination of the cavity may always precede, and nearly always supersede, the use of the rhinoscope. Very full and practical instructions are offered for conducting this examination. The frequency of the occurrence of these adenoid vegetations of the naso-pharyngeal cavity has been tested, in Denmark at least, by careful inquiries prolonged over about eighteen months. The statistics of this affection are shown in a tabular form, and are otherwise explained. It occurs especially in youth. The causes of these vegetations are then briefly discussed, and especially their relation to deafness. As to prognosis it seems possible that they may diminish or become of less moment as age advances; but this is uncertain. Their treatment is, in the last place, fully discussed. They may be most easily and rapidly removed by a ring-shaped knife, mounted on a long slender handle, which is passed through one or other nostril and manœuvred so as to sweep over the mucous surface affected with these vegetations. This proceeding is aided by the forefinger of the left hand passed over the tongue. Two or more operations are sometimes necessary. The bleeding is free, but not excessive. Sickness sometimes supervenes. A complete cure is usually accomplished—the voice becoming improved, the speech perfect, the nostrils expanded, the mouth closed; the aspect of the face is changed, and any accompanying deafness is relieved. As an auxiliary means, the use of the nasal douche is of great importance. Nitrate of silver, or the galvanic cautery, may also be employed, with or without the previous application of the knife, according to special circumstances, which are fully indicated. Many little practical details require to be attended to in order to insure success. To illustrate the remarks and conclusions above detailed, two typical cases are described, together with the treatment employed and the results obtained. In conclusion, the real importance of this local disease is enforced, as a reason for bringing it under the notice of the Profession in England.

Illustrated photographs of patients, taken before and after the operation, with drawings of the vegetations, of their microscopic structure, and of the instruments used in removing them, are added to the paper.

Mr. Savory could not help thinking that there must be great difficulty in distinguishing the adenoid vegetations of the author from enlargement of the many crypts and follicles and ductless glands of the mucous membrane of the affected region.

Mr. Thomas Smith felt much in accord with Mr. Savory. The frequency of the disease in Copenhagen rendered it probable that it was nothing more than common naso-pharyngeal catarrh. The symptoms enumerated by the author are precisely those of that affection, and others have described as "granulations," enlargements of the ordinary follicles of the pharynx. Mr. Smith regretted the absence of Dr. Meyer, as he would have liked to ask him the size of the growths. In all cases of cleft palate in young children, the so-called pharyngeal tonsil is very prominent; and Mr. Smith believed it to be a projection caused by muscular effort to close the cleft. If this

projection be not a diseased growth, neither could the vegetations be so regarded.

Mr. Christopher Heath confirmed Mr. Smith's statement about the presence and nature of the "pharyngeal tonsil" in cleft palate. His attention had been called to it by Mr. Coles, the dentist, who was a practised rhinoscopist. The size and relations of this projection might possibly explain some of the variations of success in operations intended to unite cleft palate.

Mr. John Marshall referred to the absence of the author, and to his own responsibility as the introducer of the paper. He spoke of the excellence of the English in which it was written by Dr. Meyer himself, and to its perfect openness and freedom from mystery. He had himself seen much hypertrophy or natural structures in the region indicated, but nothing that he could consider a morbid growth. The affection described by Dr. Meyer must, he thought, be more than a common catarrh, from its chronicity, and more than a simple hypertrophy, on account of the liability to bleed. He had accompanied Dr. Meyer to the Orphan School at Haverstock-hill, where they saw 700 children, who were made to speak to them, and especially to utter the words "cannon" and "command." Dr. Meyer selected thirteen children for further examination; and of these two as probably subjects of the disease. They certainly presented the characteristic faces, as described in the paper; and there was certainly an evident obstruction to the finger behind the soft palate. No attempt was made to remove the growths, or to display them by means of rhinoscopy.

CLINICAL SOCIETY.

Friday, November 26, 1869.

Mr. Paget, President, in the Chair.

Dr. Cholmeley brought before the Society the following case, in which the cutaneous eruption which occasionally results from the administration of bromide of potassium presented unusual characters:—H. C., a pallid, dark-haired Scotch lad, of leuco-phlegmatic temperament, aged 13, was admitted into the Great Northern Hospital on August 30, 1869, for epilepsy. The bromide of potassium was given in ten-grain doses three times a day, but without benefit. On September 20 Dr. Cruckuell, who had charge of the patient during Dr. Cholmeley's absence from town, determined to try the salt in larger doses, and, beginning with fifteen grains, quickly increased it to twenty-five grains three times daily. Marked improvement as to the epilepsy immediately followed, but on September 26 an eruption appeared on the patient's face and legs, and quickly became copious and very painful; at the same time there was general malaise, with pain in the head, and the fits became more frequent. The bromide was then discontinued, and nitrate of silver given. The eruption was described as being "like varicella, but that the vesicles, instead of drying up, became in many places confluent, and the clusters thus formed showed a tendency to enlarge, and exhibited numerous points of suppuration." When Dr. Cholmeley again saw the patient—October 18—he had a band of eruption up each side of the face and across the forehead, while the front and outer side of each leg was covered with it from knee to ankle. On the face it consisted of irregularly circular, elevated, flattened, light-brown crusts, varying in size from a pea to a fourpenny-piece, surrounded by slightly red areolæ, and so adherent that they could not be removed without causing bleeding. On the legs the eruption was in a more active condition; the skin between and around the spots was vivid red, exquisitely tender, hot, and painful, the pain being of a burning, tingling character. Movement of the legs caused very severe pain; the smallest spots, which were also the most recent, consisted of circular, elevated, conical vesicles filled with a milky-white semi-fluid matter, and seated on a slightly elevated hardened base; the largest spots were from one to two inches long, irregularly oval or oblong, elevated, flattened on the surface, and covered with flaccid moist cuticle, or light-brown crusts, under which the surface presented "numerous milletseed-like yellowish-red prominences." Dr. Cholmeley had never seen a like eruption, but from careful observation was convinced that it was a severe and confluent acne excited by the bromide of potassium. The eruption began by a minute, redhot, and tender pimple, on the summit of which there very quickly formed a small yellowish-white, tense, conical vesicle, pierced by a hair; if the vesicle was ruptured and gentle pressure applied, a smooth yellowish-white substance was obtained, which proved to be sebaceous matter with the bulbous root of the hair; if the vesicle was let alone, it rapidly enlarged, and then was found to contain pus. The crusts of the older spots were partially dissolved by ether, which on drying left a greasy stain, while the remaining portion of the crust was found to consist of epithelium and damaged pus-cells and blood-corpuscles. When the eruption had after seven weeks nearly died away, the bromide was again given in full doses, and on the sixth day the eruption began again to come out very actively, most on the legs, movement being again very painful. Dr. Cholmeley remarked that while it was well known that acne sometimes appeared during the exhibition of the bromide, it was not with us a very common occurrence. In France it seemed to be much more common, and some French Physicians, as Voisin and Falret, expected its occurrence in every case, at least, where the patient was epileptic. Voisin had described five forms of eruption as induced by the bromide, and his fifth form closely resembled that in the present, only being much less copious. Voisin had seen six cases of it. But in France the bromide is given in much larger doses than with us, from 7 to 9, 10, and even 11 grammes being given daily, and for long periods. Lastly, as showing the bromide to possess a stimulating power over the cutaneous structures, Dr. Cholmeley had seen an obstinate, long-continued acne disappear entirely while bromide of potassium was being taken for a nervous affection.

Dr. Buzzard was glad Dr. Cholmeley had brought this subject forward, whilst he took shame to himself that, with abundant opportunity, he could not give satisfactory statistics of the frequency of these eruptions. One day he had noted fifteen cases taking bromide; eight presented eruptions at that time or had done so previously. These were mostly about the neck. Some presented a few patches only; others were severely affected. He saw none on the extremities. He had seen one case like this as to the neck and shoulders only. He generally continued the bromide in spite of the eruption. The notion as to the good results depending on this eruption was incorrect.

Dr. Tilbury Fox had seen acne disappear under the use of the bromide. He saw at the Epileptic Hospital some time ago a case of ecthyma very likely from bromide. The disease was undoubtedly a kind of acne, and the fluid contained in the pustules was similar to that found in molluscum contagiosum.

Dr. Beigel had often seen eruptions in epileptics where no bromide was given, which, indeed, he thought comparatively rarely produced an eruption. He remembered seeing a case like this in an epileptic treated by the subcutaneous injection of morphia.

Mr. Christopher Heath brought a boy before the Society who suffered from a congenital enlargement of the left side of the upper jaw. The parts were covered by a varicose-like skin, and considerable deformity was the result. Both eye and mouth were distorted, but the teeth were regular and not implicated in any way. He proposed bringing the boy before them again after operating. Beyond inconvenience there was no ill-consequence.

Mr. T. Smith would differ little as to the nature of the disease. They were quite used to see such enlargements of single bones in the fingers, the toes, or sometimes the foot generally. The teeth not being involved showed that a single bone only was affected. He thought the soft parts would shrink after the bone was removed.

Mr. Callender briefly referred to the perfect incorporation of the præ-maxillary with the true maxillary this uniform enlargement indicated.

Mr. John Croft asked what gain would be got by removing the bone if there was no disease and the bone was not increasing. Removal would not do much for the soft parts.

The paper by Mr. Cooper Forster was postponed, his drawings not being completed.

Dr. Oppert related eight cases of Syphilis in which good results had been obtained by the subcutaneous injection of solution of corrosive sublimate. In four of the cases the symptoms had entirely disappeared. In one of the others it was necessary to discontinue the injections on account of the local effects. In all of the cases the favourable action of the remedy showed itself within a very short time after the commencement of the treatment. The toxical action of the drug was observed in one instance only. In his comments on the cases Dr. Oppert drew attention to the special advantages of this method of administering mercury, as well as to the objections to which it is liable. He recommends its employment in cases in which other remedies have failed or cannot be applied, and particularly when the state of the digestive organs forbids

the continued use of mercury internally. The local pain and the liability to the formation of abscesses at the seat of injection are the most important drawbacks. They are best avoided by restricting the quantity of sublimate injected each time to one-twelfth of a grain.

Dr. Sanderson asked why Dr. Oppert preferred the side of the chest, a situation generally inconvenient, and where the injection was especially likely to irritate the parts.

Dr. Oppert seemed to think this was because there required to be considerable room between the punctures.

Dr. Beigel had tried the plan a good many times. It did no good where there were sores. It did good with psoriasis, but not with other eruptions. Such also was Lewin's experience.

A case of Addison's Disease was exhibited by Dr. Greenhow.

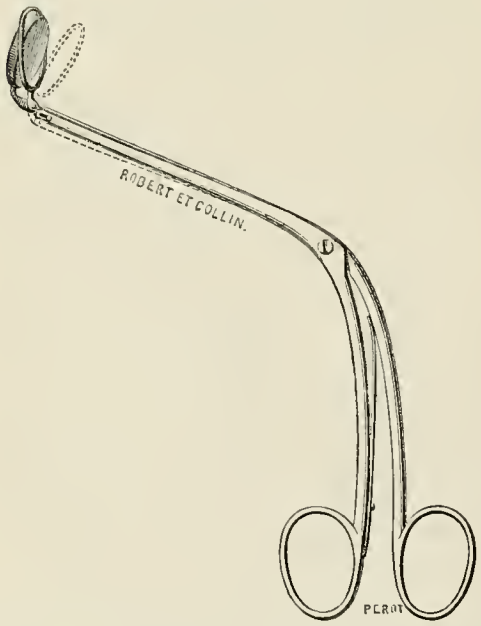
NEW BOOKS, WITH SHORT CRITIQUES.

Letts's Medical Diary for the Year 1870.

*** This is an improved edition of a Medical pocket-book which, even in its original form, supplied a want and obtained a large circulation amongst Medical men. The Medical Diary for 1870 is a well-arranged pocket-book for the entry of visits and engagements according to a fixed plan, also, by the information it contains, a very valuable companion. To prove this, it is only necessary to specify some of the things it contains. It gives tables of Professional fees according to the Manchester tariff; a table of baths and mineral waters, arranged according to their ingredients; a table of poisons and antidotes; a table of therapeutical equivalents—*i.e.*, the quantity of the more active drugs contained in Pharmacopœia preparations; a table of the contents of medicinal lozenges; some rules for the hypodermic injection of remedies; a table of the strength of spirits and wines; a table of comparison of the Fahrenheit with the Centigrade thermometer; a table of the chemistry of the urine; tables of the weights and measures of the Pharmacopœia and of the metrical system. These will serve to show what a very useful book this Diary must prove to the Practitioner. It may be had in russia leather arranged for the reception of Surgical instruments, and with plenty of pockets for memoranda. It is, then, a luxurious as well as useful pocket-book.

NEW INVENTIONS.

DR. DUPLAY'S RHINOSCOPE.



The advantages of this new instrument are many. First of all, only one hand is necessary for its management, leaving the other free to cut, cauterise, or catheterise, as the case may be. The mirror, situated at the extremity of the instrument and attached to the fixed branch, can be placed in any desirable position. The ring, which covers the circumference of the mirror and which is in communication with the movable branch, can be separated from the mirror by simply approaching the two handles of the instrument; this raises the soft palate, and permits a greater amount of light to reach the back of the nasal fossæ and the openings of the Eustachian tubes.

DR. DE SAINT-GERMAIN'S SOUND FOR INTRA-UTERINE CAUTERISATION.

This instrument is composed of a metallic tube, slightly curved, and divided into three separate canals, each opening separately, and each in relation with its corresponding bladder of caoutchouc. The large ampulla is charged with distilled water; the upper one with a solution of nitrate of silver, the lower one with a solution of chloride of sodium. After introduction of the sound well up into the uterus, its cavity is first cleansed of mucus, by an injection of distilled water from the large ampulla; this done, the solution of nitrate of silver is injected, and followed by that of chloride of sodium. The coating of insoluble chloride of silver thus formed may, in its turn, be expelled by a fresh injection of distilled water from the large ampulla.

OBITUARY.

JAMES HAVILAND.

The *Bridgwater Mercury* contains the following account of one of the oldest members of the Profession:—"Our readers will learn with regret the decease of the above-named gentleman, which event occurred on Thursday. Mr. Haviland was born at Bridgwater, October 1, 1788, and after studying his profession at the united Hospitals of Guy's and St. Thomas's, under Astley Cooper, Henry Cline, C. Chandler, and John Haighton, was admitted a Member of the Royal College of Surgeons, in London, when he was only nineteen years of age. He was immediately appointed to take charge of an outward-bound East Indiaman, belonging to the Honourable E.I.C. maritime service, and, before he had entered upon his twentieth year, set sail for India as Surgeon to the *Sir William Pulteney*, which had on board a large number of soldiers and seamen. Off the Cape of Good Hope his ship met with a hurricane, and whilst he was attending to a man who had just fallen from the mast-head, a tremendous sea was shipped, which threw a coil of cables over him, the blow from which broke and dislocated his thigh-bone. When, however, he had been removed to his cabin, he ordered the man whom he was attending to be brought to his side, and then he trepanned his skull and saved his life. The crews of all the ships which accompanied the *Sir William Pulteney* had suffered severely from scurvy; but Mr. Haviland kept all on board his ship free from this direful sea plague by maintaining a constant supply of freshly grown mustard and cress, which the men were directed to grow for their own use in warm moist flannel, the result of which was that he did not lose a single soldier or seaman, and for this he obtained the thanks of the Board of Directors. In 1809 he returned to England and commenced practice in Bridgwater, succeeding his uncle and grandfather. In 1813, in conjunction with his cousin, Dr. Haviland, afterwards Regius Professor of Medicine in Cambridge, he founded the Bridgwater Infirmary, in which work he was also ably assisted by his Medical colleagues. He acted as Surgeon to this institu-

tion for seventeen years. In 1815 he married Harriet Cobly, the sister of the celebrated historical painter, Benjamin Robert Haydon. At the approach of the cholera to our shores in 1848, it was deemed advisable that the town should have as its chief magistrate a Medical man of great experience and sound judgment; and on this occasion the choice fell upon Mr. Haviland, who discharged his duties during the whole time this fearful epidemic raged at Bridgwater, in 1849, with great energy, judgment, and skill. From the manner in which he discharged his duties as mayor during this trying time he was made a justice of the peace for the borough. Ever active, untiring, and skilful in his profession, he commanded not only the affection, but the confidence, of his patients and friends; and died on Thursday last at his residence, universally regretted and respected, in the eighty-second year of his age. He was one of the oldest Members of the Royal College of Surgeons. He leaves a widow, three sons, and two daughters to mourn his loss."

EDWARD HOWARD VERDON.

We record with sorrow the death of this gentleman in Dublin, on November 22, at the early age of 26, from an attack of malignant typhus, contracted by zealous attendance at the bedside of a near relative in Sligo, to whom he had been summoned by telegram.

Mr. Verdon received his Medical education at the College of Surgeons, Dublin, where by his talents and agreeable manners he became a great favourite. Subsequently he acquired much experience in the practice of the Sligo Infirmary.

Owing to domestic affliction and the loss of both parents, the subject of our notice encountered obstacles and delay in obtaining his diplomas, but he had formed plans for passing his examinations early in the new year. Meanwhile he had assisted two gentlemen in private practice, and at the time of his decease was under an engagement with a Practitioner in London, by whom he was much esteemed and highly appreciated.

A life of usefulness and prosperity had been hoped for by a large circle of friends, but it has been ordained otherwise.

JOHN HAYWARD, M.R.C.S.E.

[To the Editor of the Medical Times and Gazette.]

Sir,—Thinking that perhaps you would like to notice the death of the late John Hayward, Esq., M.R.C.S. Eng., of Rushall-cottage, Wiltshire, I send you just an outline of his case.

Mr. Hayward had been in constant attendance on a child suffering from typhoid fever, and on November 9 was himself attacked with violent shiverings, vomiting, etc. On being visited, typhoid fever was at once diagnosed, and although visited by almost every Medical man within several miles of his residence, and everything done which Medicine would permit, he died on the 19th, after ten days' illness, aged 45 years. Mr. Hayward was most deeply and universally respected by every member of his Profession who knew him, and as sincerely beloved by the poor of his parish, to whom he had ever shown the most marked kindness. He was an old student of St. Bartholomew's Hospital, where he served the office of dresser to the late Sir William Lawrence. Mr. Hayward's loss will be most deeply felt by every resident in his parish for many years. I am, &c.

Charles H. Lawrence, L.R.C.P. Edin., M.R.C.S.E., etc.

Rushall-cottage, November 25.

MEDICAL NEWS

University of London.—The following is the Candidate who has passed the recent B.S. Hons. Examinations:—

EXAMINATION FOR HONOURS.

First Class.

Dukes, Clement (Gold Medal), St. Thomas's Hospital.

Royal College of Surgeons of England.—The following Members of the College having completed their examination for the Fellowship on the 26th ultimo, were reported to have acquitted themselves to the satisfaction of the Court of Examiners, and, at a meeting of the Council on the 9th inst., were admitted Fellows of the College, viz.:—

Adams, James Edward, Finsbury-circus, of the London Hospital, diploma of Membership dated November 14, 1865.

Anderson, William, L.R.C.P. Lond. and L.S.A., Derby, of St. Thomas's Hospital, April 25, 1867.

Dessé, Ethelrid, M.B. Lond., Kensington-gardens-square, of University College, April 21, 1869.

Horsfall, John, Leeds, of St. Bartholomew's Hospital, May 22, 1866.

Keeling, James Hurd, M.D. Edin. and L.S.A., Sheffield, of the London Hospital, August 6, 1852.

Leet, Charles Henry, L.K.Q.C.P. Ire., Royal Engineers, of the Dublin School, December 4, 1857.

Liefde, John de, Tavistock-road, Covent-garden, of Guy's Hospital, April 24, 1867.

Mackenzie, George Welland, L.R.C.P. Lond., and L.S.A., William-street, Lowndes-square, of the London Hospital, April 28, 1864.

Pern, Alfred, L.R.C.P. Lond. and L.S.A., Botley, Hants, of St. Thomas's Hospital, April 25, 1867.

Pilcher, Jesse Griggs, L.S.A. Dub., her Majesty's Indian Army, of the Dublin School, April 13, 1860.

Pilcher, William John, L.S.A. Dub., Boston, Lincolnshire, of the Dublin School, April 13, 1860.

Rand, John, L.S.A., Blackheath, of Guy's Hospital, March 12, 1858.

Robinson, John, L.S.A., Midhurst, Sussex, of University College, November 9, 1849.

Steele, Charles, L.R.C.P. Lond., Clifton, of the Bristol School, November 14, 1860.

Thomas, William, M.B. Lond., Birmingham, of the Birmingham School, November 14, 1865.

Watson, James, L.S.A., Army, of St. Bartholomew's Hospital, May 28, 1858.

Wigg, Henry Carter, M.D. Edin., Seymour-street, Hampstead-road, of University College, January 19, 1869.

The following gentleman, *not* a Member of the College, also passed the examination:—

Banks, William Mitchell, M.D. and L.R.C.S. Edin., Liverpool, of the Edinburgh, Glasgow, and Liverpool Schools.

It is deserving honourable mention that all the candidates passed the Examination. At the same meeting of the Council, Mr. Henry James Shirley, of Finchingfield, Braintree, Essex, having been elected to the Fellowship at a previous meeting of the Council, was admitted as such, his diploma of Membership bearing date June 11, 1841.

Licentiates in Midwifery.—The following Members of the Royal College of Surgeons, having undergone the necessary examinations, were admitted Licentiates in Midwifery at a meeting of the Board on the 7th inst.:—

Boustead, Robinson, F.R.C.S. Edin. and L.S.A. Lond., her Majesty's Indian Army, of the Edinburgh School, diploma of Membership dated July 2, 1858.

Donovan, Humphry John, M.D. Queen's University, Ireland, June 27, 1868, Writtle, Chelmsford, of the Dublin and Cork Schools, *not* a member of the College.

Roberts, Richard Lawton, Ruabon, North Wales, of the University College, November 17, 1869.

It is stated that two candidates failed to acquit themselves to the satisfaction of the Board, and were consequently referred to their obstetrical studies for the usual period.

Apothecaries' Hall.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, December 2, 1869:—

Chambers, John Louis, Hackney-road.
Kavanaugh, Michael Thos., Bermondsey.
Magee, John James, Park-street, Grosvenor-square.
Owen, Simeon Holgate, Manchester.
Ravenhill, Thos. Holmes, Birmingham.
Thomas, Llewelyn Morgan, Camberwell-grove.

The following gentlemen also, on the same day, passed their First Professional Examination:—

Gibson, John Charles, King's College.
Hassard, John, Guy's Hospital.
Sutcliffe, John, St. Thomas's Hospital.

APPOINTMENT.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Ritchie, C. Currie, M.D.—Honorary Physician to the Hulme Dispensery, Manchester.

NAVAL AND MILITARY APPOINTMENTS.

Surgeons.—Dr. Thomas Carmichael, Assistant, to the *Valorous;* Charles F. R. Murray, Acting Assistant, to the *Monarch;* and Dr. Thomas O'Sullivan, Acting Assistant, to the *Valorous.*

Royal Artillery.—Surgeon John Irvine, M.D., having completed twenty years' full pay service, to be Surgeon-Major, under the provisions of the Royal Warrant of April 1, 1867.

17th Foot.—Staff Surgeon Thomas Knox Birnie to be Surgeon, *vice* Surgeon-Major Edward Baily Tuson, appointed to the Staff.

24th Foot.—Surgeon John Coates, M.D., having completed twenty years' full pay service, to be Surgeon-Major, under the provisions of the Royal Warrant of April 1, 1867.

47th Foot.—Surgeon Francis Henry Macfadin, from the 83rd Foot, to be Surgeon, *vice* Alexander Robert Hudson, M.B., who exchanges.

83rd Foot.—Surgeon Alexander Robert Hudson, M.B., from the 47th Foot, to be Surgeon, *vice* Francis Henry Macfadin, who exchanges.

Medical Department.—Surgeon-Major Edward Baily Tuson, from 17th Foot, to be Staff Surgeon-Major, *vice* Staff Surgeon Thomas Knox Birnie, appointed to 17th Foot; Staff Surgeon John Gorringe, having completed twenty years' full pay service, to be Staff Surgeon-Major, under the provisions of the Royal Warrant of April 1, 1867; Assistant-Surgeon Alexander Minty, M.B., supernumerary in the 90th Foot, to be Staff Assistant-Surgeon, *vice* William Thomas Paliologus, promoted on the Staff; Assistant-Surgeon George Beatty West, supernumerary in the 23rd Foot, to be Staff Assistant-Surgeon, *vice* Thomas Stawell Barry, promoted on the Staff.

BIRTHS.

Bates.—On December 4, at 6, Stockport-road, Manchester, the wife of William Bates, M.D., etc., of a son.

Bowes.—On November 30, at Herne Bay, Kent, the wife of John Bowes, L.R.C.P. Lond., of a son.

Caldcleugh.—On December 4, at No. 1, Queen's-crescent, Haverstock-hill, the wife of Dr. S. Caldcleugh, of a daughter.

Cribb.—On December 4, at 37, Compton-terrace, Highbury, the wife of Arthur J. Cribb, M.D., of a son.

Metcalfe.—On December 4, at 55, Clifton-gardens, the wife of E. Metcalfe, F.R.C.S., of a son.

Sealy.—On December 1, at 4, Princes-street, Hanover-square, the wife of George J. Sealy, M.D., of Weybridge, Surrey, of a daughter.

MARRIAGES.

Bell—Rait.—On December 7, at Edinburgh, George William Bell, M.D., etc., to Sarah Jane Bland, widow of John Rait, Esq., Edinburgh.

Cunynghame—Crabbie.—On December 2, at 22, Royal-terrace, Edinburgh, Robert James Blair Cunynghame, Esq., M.D., Cronan, to Joana, daughter of John Crabbie, Esq.

Edwards—Bowie.—On December 2, at Walcot Church, Bath, Lieutenant-Colonel Edwards, unattached, late 98th Regiment, to Flora Campbell, third surviving daughter of the late William Bowie, M.D., Bath.

Fell—Smith.—On December 2, at St. Nicholas Church, Brighton, Thomas Fell, Surgeon, of Sunderland, to Susan, youngest daughter of the late James Smith, Esq., Palmer's-green, London.

Houghton—Merry.—On December 1, at the Parish Church of Hemel Hempstead, John Campbell Arthur Houghton, of Edgbaston, to Annie Marie, third daughter of Robert Merry, M.D., of Marlowe's House, Hemel Hempstead.

Richardson—Smart—On November 30, at Cranborne, Dorset, the Rev. John Richardson, Vicar of St. Mary's, Ilford, Essex, to Sarah Isabella, eldest daughter of T. W. W. Smart, Esq., M.D., of Cranborne.

Smith—Thompson.—On December 1, at St. Saviour's Church, Chelsea, Henry Smith, M.D., of St. Mary's-terrace, Paddington, eldest son of the late W. H. Smith, D.C.L., barrister-at-law, of Lincoln's Inn, to Catherine, only child of the late John Thompson, Esq., of Holm Island, Morecambe Bay, Lancaster, and Montpelier-crescent, Brighton.

Wright—Leech.—On December 3, at Trinity Church, Rathmines, Dublin, William Frederick Wright, Esq., Military Store Staff, to Anna, second daughter of the late Dr. Robert Leech.

DEATHS.

Adam, John, retired Surgeon Madras Army, at Boulogne-sur-Mer, on December 3, in his 72nd year.

Bowie, Dr. Robert, formerly of London, at Northcote, near Melbourne, on October 2, in the 82nd year of his age.

Bowra, Henry Gooneve, M.R.C.S., L.S.A. England, Captain of the Hon. Artillery Company, London, late of Charterhouse-square and De Beauvoir Town, at Havre-des-Pas, Jersey, on November 26, aged 55.

Butler, Louisa, widow of William Butler, Esq., late Superintending Surgeon Madras Army, and youngest daughter of the late Captain James Mathews, 37th Madras Grenadiers.

Cotton, Elizabeth, wife of Dr. Cotton, at 46, Clarges-street, Piccadilly, W., on November 27, aged 49.

Fulchea, Frederick Brooker, M.R.C.S., at Orpington, Kent, on November 24, in his 47th year.

Hall, W., M.D., at Exeter, on December 3, aged 69.

Hayland, James, M.R.C.S.E., and Justice of the Peace for the Borough of Bridgewater, at The Square, Bridgewater, on December 2, aged 81.

Headland, Edward, M.R.C.S., etc., at 6, Upper Portland-place, on December 8, in his 67th year.

Meacea, Dr. Isaac, of Karlshof, near Darmstadt, on December 3, from the accidental discharge of a revolver, aged 37.

Spencer, Sarah, the beloved wife of Lawrence Spencer, M.D., J.P., at 3, Winckley-square, Preston, Lancashire, on December 4, in her 59th year.

Spencer, Walter Elwin, the beloved child of G. Owthwaite Spencer, Surgeon, at St. John's-park, Upper Holloway, on December 1, aged 14 months.

Stone, Daniel, Surgeon, at Abingdon, on November 28, aged 51.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

Borough of Ipswich Lunatic Asylum.—Resident Medical Superintendent. Applications and testimonials to the Town Clerk's office, Ipswich, addressed to "The Lunatic Asylum Committee," on or before January 15, 1870. The Asylum will be ready for occupation in April or May.

Cholsey New Pauper Lunatic Asylum.—Medical Superintendent. Applications and testimonials to J. T. Morland, Esq., Clerk to the Committee of Visitors, at the Asylum, Cholsey, near Abingdon, Berks, on or before December 16.

German Hospital, Dalston.—Honorary Medical Officers, an Honorary Physician, and an Honorary Assistant-Surgeon. They must both be natives of Germany, or prove themselves fully conversant with the German language. Candidates must produce a diploma from a British or foreign university. Applications and testimonials to the Honorary Secretary on or before January 3, 1870.

Holbeach Union.—Medical Officer for the Sutton Bridge District. Candidates must have the qualifications prescribed by the general orders of the Poor-law Board. Applications and testimonials to Mr. E. G. Ayliff, Holbeach, on or before December 24. Election on the 27th.

Hospital for Consumption and Diseases of the Chest.—Assistant-Physician; must be M.B. or M.D., and F. or M.R.C.P. Applications and testimonials to the Secretary on or before December 15.

Radcliffe Infirmary, Oxford.—House-Surgeon. Must have both Medical and Surgical qualifications. Applications and testimonials to the Committee of Management on or before the 15th inst. The successful candidate will be required to enter upon his duties on January 1, 1870.

Stourbridge Dispensary.—House-Surgeon; must be L.R.C.P. Lond. or L.S.A. Lond., and M.R.C.S. Eng. Applications and testimonials to the Secretary on or before December 14.

Victoria Hospital for Sick Children.—Assistant-Physician; must hold a degree in Medicine from a British University, and not practising pharmacy. Applications and testimonials to the House-Surgeon, at the Hospital, Queen's-road, Chelsea, on or before the 15th.

West Ham Union.—Medical Officer for the St. Mark's District. Candidates must possess the qualifications prescribed by the general orders of the Poor-law Board, and will be required to reside in the District. Applications and testimonials to Mr. F. E. Hilleary, Clerk's Offices, Boardroom, Leytonstone, Essex, on or before the 15th inst. Election the next day, at half-past 11 o'clock.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Oundle Union.—Mr. Edward Webster has resigned the Oundle District; area 22,986; population 6705; salary £80 per annum. Also the Workhouse; salary £30 per annum.

Pewsey Union.—The Fourth District is vacant; area 24,880; population 3429; salary £60 12s. per annum.

APPOINTMENTS.

Barnsley Union.—William Stewart, L.R.C.P. Edin., L.R.C.S. Edin., to the Workhouse.

Epping Union.—Frederic C. Cory, M.D. St. And., L.R.C.P. Edin., M.R.C.S.E., to the Buckhurst-hill district.

Reading Union.—Heygate Henry Phillips, M.B. Dub., L.R.C.S. Ire., to the St. Giles District.

Solihull Union.—Edward S. Page, L.F.P. and S. Glas., L.S.A., to the Workhouse.

The Queen has been pleased to appoint George Hornidge Porter, Esq., M.D., of Meath Hospital and County Dublin Infirmary, and ex-President of the Royal College of Surgeons, Ireland, to be one of her Majesty's Surgeons-in-Ordinary for Ireland.

Dr. Samuel Browne, R.N., has been elected Mayor of Belfast.

Anderson's University, Glasgow.—It has been decided that Dr. Clark (the late Dr. Penny's assistant) shall finish the winter course of lectures, which he has conducted from the commencement; and that the appointment of a Professor of Chemistry shall be postponed till the spring.

Royal College of Surgeons, Edinburgh.—At a special meeting of the College, held on December 4, Dr. James Pettigrew was elected Conservator of the Museum, in the room of Professor William R. Sanders, resigned.

At an influential meeting held at the Midland Institute, Birmingham, Mr. Kynnersley, stipendiary magistrate, in the chair, resolutions were passed in favour of the system of "boarding out" pauper children, and recommended its adoption in Birmingham.

A Hospital for foreign seamen has been opened at Sunderland, with Dr. Abrath as its first Physician.

It was determined at a special general court of the Sussex County Hospital, held last week, to erect a new museum and library, with pupils' room and appertaining apartments and offices.

Death of Mr. A. B. Boyd.—This gentleman died at New York on September 19, at the age of 42. Mr. Archibald Boardman Boyd, who was a native of Lisnaskea, County Fermanagh, after completing his Medical studies in Liverpool, embarked in trade, became master of a coaster in the Pacific, and from 1852 was joint proprietor and editor of the *Panama Star and Herald*.

Fatal Accident—The Dublin morning newspapers report that the wife of Dr. Lynn, of Sligo, was killed on last Saturday night by falling down a flight of stairs. The unfortunate lady's foot caught in the stair carpet, and she was precipitated to the bottom of the flight. When she was taken up, it was found that her neck was broken, and that death must have been instantaneous.

Longevity.—Dr. Casper, of Berlin, in his work on the duration of human life, has given the following conclusions, from which it will be seen that members of our Profession have the shortest existence:—Medium longevity of clergymen, 65; of merchants, 62; of clerks, 61; of farmers, 61; of military men, 59; of lawyers, 58; of artists, 57, and of Medical men, 56.

THE number of deaths from scarlatina during the last week is the highest recorded in London this year—in all 245. Thirty cases occurred in the West district, 48 in the North, 19 in the Central, 60 in the East, and 88 in the South districts. The disease would now seem to be creeping into Westminster, which has hitherto been remarkably free from infection.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.—At the meeting on Monday, December 6, Mr. J. R. Mummery, L.D.S., F.L.S., read the second and concluding portion of his paper on "The Relations which Dental Caries, as discovered amongst the Ancient Inhabitants of Britain and amongst existing Aboriginal Races, may be supposed to hold to their Food and Social Condition."

TYPHOID fever, in a very virulent form, having been for some time prevalent at Spinkhill, near Eckington, to the great alarm of the inhabitants, several of them sent a memorial to the Privy Council, who thereupon directed Dr. Thorne to make an inspection of the locality. The cause of the disease was soon discovered, the soil being saturated with animal and human filth to an extent rarely if ever seen, and all the wells polluted with drainings from ashpits, urinals, pigstyes, etc., so that there was literally no water in the place fit for use.

AUSTRALIAN NEWS.—At a very large meeting of the friends of the Honourable William Lodewyk Crowther, M.L.C., M.R.C.S. Eng., etc., held at the Alliance Rooms, Hobart Town, on September 27, an address was presented to him, together with a purse of 240 sovereigns, as a token of admiration of his public and private conduct. Mr. Crowther, who has been a valuable contributor to the Museum of the College of Surgeons, was recently presented with the Honorary Gold Medal by the Council of that institution. — The exploration of the caves at Wellington, under the direction of Dr. A. M. Thomson and Mr. Krefft, is making good progress, and many remains of extinct animals, some of which are new to science, have been discovered. A trial shaft has been put down in the centre of the breccia cave to the depth of fifteen feet, and bones are still found.

CAUTION TO DISPENSARY MEDICAL OFFICERS.—At a meeting of the Kingstown (Co. Dublin) Dispensary Committee held on Tuesday last the Medical officers were reprimanded for "having given evidence in open court of the relief afforded to poor persons, and for having permitted the Medical registry to be inspected by unauthorised persons." The information was given in connexion with the Parliamentary revision of the borough, and appears to have been volunteered. A letter from the Poor-law Commissioners to the Medical officers was read, in which the following passage occurs:—"You had no right whatever to give information acquired by you in your official capacity to persons unconnected with the dispensary committee or the board of guardians or unauthorised by them, and who were avowedly seeking that information for party purposes."

FRIENDLY SOCIETIES AND THE PROFESSION.—Deputies representing about 5000 members of friendly societies met last week at Preston to consider the position of those bodies with their Medical attendants. The meeting had its origin in a circular issued by the various Medical officers of the clubs declaring that they would not renew their contracts unless the yearly payment per member was increased, and mileage paid for. Now, the annual payment of a member was 2s., and this included attendance and medicine. The doctors insisted that the minimum should be 3s. To this the clubs demurred. The strongest point in their opposition to the increase was that a great number of them belonged to two, three, or four clubs, and paid 2s. to each for the doctor. After a good deal of discussion, and some abuse of the Faculty, a committee was appointed "to get all the information they could as to the working of a Medical institution in view of any members that might be got to join together—two thousand, five thousand, or ten thousand—and that they be also instructed to get up a plan as to what will be necessary and requisite for such an institution: the expense of doctors, hall, and drugs; and that they have power to summon another meeting when they have completed their investigation." This motion was seconded, and carried unanimously. The nomination of the committee was the only other business transacted. The plan suggested by one speaker was that they should form "a Medical Union," that a Medical hall should be established, with a properly qualified staff to attend to the members of these societies, and the whole to be under the control of a president, other officers, and a committee. It requires no foresight to predict the failure of such a scheme. The Preston societies will act with more wisdom by doing justice to their present Medical attendants, and agreeing to their most reasonable demands.

THE LINCOLN COUNTY HOSPITAL.—The celebration of the centenary of this excellent institution took place on Thursday se'nnight. After a sermon by the Bishop in the Cathedral, the dinner was held in the County Assembly Rooms, and was numerously and brilliantly attended. Lord Brownlow, the Lord Lieutenant, presided. After the usual loyal toasts, subscriptions were announced to the amount of nearly £3000.

ROYAL INSTITUTION OF GREAT BRITAIN.—At the general monthly meeting, on Monday, December 6, 1869, George Busk, Esq., F.R.S., in the chair, George Henderson Gibb, Esq., William Harbottle, Esq., John Henderson, Esq., Henry Musgrave Musgrave, Esq., were elected Members of the Royal Institution. The following lecture arrangements for the ensuing season were announced:—Professor Tyndall, LL.D., F.R.S.: Six lectures (adapted to a juvenile auditory), on Light; on December 28 and 30, 1869; January 1, 4, 6, and 8, 1870. *Before Easter*, 1870.—Professor Humphry, M.D., F.R.S.: Six lectures, on the Architecture of the Human Body; on Tuesdays, January 18 to February 22. Professor Odling, F.R.S.: Twelve lectures, on the Chemistry of Vegetable Products; on Thursdays, January 20 to April 7. Robert Scott Esq., M.A., Director of the Meteorological Office: Four lectures, on Meteorology; on Saturdays, January 22 to February 12. Dr. Masters, F.L.S.: Two lectures, on Plant Life as contrasted with that of Animals; on Tuesdays, March 1 and 8. Professor Rolleston, M.D., F.R.S.: Four lectures, Deductions from the Comparative Anatomy of the Nervous System; on Tuesdays, March 15 to April 5. Professor Max Müller, M.A., LL.D.: Four lectures, an Introduction to the Science of Religion; on Saturdays, February 19 to March 12. Joseph Norman Lockyer, Esq., F.R.S.: Four lectures, on the Sun; on Saturdays, March 19 to April 9. *After Easter.*—Professor Blackie: Four lectures, on the Principles of Moral and Political Philosophy; on Tuesdays, April 26 to May 17. Professor Tyndall, LL.D., F.R.S.: Seven lectures, on Physics; on Thursdays, April 28 to June 9. Professor Robert Grant, LL.D., F.R.S.: Seven lectures, on Astronomy; on Saturdays, April 30 to June 11. Professor Seeley: Three lectures, on History; on Tuesdays, May 24, 31, and June 7.

COMPOSITION AND QUALITY OF THE METROPOLITAN WATERS IN NOVEMBER, 1869.—The following are the returns of the Metropolitan Association of Medical Officers of Health:—

Names of Water Companies.	Total Solid Matter per Gallon.	Oxygen required by Organic Matter, &c.	Nitrogen.		Hardness.	
			As Nitrates &c.	As Ammonia.	Before Boiling.	After Boiling.
Thames Water Companies.	Grains.	Grains.	Grains.	Grains.	Degs.	Degs.
Grand Junction	19·19	0·036	0·051	0·004	14·6	3·4
West Middlesex	18·04	0·057	0·049	0·000	14·0	3·3
Southwark & Vauxhall	18·83	0·031	0·050	0·000	14·3	3·4
Chelsea	18·93	0·036	0·091	0·001	14·4	3·4
Lambeth	18·97	0·032	0·065	0·000	14·5	3·5
Other Companies.						
Kent	27·47	0·027	0·069	0·000	20·8	5·6
New River	18·47	0·021	0·056	0·000	14·0	3·6
East London	18·96	0·042	0·081	0·001	14·5	3·7

The average quantity of water supplied daily to the metropolis in the preceding month was, according to the returns of the Water Companies to the Medical Officers of Health, 103,363,482 gallons, and the number of houses supplied was 469,594. This is at the rate of 32·6 gallons per head of the population daily. The daily supply in Paris, according to the last official returns, was 30·8 gallons per head of the population, and this includes the water to the public fountains and to the ornamental waters in the Bois de Boulogne and Bois de Vincennes.

Note.—The amount of oxygen required to oxidise the organic matter, nitrites, etc., is determined by a standard solution of permanganate of potash acting for three hours; and in the case of the metropolitan waters the quantity of organic matter is about eight times the amount of oxygen required by it.

MEDICAL REFORM UNION.—A meeting of this Association was held on Saturday last at the Council-room of the Midland Institute, Birmingham. Gentlemen from various towns and country districts were present. Mr. S. Gamgee, at the request of the chairman, Dr. Bell Fletcher, read a paper in which he referred to what had occurred at a late meeting of the Union in reference to the exclusion of a gentleman who had joined the Association from any executive office. Mr. Gamgee said his speech on the occasion referred to had reference simply to the incorporation of the Union, and he could not think it desirable to exclude any legally qualified member of the Profession who joins the great body of memorialists in petitioning Parliament for reforms now deemed essentially necessary by the great body of the Profession. When the time arrived for organising an executive for the Union, a careful selection must

be made, and the election conducted on true representative principles. Mr. Gamgee then said the Union had the support of the leading Practitioners of the district, and overtures of co-operation had been officially made by the British Medical Association. There were symptoms amongst the colleges and corporations that the memorial of the "Union" was producing effects where they were most desirable. Mr. Gamgee then spoke of the importance of not entering at once into details, but to enunciate principles which were vital and essential. Details were necessary, but were susceptible of adaptation according to circumstances. It was now merely proposed to proceed with the organisation of the Union, and the chairman would be glad to receive the names of all those registered Practitioners who had not yet assented to the memorial. A great public meeting would after a time be held, of which due notice would be given. Some discussion took place respecting the raising of funds, which, however, lapsed, and it was arranged that the meeting should be adjourned to a day to be fixed by the president. A fact was mentioned by Mr. Manley which is not creditable to us. Six thousand circulars were sent out on the subject of their finances, with a stamped envelope for reply; four thousand of these stamped envelopes were not returned. This is too bad.

Scholarships and Exhibitions in Natural Science at Cambridge University.—The following is a list of the scholarships and exhibitions for proficiency in natural science which are likely to be offered at Cambridge during the ensuing year. This list is eminently valuable to intending members of the University, as presenting at once a comprehensive and concise account of the whole, free from the more precise and distributive detail necessarily entered into by the serial notices issued from time to time as vacancies occur.

Trinity College.—One of the value of about £80 per annum. The examination (in chemistry, physics, and physical geology, including meteorology, and the elements of mineralogy) will be held in Easter week, and will be open to all under graduates of Cambridge and Oxford. Further information may be obtained from the Rev. E. Blore, Tutor of Trinity.

St. John's College.—One of the value of £50 per annum. The examination (in chemistry, physics, and physiology, with geology, anatomy, and botany) will take place on April 29 and 30, and will be open to all persons who are not entered at the University, as well as to all who have entered and not completed one term of residence. In this College, moreover, natural science now is made one of the subjects of the regular College examination of its students at the end of the academical year, in May; and exhibitions and foundation scholarships will in consequence be awarded to students who show an amount of knowledge equivalent to that which in classics or mathematics usually gains an exhibition or scholarship in the College. In short, natural science is on the same footing as classics and mathematics, both as regards teaching and rewards.

Christ's College.—One to four, in value from £30 to £70, according to the number and merits of the candidates, tenable for three and a half years, and three years longer by those who reside during that period at the College. The examination will be in 1870, and will be open to the undergraduates of Christ's College, to non-collegiate undergraduates of Cambridge, to all undergraduates of Oxford, and any students who are not members of either University. The candidates may select their own subjects for examination. Besides these, there are three other exhibitions perfectly open, which are distributed annually among the most deserving students of the College.

Clare College.—One of the value of £50 per annum. The examination (in chemistry, chemical physics, comparative anatomy and physiology, and geology) will be on March 30, and will be open to students intending to begin residence in October. The candidates must show such acquaintance with classics and mathematics as will qualify them to pass the previous examination.

St. Peter's College.—One of the value of £60 per annum. The examination (in chemistry, botany, and comparative anatomy and physiology) will be in June, and will be open to all students who are not members of the University, or who have not commenced residence in the University.

Downing College.—One or more, according to the merits of the candidates, of the value of £40 per annum. The examination (in chemistry and comparative anatomy and physiology) will be in March, and will be open to all students not members of the University, as well as to all undergraduates in their first term.

Sidney College.—Two of the value of £40 per annum. The examination (in heat, electricity, chemistry, geology, physiology, and botany) will be in October, and be open to all students who may enter on the College boards before October 1.

Although several subjects for examination are in each instance given this is rather to afford the option of one or more to the candidates than to induce them to present a superficial notice of several; indeed, it is expressly stated by the authorities of some of the colleges that good clear knowledge of one or two subjects will be more esteemed than a general knowledge of several. Candidates, especially those who are not members of the University, will, in most instances, be required to show a fair knowledge of classics and mathematics, such, for example, as would enable them to pass their previous examination. There is no restriction on the ground of religious denomination in the case of these or any of the scholarships or exhibitions in the Colleges or the University. Further necessary information may be obtained on application to the tutors of the respective Colleges.

It may be added that Trinity College will give a Fellowship for natural science, once at least in three years, and that the authorities of most of the Colleges are understood to be willing to award Fellowships for merit in natural science equivalent to that for which they are in the habit of giving them for classics and mathematics.

Bazin's Liniment in Pruritus.—Lime water and glycerine, of each 30 parts; oil of sweet almonds, 60 parts. Especially recommended to relieve the pruritus ani so frequent in arthritis.—*Union Méd.*, Nov. 23.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Dr. B. Wills Richardson's paper on Poisoning by Tincture of Aconite has been received, and shall appear next week.

Dr. Sutton's communication on Venesection is in type, and shall appear next week.

We are glad to see that an attempt to introduce a gentleman practising homœopathy on the staff of the Southampton Dispensary has failed. Liberality is a very excellent thing when it is not extended to what is false, whether it be in religion, morals, or science. Homœopathy—as far as it is homœopathy, and not scientific Medicine under its name—is an exploded system of delusion, and no one should be more thoroughly aware of this than the gentleman who endeavoured to foist a homœopathic practitioner on the Medical staff of the Southampton Dispensary.

Sartorius.—Certainly you are quite entitled to call yourself Dr., and to sign yourself M.D. Foreign degrees may be registered if the Medical Council think it proper to do so.

Early History of Syphilis.

To the Editor of the Medical Times and Gazette.

Sir,—In furtherance of your suggestion of the search in municipal archives for the early traces of syphilis in England, I should recommend the town of Southampton as that in which the investigation should begin, for this city, if my memory serves me well, used to receive, by a special privilege once a year, a laden ship from Genoa, and it is not improbably through that path that syphilis entered England.

7, Westbourne-park, December 6. I am, &c. George Gaskoin.

Antiquity of Syphilis.

To the Editor of the Medical Times and Gazette.

Sir,—As I see a discussion is proceeding in your columns as to the origin and antiquity of syphilis, allow me to call attention to a very ancient document indeed as evidence on this point—viz., the 38th Psalm. In this David speaks of there being no soundness in his flesh nor rest in his bones because of his sin; of his wounds stinking and being corrupt because of his foolishness; of his loins being filled with a sore disease, and of his being feeble and sore broken; of his heart panting and his strength failing, and losing the sight of his eyes, while his friends stood aloof from his sore. In other psalms he speaks of his moisture being turned into the drought of summer, and he lays special stress on his pains affecting him specially in the night season. He also mentions that his enemies cast in his teeth that he is affected with a foul disease. Could there be for that age a more graphic account of an aggravated case of syphilitic cachexia with its manifestations in loss of health, palpitations of the heart, disturbed rest, osteocopic pains, foul and probably phagedænic ulcers over the surface of the body, and iritis or syphilitic glaucoma? I am, &c.

Fredk. R. Wilson, M.B., Staff Assistant-Surgeon.

Colchester, December 6.

*** All the arguments of our correspondent, and more, are to be found in the papers by Mr. Beckett on the Antiquity of Syphilis in the *Philosophical Transactions* of the last century. Unhappiness is metaphorically represented as bodily pain; but if this is to be taken as real disease, in what river, may we ask, was King David drowning when he wrote the 69th Psalm? *Vide* Bishop Lowth on "Hebrew Poetry."

A Pupil.—Yes.

Mr. T. Jones.—A knowledge of the Welsh language is necessary.

Vigilans.—The subject has not escaped our attention.

PUBLICATION OF THE SICK-ROOM SECRETS OF ILLUSTRIOUS PERSONAGES.

The New York *Tribune*, four weeks ago (October 11), published an "authoritative" statement "for the first time in America," that the French Emperor was afflicted with a painful disease of the bladder, and, on one occasion, in order to get relief from the pain it caused him, had, without revealing his condition even to his Medical advisers, secretly burnt his own back along the spine with a lighted candle. An "authoritative" statement on such a subject could, of course, hardly come from anybody but the Emperor himself, with whom the *Tribune's* correspondent is doubtless intimate, and we were doing our very best to believe it when our contemporary announced (November 5) that the story had been "directly confirmed" by another story which had just appeared "in a Philadelphia paper," which had got it from a friend of Mr. George Wilkes, who got it in a private letter from Mr. Wilkes from Paris, who got it from a conversation with Dr. Brown-Séquard, who saw it in an article "in a Paris paper," supposed to have been written by a Physician, "an able but dissolute man," formerly employed by the Emperor, but dismissed for his bad habits, and now engaged in earning an honest penny by publishing his Professional secrets. An "authoritative" statement which can be "directly confirmed" in this way is certainly a very queer affair; but still, after reading this, nobody but a Paynim or atheist could any longer doubt, and we frankly accept the story about "the fungus of the bladder." But, then, what about the cauterisation with the lighted candle? What does the dissolute Physician say on this point? We long to believe this, too. Give us the bad man's exact words.—*The New York Nation.*

Ego can recover charges, both for medicine and attendance.

A Patient, C. (Reform Club), Alpha, and Others.—Undoubtedly there are objections to the publication in the newspapers of minute details of the illness of *private* patients. We cannot, however, think that Mr. Seymour Haden is open to the strong remonstrance which our correspondent "A Patient" has written for his publication of the history of the Archbishop's malady. "A violation of the sanctity of the sick chamber" cannot properly be applied to the transaction. It is true the public do not care to know all the symptoms under which an "illustrious" patient labours; they are content to be made acquainted with the simple fact of "better" or "worse;" but our correspondents may rest satisfied that the object of the publication of "sensational" articles is obtained when they are quoted. Announcements such as that in question are not always advisable. They may give pain in quarters least expected. We know that the friends of the late Lord Palmerston prohibited, at the eleventh hour, the publication of a narrative of the Medical aspects of his last illness, as calculated to wound the feelings of relations. Mr. Haden is a gentleman who has a high sense of honour and Professional etiquette, and must be acquitted of all mean or unworthy motives in communicating to a contemporary the article to which our correspondents have drawn our attention.

UTERINE HÆMORRHAGE.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Allow me to suggest another method of suppressing uterine hæmorrhage after delivery by introducing into the uterus a bladder, ball of india-rubber or oil silk, with a double tube attached, through which, by attaching a syringe to one of the tubes, the ball can be partly or completely distended, by keeping up a constant injecting current of cold water through the ball, which is allowed to escape by the other tube, through a stop-cock, as rapidly as it becomes warm. By cooling the water with a frigorific mixture, a great degree of dry cold can be applied to the interior of the uterus, which has advantage over the usual plan of applying cold, especially in preventing the contact of moisture, in being able to apply a constant degree of cold, and also pressure to excite the uterus to contract or to press on the bleeding vessels, according to the force of the injecting current. The construction of such an instrument is easy, so long as the principles I explain are understood. I also suggest in most cases, when this instrument is used, the application of warmth to the surface of the body. By injecting hot water through the ball, dry heat can be applied to the uterus in some cases of hæmorrhage and disease. I am, &c. W. C.

America.—Files of American papers just received contain letters and leading articles respecting the late outbreak of the students of the Philadelphia Hospital against the admission of women to the lectures of that institution.

Lincoln.—The workhouse of Lincoln contains about 250 inmates. Diarrhœa lately prevailed there; the well of the institution was closed for drinking purposes, and the diarrhœa ceased. The workhouse is now drained into a ditch on the West-common, where the sewage remains polluting the air and endangering the health of hundreds of children who, in fine weather, play about that spot. Mr. W. J. Mantle, of Lincoln, in an able letter in the last number of the *Lincoln Journal*, calls upon the guardians to take effective measures, not only to dispose of the sewage of the workhouse, but to drain the city completely and give it a proper supply of water.

CHLOROFORM INHALATION.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—A letter in the *Standard* of Monday last, and the "death from chloroform" reported in your impression of the 27th ultimo, show that both the public and the Profession are uneasy concerning this invaluable and indispensable agent, and suggest to me the propriety of making some remarks on it, in the hope of eliciting the opinions of those whose experience and opportunities exceed mine.

The correspondent of the *Standard* proposed to lessen the dangers of chloroform by making its administration a "distinct branch of the Profession"—in other words, that a body of men should be trained in the use of it, "who would never take their eyes from the countenance nor their fingers from the pulse of the patient." Now, while disapproving of a remedy in the direction of increasing the distinctions and specialities already too numerous in our ranks, yet his remedy is to me suggestive that indications of danger from this drug are too much sought for from pulse and countenance, and too little from respiration, believing, as I do, that danger more frequently is to be apprehended primarily from impeded respiration than from failure of the heart's action, as shown by failing pulse.

I believe that a frequent cause of death under chloroform arises from mechanical closure of the windpipe by gravitation of the tongue into the back of the mouth, and when this is the case restoratives in the form of electricity, etc., can be of no avail. I do not think that fatal results arise from heart disease so often as is generally supposed, and I believe that heart-disease of even a decided kind is compatible with the safe use of chloroform.

I venture to add, also, that a frequent source of danger is want of confidence in the drug, leading to its being given in repeated small doses. On the other hand, confidence in it leads to its being given at the outset in a large dose, repeating it if necessary, and so to reach the ultimate condition of insensibility with the least previous amount of excitement possible. I should consider it safer to begin with a dose of not less than 3j. for an adult, repeating it if necessary, than to begin with one of half the quantity with the certainty of having to go on repeating it.

If you deem my remarks likely to be useful, I shall feel much obliged by your inserting them in your valuable journal.

December 2. I am, &c. A GENERAL PRACTITIONER.

Quærens.—The Act of 1858 gives the right to be registered (and therefore of practice when registered) to all Doctors, Bachelors, or Licentiates of Medicine, or Masters in Surgery of any university in the United Kingdom. Any M.B. of the University of London, therefore, after registration, is a legally qualified Medical Practitioner. The question of what title should be assumed by or given to a Bachelor of Medicine was not touched in the article referred to. Bachelors of Medicine of Oxford and Cambridge have generally been styled *by courtesy* "Doctors." The University of London, not willing that its graduates should rest at the Bachelor's degree, discountenances the extension of the same courtesy to them. The circumstance, however, is merely adventitious.

Registry of Sickness.—Mr. Liddle says: "In a letter addressed to the Editor of the *Journal of Public Health*, and published in the number for July, 1848, I drew public attention to this important subject, and urged the desirability of furnishing the Registrar-General with a weekly return of the cases of sickness occurring in the metropolis, so that he might be able to publish it with the weekly returns of death. Such a publication would acquaint the public authorities and their officers with the actual state of the health of the people. If such returns had been published, the numerous cases of relapsing fever, a disease fatal in the proportion only of about 5 per cent. of persons attacked, would have called, at an early period, the attention of the public to the subject."

HAMBURG SHERRY.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—A short time back an article appeared in your valuable paper entitled "Hambro' Sherry and the shilling duty," which was penned in opposition to the lowering of the import duties on wine. Will you allow me space for a few observations on the subject?

The writer of the article referred to treats the wine-duty question on the sole merits of allowing Hamburg sherries to be imported at the proposed duty of one shilling per gallon, and omits to allow that it would be a great boon to our population if good wholesome wines, such as Port, Sherry, Marsala, Teneriffe, Tarragona, and other strong wines, were admitted at a lesser rate of duty. Whilst admitting that the ardent spirit sold in such immense quantities in the form of sweetened gin or cordial is the curse of the lower grades of society, he infers that if Hamburg sherries of 40 degrees strength were admitted at one shilling duty the evil would be increased by our poorer classes flying to the much nastier and unwholesome Hamburg wines, because the alcoholic contents vended under that form would attract their attention as being cheaper.

I much doubt this result, even were the figures quite correct as given. The writer was probably not aware that Hamburg factitious wines rarely contain more than 33 to 34 degrees proof spirit (equal to about 19 per cent. of pure alcohol), and that even now, if showing any superfluous strength when tasted and tested at the laboratory of the custom-house, they are condemned for re-exportation, or charged with the spirit duty as sweetened compounds.

I would cordially agree with any suggestion conducive to keeping us clear of such abominations as factitious wines, and, although an advocate for the one shilling duty on honest wines up to a strength of 36 or 38 degrees, I wish we could guard against the Hamburg trash. That this can be done by proper legislation there can be no doubt about—for instance, nothing is easier than to determine the presence of tartaric acid in wines; all real wines contain it. Supposing it were resolved to admit only such wines at the shilling duty as should contain, as a minimum, ½ per cent. of tartaric acid, we should effectually exclude Hamburg sherry, because they do not contain, and cannot be made to contain, this essential vinous property, unless made from wine, when they would be less objectionable.

I maintain, in contradiction to Messrs. Gilbey's assertion, that the present Hamburg wines have not cheap German wines as a basis, but are made with distilled water; hence Dr. Dupré does not find any tartaric acid in his analysis, whilst in cheap hock (German wine) he detects 12½ per cent.

All fetters on trade impede its natural development (which means that they prevent Peter from buying cheaply from Paul what the latter produces). I am therefore in favour of the lowering of duty on wine, and I am happy to say that a great majority of Englishmen hold the same opinion, more particularly because it will be a step towards banishing that horrible enemy—gin; but when it is conclusively proved that an article of commerce introduced under an innocent name is in reality poison, such as Hamburg sherry must be to a sick person, we should mulct it so as to annihilate it.

Hamburg Sherries can be dealt with by legislation much more readily than home adulterations, because every gallon has to be cleared at the Custom-house.

Before concluding, allow me to call the attention of your readers to the fact that if alcohol of pure quality is added during the vintage to the musts in moderate proportions, as is done in the South of Spain, the Douro, at Madeira, Marsala, &c., before the musts pass through their secondary

fermentation into wine, this alcohol chemically combines with the wines, becomes digestible, and consequently less intoxicating than if taken in the distilled or diluted form.

I am, &c.

London, December 6. F.

The Medical Act.—We do not expect much support from the general press in our struggle for the attainment of an amendment of this measure. *Aris's Birmingham Gazette*, however, in its last issue has a sensible leading article on the subject, and concludes with these words—"In all probability the amended Medical Act will only be attained after a severe struggle, and the memorialists, so ably represented by Dr. Bell Fletcher, will do well to dismiss personal considerations, and close their ranks in unselfish earnestness. We look forward with no ordinary interest to the meeting of the Medical Profession to be held at the Midland Institute this afternoon, and a great deal depends on the public spirit and moderation of the speakers."

COMMUNICATIONS have been received from—

Dr. C. C. Ritchie; Mr. R. S. Thornley; Dr. J. K. Browne; Dr. Imray; Dr. H. Letheby; A General Practitioner; Dr. Russell; Mr. John Stroud; Mr. F. Greatheed; An Old Subscriber; Dr. Fayrer; Mr. Boverton Redwood; Mr. J. L. Paterson; Mr. T. Stokes; Medicus; Dr. Wiblin; Mr. F. R. Wilson; Mr. H. Lorenz Feurheerd; Sartorius; Dr. F. R. Fairbank; Dr. Henry Bennet; Mr. J. F. Collingwood; Mr. J. B. Curgenven; Dr. J. N. Vinen; Dr. Crisp; Dr. G. J. Sealy; Dr. Loney; Mr. J. Williams; Dr. H. P. Ridton; Mr. G. Gaskoin; Mr. Erasmus Wilson; Mr. Weightman; Mr. Spencer Wells; Mr. B. Newbatt; Dr. Lawson; Mr. T. M. Stone; Mr. Arnott; Mr. J. Chatto; Dr. E. Oldfield.

BOOKS RECEIVED—

The Working Man's School (a paper read at the Manchester Educational Congress)—Practitioner, No. 18—Watson's Essay on Vaccination: Its actual Value and attendant Dangers—Monthly Microscopical Journal, No. 12—Finlayson on the Temperature of Children in Phthisis and Tuberculosis—Die Addison'sche Krankheit, von Dr. Averbeck—Australian Medical Gazette—American Journal of Insanity, No. 26—Transactions of the Odontological Society—Report of the Sanitary Commissioner with the Government of India—American Journal of the Medical Sciences, No. 116—An Historical Review of the Nature and Results of Vaccination—Murray on Small-pox, Chicken-pox, and Vaccination—Gill's Chemistry for Schools—Acton on Prostitution, 2nd edition—California Medical Gazette, November—Gross's Case of Poisoning by Three Grains of Atropia—Smith's Physicians' and Surgeons' Visiting List and Pocket Diary, 1870.

NEWSPAPERS RECEIVED—

Nature—New York Medical Gazette—Animal World, No. 3—The Preston Guardian—The Philadelphia Press—The Philadelphia Daily Evening Bulletin—Birmingham Daily Gazette—New York Medical Record—Leicester Guardian—Medical Press and Circular—Sunderland and Durham County Herald.

VITAL STATISTICS OF LONDON.

Week ending Saturday, December 4, 1869.

BIRTHS.

Births of Boys, 1125; Girls, 1016; Total, 2141.
Average of 10 corresponding weeks, 1859-68, 1941·7.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	850	855	1705
Average of the ten years 1858-67	742·8	736·2	1479·0
Average corrected to increased population	...	...	1627
Deaths of people above 90	...	...	...

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-cough.	Fever.	Diarrhœa.	Cholera.
West	463388	...	5	30	1	9	4	6	...
North	618210	2	6	48	...	17	19	3	...
Central	378058	...	2	19	2	6	5	1	...
East	571158	6	4	60	1	14	12	2	...
South	773175	2	23	88	...	17	9	7	...
Total	2803989	10	40	245	4	63	49	19	...

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·719 in.
Mean temperature	34·2
Highest point of thermometer	46·6
Lowest point of thermometer	24·0
Mean dew-point temperature	29·6
General direction of wind	Variable.
Whole amount of rain in the week	0·80

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, December 4, 1869, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the year 1869.	Persons to an Acre. (1869.)	Births Registered during the week ending Dec. 4.	Deaths. Corrected Average Weekly Number.	Deaths. Registered during the week ending Dec. 4.	Temperatur of Air (Fahr Highest during the Week.	Temperatur of Air (Fahr Lowest during the Week.	Temperatur of Air (Fahr Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3170754	40·7	2141	1462	1705	46·6	24·0	34·2	0·80	81
Bristol (City)	169423	36·1	112	76	*101	48·5	18·9	34·6	1·59	161
Birmingham (Boro')	360846	46·1	214	175	193	47·2	25·1	34·2	1·14	115
Liverpool (Boro')	509052	99·7	332	295	268	46·0	23·4	33·8	0·35	35
Manchester (City)	370892	82·7	244	210	*207	46·3	21·0	33·0	0·39	39
Salford (Borough)	119350	23·1	80	60	72	46·5	20·4	34·1	0·38	38
Sheffield (Borough)	239752	10·5	159	126	154	45·5	23·5	34·5	0·61	62
Bradford (Borough)	138522	21·0	99	71	71	44·6	24·0	32·3	0·17	17
Leeds (Borough)	253110	11·7	230	129	140	45·0	24·0	34·6	0 61	62
Hull (Borough)	126682	35·6	74	59	73	45·0	13·0	31·9	0·79	80
Nwcstl-on-Tyne, do.	130503	24·5	70	69	65	...	...	...	...	...
Edinburgh (City)	178002	40·2	139	86	102	41·7	21·0	31·7	0·10	10
Glasgow (City)	458937	90·6	327	268	317	39·8	19·7	30·7	0·04	4
Dublin (City, etc.†)	320762	32·9	146	158	162	44·8	25·0	35·3	1·00	101
Total of 14 large Towns	6546587	35·5	4367	3244	3630	48·5	13·0	33·4	0·61	62
Paris (City)	1889842	...	...	...	846	...	...	...	...	...
					Week ending Nov. 27.	Week ending Nov. 27.				
Vienna (City)	605200	...	...	...	319	...	...	39·6	...	...

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·719 in. The barometrical reading increased from 29·22 in. on Tuesday, Nov. 30, to 30·08 in. by the end of the week.

The general direction of the wind was variable.

Note.—The population of Cities and Boroughs in 1869 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous.

* The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

† Inclusive of some suburbs.

APPOINTMENTS FOR THE WEEK.

December 11. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m. King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 1½ p.m.

13. Monday.

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 1½ p.m.; St. Peter's Hospital for Stone, 2½ p.m.

Medical Society of London, 8 p.m. Mr. R. W. Dunn, "On a Case of Poisoning by Aconite." Mr. Thomas Bryant, "On Disease of the Knee-joint."

14. Tuesday.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.

Anthropological Society, 8 p.m. C. Staniland Wake, F.A.S.L., "The Race Affinities of the Peoples of Madagascar."

Royal Medical and Chirurgical Society, 8½ p.m. Mr. George Pollock, "On Amputation at the Knee-joint."

15. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.

Society of Arts, 8 p.m. Meeting.

16. Thursday.

Operations at St. George's, 1 p.m. Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

Harveian Society, 8 p.m. Mr. Curgenven, "On Quinsy."

17. Friday.

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

ORIGINAL LECTURES.

LECTURES ON EXPERIMENTAL AND PRACTICAL MEDICINE.

By BENJAMIN W. RICHARDSON, M.D., F.R.S.

PHYSIOLOGICAL RESEARCH ON ALCOHOLS.(a)

GENTLEMEN,—I ask your attention in the present lecture to some experimental demonstrations bearing upon the physiological action of the alcohols. No subject could possibly be of deeper interest to us as Practitioners of Medicine, for one at least of the series of chemical bodies with which we are about to deal, common or ethylic alcohol, is brought daily under our consideration as a remedial agent, and the questions we are about to put are—What is the value of this agent, what its immediate action on the economy? These questions are essentially preliminary to practical application, and I shall treat them in that light—treat them purely and simply for the moment as though we had no practical ideas at all relative to application.

At once let me direct your minds to the precise title of this lecture. It is not upon alcohol, but upon "alcohols." The Profession up to the present time has been content to study alcohol as though it were an isolated compound, and, indeed, until our days the chemists studied it after a similar mode. But the chemists were first to move onwards, and to discover and teach the facts that there are several bodies in nature all of which are alcohols, and that the alcohol we use in daily life, in wine, spirits, beer, is but one representative of a large and active family of chemical bodies. I believe I am the first physiologist who has followed the chemists by endeavouring to discover the difference of action of the different members of this family; and as to-day I am still following the same course, the term the "alcohols" is chosen as the most significant heading to the present effort. I have in no degree, it is true, come up with the chemists in their work, but I have kept in the track they have laid out, and for a few stages have done the best, in my way, to make progress.

PHYSICAL NOTES.

Common alcohol, or, in more correct language, ethylic alcohol, is a compound of the elements carbon, hydrogen, and oxygen. It is composed of carbon, hydrogen, and oxygen —thus C_2H_6O. It is made, as is well known, by the fermentation of sugar and after-distillation. Its physical properties are given in the second line of the following table. It is grouped in the table in its natural place with five other alcohols which I have studied in relation to their physiological properties.

ALCOHOLS.

Name.	Chemical composition.	Vapour density (H_2=1).	Sp. grav. (water 100).	Boiling-point. Centi-grade.	Fahren-heit.
Methylic alcohol .	CH_4O	16	·814	60°	140°
Ethylic „ .	C_2H_6O	23	·792	78°	172°
Propylic „ .	C_3H_8O	30	—	96°	205°
Butylic „ .	$C_4H_{10}O$	37	·803	110°	230°
Amylic „ .	$C_5H_{12}O$	44	·811	132°	270°
Caproylic „ .	$C_6H_{14}O$	51	·821	150°	302°

The construction of ethylic alcohol in a chemical point of view—in respect, that is to say, to the arrangement of its elements—is water (H_2O), in which an organic radical called ethyle, composed of carbon and hydrogen (C_2H_5), replaces one atom of the hydrogen of the water. Thus:—

$$\left.\begin{matrix}H\\H\end{matrix}\right\}O \textit{ water, } \left.\begin{matrix}C_2H_5\\H\end{matrix}\right\}O \textit{ ethylic alcohol.}$$

When ethylic alcohol is oxidised, it yields different compounds, according to the character of the oxidation. The result may be a simple oxidation of two atoms of the hydrogen, by which water is produced, and there is left with the water a fluid having the composition of C_2H_4O, called aldehyde; or, the oxidation carried further, an equivalent of oxygen is added with the result of the formation of a compound $C_2H_4O_2$, acetic acid. Lastly, if the oxidation be intense, as it is in this lamp, where we are burning alcohol, the carbon, which in preceding changes remains untouched, is directly oxidised, as well as the hydrogen, and the result is the production of dioxide of carbon or carbonic acid CO_2, and water H_2O.

Ethylic alcohol, studied in this simple manner, is, then, to us a type of other bodies, five of which are down in our table. In the destructive distillation of wood there passes over an alcohol which is commonly called wood spirit or naphtha. We have a very pure specimen of it now going round the room. This alcohol differs from common alcohol in that it is a compound in which an organic radical called methyle, CH_3, replaces one atom of hydrogen of water. Thus:—

$$\left.\begin{matrix}H\\H\end{matrix}\right\}O \textit{, water, } \left.\begin{matrix}CH_3\\H\end{matrix}\right\}O \textit{, methylic alcohol.}$$

This alcohol is called methylic alcohol; its composition is, as seen above, CH_4O, and its physical properties are placed in the table. When this alcohol is slowly oxidised, it yields, as we now know from the recent discovery of the illustrious chemist Hofmann, an aldehyde called formaldehyde. In the production of this compound two atoms of the hydrogen of the methylic alcohol are oxidised, forming one equivalent of water, H_2O, and formaldehyde, CH_2O, a gas. If the oxidation be carried further still, an equivalent of oxygen is added, and the result is the formation of an acid called formic, CH_2O_2, which is the analogue of acetic acid.

When methylic alcohol is oxidised rapidly, as in this burning lamp, which is trimmed with it, the carbon and oxygen are both oxidised, and the products are dioxide of carbon or carbonic acid CO_2, and water H_2O. This alcohol, please observe, has in it only one equivalent of carbon.

In the fermentation of potato flour, and, in less quantity, in all alcoholic fermentations, we obtain a crude disagreeably smelling spirit, which is called fusel oil. Dr. Versmann has been good enough to bring us a specimen of this, and you will see that indeed it does at first sight look like an oil. It is of the colour of linseed oil, and the odour is intolerable. By successive distillations, however, at different degrees of temperature, we can succeed in distilling over from this unpromising liquor several varieties of alcohols. I will pass round four of these which have been distilled by Dr. Versmann. They are the four alcohols named in the table after common or ethylic alcohol, and they are called respectively propylic, butylic, amylic, and caproylic. In all of them we have the same plan of construction as in common alcohol—that is to say, we have one atom of the hydrogen of water H_2O replaced by an organic radical. In propylic alcohol this radical is propyle (C_3H_7); in butylic alcohol, butyle (C_4H_9); in amylic alcohol, amyle (C_5H_{11}); and in caproylic alcohol, caproyle (C_6H_{13}). The change in each case is the same as in the case of ethylic alcohol. By oxidation of these alcohols we obtain in a similar manner corresponding aldehydes and acids. Thus propylic alcohol gives propionaldehyde C_3H_6O and propionic acid $C_3H_6O_2$. Butylic alcohol gives butylaldehyde C_4H_8O and butylic acid $C_4H_8O_2$. Amylic alcohol gives amylaldehyde or commonly called valeraldehyde $C_5H_{10}O$ and valerianic acid $C_5H_{10}O_2$. Caproylic should also give an aldehyde $C_6H_{12}O$, and an acid, caproic, $C_6H_{12}O_2$; but these have not yet been directly obtained from the alcohols.

When the heavier alcohols are burned as we have them burning in these lamps, which are trimmed with them separately, we get, as from common alcohol, oxidation of carbon and hydrogen, and as products of such oxidation the dioxide of carbon or carbonic acid (CO_2) and water (H_2O). But there is a difference in the process of burning, for now the oxygen in the common air is not sufficient to consume all the carbon, and the result is an escape or separation of free carbon, which becomes deposited as soot. See this in experiment. Before me are six lamps trimmed with the six alcohols, and all yielding flame. I commence to test the flame for free carbon by holding over each a cold white porcelain plate. Methylic alcohol and ethylic yield no deposit of soot on the plate, their carbon is all oxidised; propylic alcohol gives a faint deposit, butylic more, amylic more still, while the caproylic, so soon as I bring the plate near to its flame, yields a deposit which gives a layer of carbon.

Bearing in mind this increase of carbon in each of the alcohols from the methylic, please to carry the eye to the table in which the physical characteristics of each are explained; you will then see that, in proportion as the carbon and hydrogen increase, there is produced in each case a fluid having (with one apparent exception) a proportionate heavier vapour density, a heavier fluid density, and a higher boiling point. These differences, as I shall prove, modify physiological action.

One more peculiarity requires to be noticed, and this physiologically is of great moment. Methylic and ethylic alcohols are soluble in water in all proportions; but when we move to the higher alcohols this solubility is lessened. Butylic alcohol, for example, is soluble in water in the proportion of one part to one and a half, while amylic and caproylic are insoluble.

(a) Delivered on Tuesday, December 7.

PHYSIOLOGICAL ACTION.

In considering physiological action, I shall commence with common or ethylic alcohol, and I shall dwell on modes of administration; stages or degrees and characters of symptoms produced by alcohols; effects on animal temperature; mode of death, and post-mortem results in cases where death is a direct result. Changes of structure from the slow action of alcohol I must reserve for a future lecture.

Ethylic Alcohol.

Administration.—Ethylic alcohol can be administered in different ways—by the mouth, by subcutaneous injection, by inhalation of vapour, and by inhalation in the form of spray; for the latter or spray inhalation, I employ the Seigele's spray producer, made by Krohne and Sesemann, in which a current of steam is driven by the heat of a spirit lamp from a small boiler, and the alcohol drawn up the capillary tube from its reservoir is broken up into very fine spray. This little instrument is invaluable in all cases where inhalation of spray is required. Rapidity of action is most quickly secured by the method of subcutaneous injection, but this sometimes causes local irritation, and on that account is so far objectionable. To meet the objection it is an advantage to dilute absolute alcohol with an equal quantity of water. Intoxication by inhalation of the vapour is a very slow process, even at a temperature of 80° Fahr.

Stages of Intoxication.—In the progress towards complete intoxication under ethylic alcohol, however administered, there are, as under chloroform, four distinct degrees or stages. The first is a stage of simple exhilaration; the second of excitement; the third of rambling insensiblity, and the fourth of entire unconsciousness, with muscular prostration. The duration of these stages can be modified in the most remarkable degree by the mode of administration, but whether they are developed and recovered from in an hour or a day, they are always present except in cases where the quantity of alcohol administered is in such excess that life is endangered or destroyed instantly.

Temperature.—In the first or exhilarative stage, the temperature undergoes a slight increase—in birds a degree Fahrenheit, in rabbits half a degree. With the stage of excitement, during which there is vomiting in birds, or attempts at vomiting, the temperature comes back to its natural standard, in the second stage it soon begins to fall, and during the third into the fourth stage the decline continues. In the third degree it reaches its first minimum, and in birds comes down from five and a half to six degrees; in rabbits from two and a half to three degrees. In this condition the animal temperature often remains steady until there are signs of recovery—viz., conscious or semi-conscious movements, upon which there is a further fall of temperature of two or even three degrees. In this course of recovery I have seen, for instance, the temperature of a pigeon which had a natural standard of 110°, reduced to 102°. Usually with this depression of force there is desire for sleep, and with perfect rest in a warm air there is return of animal heat; but the return is very slow, the space of time required to bring back the natural heat being from three to four times longer than that which was required to reduce to the minimum.

In these fluctuations of temperature the ordinary influences of the external air play an important part as regards duration of fluctuations, and, to some extent, as regards extremes of fluctuation.

The introduction of alcohol into the body in frequent and small quantities, so as not to produce any of the stages of true intoxication, is attended with a reduction of temperature limited to one and a half degrees in small mammalia. The effect is definite as the result of the administration, and occurs, under varying circumstances, before food, after food, and in atmospheres of different warmths. It is most defined when the alcohol is administered by the hypodermic method.

When the alcoholic sleep from ethyl alcohol is pushed to the fullest extent, a very long time elapses, after perfect unconsciousness is developed, before the respiratory, circulatory, and even some of the voluntary muscles cease to act. The movement of the voluntary muscles is not, however, an act of consciousness; it is not reflex, and it cannot be excited by the touch. It is usually an automatic movement, and will continue in the limbs for a long time. At last nothing remains to give evidence of the continuance of life except the motion of the heart and diaphragm, the persistency of the action of which is amongst the most curious facts in physiology. The final act rests with the heart: the heart continues to contract when the breathing has ceased, and is found contracting on the right side in both auricles and ventricles, on opening the body, when all the outward indications of motion are over.

I notice particularly that prolonged tremors do not seem to be produced by the ethylic alchohol.

Post-mortem Appearances. — The appearances immediately after death from ethylic alcoholic intoxication are very distinctive. The brain is found charged with fluid blood, and the sinuses distended with exudation of serum in the ventricles and in the membranes. The small vessels of the brain are greatly injected; the lungs are white, free from congestion, and well inflated with air; the heart is full of blood on both sides, and its own vessels are engorged; the liver is natural, and the gall-bladder is not distended; the inner surface of the stomach, even when the intoxication is induced by the gradual inhalation of the vapour, is very much congested, and a strong odour of the alcohol pervades any contents that may be in the stomach; the spleen is normal, and the alimentary tract below the stomach is normal; the kidneys are intensely congested, blood exuding freely from the cortical part in points or specks; the bladder is usually empty. The blood on the left as well as on the right side of the heart is dark, but on exposure to air it soon reddens, and coagulation is firm. The corpuscles undergo great changes even before death: they are shrunken, crenate, and some are elongated and flattened, with truncated ends.

Methylic Alcohol.

Methylic alcohol, placed in our table in its proper place, above ethylic, may be administered in the same manner as ethylic, but it is much more easily administered by inhalation. It might be used as a general anæsthetic in the place of chloroform—I mean by inhalation—but it is slower in its action.

Carried to the full extent, the methylic alcohol produces four distinct stages or degrees, the respiration in the third degree becoming blowing in character. With the fourth degree there is complete muscular prostration and anæsthesia, but reflex movements may be excited unless the period of death be very near. The temperature of the animal body begins rapidly to fall under the influence of methylic alcohol, and often falls from the first without any preliminary rise.

In birds (pigeons) I have found, when the third degree of insensibility is produced, that, in so short a period as ten minutes, the temperature is reduced four degrees, and that the decline of temperature continues during the whole period of recovery, reaching, at the lowest, a decline of eight degrees on Fahrenheit's scale. The temperature begins to rise again about two hours after the first indications of recovery, but a period of from seven to eight hours is required to restore the body, under the most favourable conditions, to the natural temperature. In one case these effects of reduction of temperature were observed, even when the external temperature of the air was 80° Fahr.

When the administration of methylic alcohol is carried to the extent of destroying life, the respiration and circulation cease almost at the same time; but here again the heart slightly outlives the respiration. And, if a frog which seems to have been killed outright by this substance be examined microscopically after death, the circulation through the web of the foot may be observed for more than an hour.

On opening the body of an animal that has been destroyed by methylic alcohol, the heart will be found pulsating several minutes after death; the heart contains blood on both sides, and the lungs are charged with a little blood, so that they are of a pink colour. The brain is much gorged with blood, and the kidneys are congested. The blood itself undergoes little change; coagulation is slightly impeded, but a firm clot results, and the blood corpuscles retain their natural character. In respect to post-mortem appearances there is thus a difference between the two alcohols in respect to the condition of the lung. Dr. Sedgwick has this moment brought into the room a careful dissection of an animal, a rabbit, which has slept into death from the effect of an overdose of common alcohol. The dose in this case which has produced the fatal insensibility is two hundred and fifty grains administered at five injections by the hypodermic syringe. You will see that both sides of the heart are in vigorous action, but the lungs are absolutely bloodless; they are pure white in appearance. Had the death been from methylic alcohol, the colour would have been pink, because there would have been some blood still entering from the heart. Hence methylic alcohol is less fatal than ethylic. The circulating and respiratory systems fail more evenly together.

The Heavier Alcohols.

We come now to consider the action of the heavier alcohols, those which on the table are placed naturally below the standard specimen, ethylic alcohol. We will pass over the propylic alcohol, because there is some difficulty in obtaining so perfect a specimen as would be absolutely reliable, and we

will advance to butylic, amylic, and caproylic. So soon as we arrive at these alcohols, we have an important physical difference to consider as between them and the ethylic and methylic. The difference I refer to is that they are not, like the lighter alcohols, soluble in water. Notwithstanding, they enter the body in sufficient quantity to produce the most decisive effects. Each of the alcohols named may be administered by inhalation, by spray, by subcutaneous injection, or by the alimentary canal; the first methods are prolonged, the best is that by subcutaneous injection. These heavier alcohols, if they be administered slowly, produce also four degrees of symptoms; but the degrees or stages are much less clearly defined. The first and second degrees are comparatively brief; the third and fourth prolonged; but the parallel remains. They act in much smaller doses, moreover, as an illustration before us will show. Here are two guinea pigs—one large, the other small—the larger one being, within forty grains, twice the weight of the smaller. Two hours ago to the smaller was administered subcutaneously fifteen grains of pure ethylic, to the larger, at the same moment and subcutaneously, fifteen grains of pure amylic alcohol. See the difference: the small animal is unaffected; it was drowsy for twenty minutes or so, but now it is quite well; but the larger animal under the amylic alcohol, in what profound and senseless sleep it lies! It is as deeply narcotised and cataleptic as it would be under the same dose of hydrate of chloral, and this state will last for eight or, it may be, ten hours, with ultimate perfect recovery. At the commencement of my last lecture I showed a similar result from butylic alcohol. Now in these cases an overwhelming dose of the narcotic alcohol has been given at once, and the symptoms have passed to the fourth stage or degree quickly. But if the dose be smaller, there will be a prolonged third stage, during which there are certain symptoms which do not belong to the intoxication produced by the lighter alcohols. One of these symptoms is a peculiar muscular tremor which occurs at intervals in a spontaneous manner, but which can be excited by a touch at any time. In the intervals when the tremors are absent, there is frequent twitching of muscles. The tremors themselves are not positively muscular contractions, but rather vibrations through the whole muscular system, and are connected with extreme want of true contractile power. While they are present the temperature continues to decline, and a difference of a full half-degree may be observed between, before, and after each paroxysm. When they are once established they may continue, without further administration of alcohol, for ten and twelve hours steadily: and so slowly do they decline that I have seen them excited thirty-six hours after the deep intoxication. They subside by remission of intensity and prolongation of interval of occurrence.

There cannot, I think, be a doubt that these tremors produced in animals by the heavier alcohols are identical with the tremors observed in the human subject during the alcoholic disease known as delirium tremens. What the nature of the muscular movement is, what unnatural relationships exist between the nervous system, the muscles, and the blood—these are questions of singular interest. Involuntary, developed even against the will; excited by any external touch that sets up vibration; attended with great reduction of temperature, and remaining so long as the temperature is low, they indicate clearly an intense depression of animal force, a condition in which all the force that remains seems to be expended on the organic acts of life, on the support of the motions of the heart, muscles of respiration, and the functions of the secerning glands.

While these symptoms of deep narcotism and muscular prostration are present as the result of the administration of the heavier alcohols, the most important modifications of animal temperature are also presented. From the first there is a fall of temperature, which continues up to the fourth degree of insensibility. The extreme of reduction of temperature requires to be seen to be fully accepted. Well, here is the fact now before us. The guinea-pig on the table, which is in such a deep and deathlike sleep, had a natural temperature of 103° Fahr. before the alcohol was injected. Read now the temperature for yourselves; it is 80° Fahr., so that an animal can actually live when it has lost 23° of natural heat. In cholera in the human subject I once saw the temperature fall to 84° Fahr., which would be 14° below the natural condition; but here the fall is 23°, and yet with care the animal will recover without any more anxiety than if it were waking from natural sleep. When, to the inexperienced, death would seem inevitable, when the respirations are not more than one per minute, recovery may be quite safe, and when it is pronounced and consciousness returns, eagerness for food is the only observable peculiarity. I could repeat this experiment with butylic alcohol, but to produce the same extreme effects I should require to employ about one-fifth more of the fluid; and I could repeat the experiment with the caproylic alcohol, but to produce the same effect I need not take so much of the fluid by one-fifth.

In these experiments we see the influence of chemical composition. We see that as the weight of the alcohol increases, as the carbon and hydrogen, but specially the carbon, increases, the narcotic action of the agent is increased. No phenomena can be steadier than these phenomena.

When an animal is made to sleep into actual death by the administration of the heavier alcohols, the heart is commonly found containing blood on both sides, and the lungs contain a little blood. The blood itself is dark even in the arterial circuit, and the venous blood is of dirty hue, and so viscid it flows slowly. Coagulation occurs, but the clot is loose, and yields much coloured serum. The blood-corpuscles are shrunken, crenate, or elongated with truncated ends where they lie loose, but they are mostly massed together in rolls, appearing as if they made in each roll one distinct column; the fibrine separates in rods or bands, forming a coarse network very peculiar and distinct in character. The sinuses of the brain are charged with blood, and the brain, usually white, is suffused with small dark points of blood. The kidneys are congested. The muscles are dark, contain fluid blood, and for many hours retain the odour of the alcohol; they resist putrefaction for several days. The alimentary canal and other parts of the body present no appearance deserving special notice.

REVIEW.

Reviewing the facts thus noticed, we gather into a few heads the more distinctive results of our researches. We learn that there is a certain general character of action pertaining to all the alcohols so far as we have investigated, but that details of action differ according to chemical constitution —that is to say, weight, *cæteris paribus*, intensifies action, and makes it more prolonged. Under all the alcohols animal temperature falls; under all, when they are administered with sufficient freedom, motion and sensation are paralysed. The order of action on the various parts of the organism is uniform. The first action seems to be on the centres of voluntary motion, next on the centres of consciousness, grey matter of the hemispheres; and next on centres of sensation, or those centres through which sensations are transmitted to the centres of consciousness. When all these parts are under the alcoholic influence the intoxication is complete; there is all but death.

And yet this extreme intoxication is not near death—is not near death for this reason, that those centres of power on which the movements of the heart and of the respiration depend remain not unaffected, perchance, but so little affected that they are capable of sustaining a minimum life. The animal fire smoulders, but does not go out. In this particular of action lies the safety of common alcohol in respect to its immediate effects. Every profound intoxication would be a fatal catastrophe were not this involuntary power of breathing and of circulating blood specially retained.

You will ask me naturally, before I leave this subject, what is the mode of action of the alcohols. Do they arrest oxidation, or do they themselves undergo oxidation? Are they slowly burned in the body, yielding the same products of combustion as are yielded by this burning lamp—viz., carbonic acid and water, or are they not burned at all? The evidence on these points is conflicting. On the one side, there is the evidence of Percy, Perrin, Lallemand, and Duroy, which goes to prove that *ethylic* alcohol is laid up in the tissues until it is eliminated by the urinary and other secretions; and again, there are the experiments of Thudichum and Dupré, which go to show that, although alcohol will pass off in the free state by the urine when the body is, in plain language, supersaturated with it, yet that the quantity found in the urine, after certain large amounts taken, bears no proportion to the amount that ought to be found if the whole were eliminated in the form in which it is taken, as alcohol. Dr. Thudichum's book in which he discusses this question, his report to the Medical Officer of the Privy Council, which I place before you, is such a model of industry, such a master-book in chemical physiology, that I would it were in the hands of every Practitioner in the kingdom, and assuredly the part which refers to alcohol is deserving of special regard. For myself, I am satisfied that his facts are undeniable; but granting this, I am not so certain the inference from them, that alcohol is consumed, is, in every sense of the term, right. Dr. Thudichum himself shows that alcohol does pass off at a certain stage of intoxication, by

the urine, as alcohol, and we may therefore all agree that such direct elimination is possible. But the whole is not accounted for by the finding; therefore some, a greater part, is consumed: that is the argument. Before, however, we can admit the argument, we must know how much common alcohol the body will hold—as a cask, we may say, would hold it—how much can be laid up and retained in combination with the water of the tissues, and how long a time must elapse before a given quantity of alcohol is actually removed from the tissues by the kidneys and other emunctories. When we consider the greed with which alcohol drinks water, I fear, the element of time for elimination being conceded, but little alcohol would be found lost as so much consumed. My reasoning is based on the phenomena of alcoholic intoxication. I can deduce from them no evidence at any stage of intoxication that there is increase of power in the organism. I admit in the first stage there is what is called excitement and a slight but brief increase of temperature; but that does not occur to me as being anything more than the result of local excitation, the effect of a local irritant on the extremities of nerve. This stimulation, or excitement of sensibility, is, I think, a natural sequence of the application of an irritant to structures in which there is a nervous expanse to receive impressions, and with this effect all evidence of stimulation, to say nothing of sustainment of power, ends. So soon as the alcohol makes its way into the organism and diffuses through the fluids, so soon there is depression, so soon respiration falls, carbonic acid gas, from respiration, decreases, and muscular strength, consciousness, and sensibility decline.

Above all, against the idea of active combustion of alcohols in the body, is the overwhelming fact of reduction of temperature. Can an animal which is burning faster than it ought to burn grow colder than is natural, without the assistance of evaporation or other compensatory process?

I am prepared, notwithstanding all this, to admit a certain oxidation of alcohol in the body. When the blood diluted with an alcohol brings round the weak spirit, in constant circuit, to the lungs, to expose it there to the air, it is next to impossible but that the same change will occur as would occur if the same diluted alcohol were exposed to air out of the body, a slow oxidation with an acid as a product. The free acid sweatings which follow a single alcoholic intoxication, the acid secretions from the intestines, the irritable condition of the heart, so like that which follows the injection of a soluble organic acid, all favour this view.

I have dwelt on these points from their immediate relation to practice. The evidence of the Physicians is not less conflicting than the evidence of the physiologists. What shall we believe? Dr. Todd and his followers cure fever with alcohol. Dr. Gairdner, of Glasgow, treats fever with and without alcohol, and finds that he cures without better by far than with it. I will contest on neither side, because I know that as yet Physicians have never prescribed alcoholic fluids with any precision at all, either in regard to quality or quantity, the common alcoholic drinks being anything; but I am prepared to contest, if under scientific administration alcohol be found to cure fever, that the medicine acts by lowering temperature and checking waste, not by sustaining as food sustains the body.

The alcohols are strictly anæsthetics, and, indeed, the first published case of Surgical operation under anæsthetic sleep was performed, in 1839, by Dr. Collier on a negro, who was rendered insensible by breathing the fumes of alcohol. But the anæsthesia is not commendable; it is too slow and too prolonged. Methylic alcohol, if it could be entirely purified and made inodorous, might be used, and with methylic ether it would be the safest of agents, but as yet its inhalation is disagreeable.

The difference of action of the alcohols as they follow in their series and as the carbon increases is most striking. The slowness of action, the prolongation of action, step by step, from the lighter to the heavier compounds, is a fact as definite as any in physiology. Still more curious is it that neither the methylic nor the ethylic alcohols produce those tremors in the inferior animals which we recognise and especially name from their occurrence in man, while the butylic and the amylic most effectively call them forth. Considering how much of the heavier kind of alcohol is distributed for consumption, especially amongst the lower orders, I think it is possible that the heavier fluids may be the cause of delirium tremens in the human subject, as they probably are the cause of that continued coldness, lassitude, and depression which follow the well-known dinner with "bad wine."

Speaking honestly, I cannot by the argument yet presented to me admit the alcohols through any gate that might distinguish them as apart from other chemical bodies. I can no more accept them as foods than I can chloroform, or ether, or methylal. That they produce a temporary excitement is true, but as their general action is quickly to reduce animal heat I cannot see how they can supply animal force. I see clearly how they reduce animal power and can show a reason for using them in order to stop physical pain, or to stupefy mental pain; but that they give strength—*i.e.*, that they supply material for construction of fine tissue, or throw force into tissues supplied by other material—must be an error as solemn as it is wide-spread.

The true character of the alcohols is that they are agreeable temporary shrouds. The savage, with the mansions of his soul unfurnished, buries his restless energy under their shadow. The civilised man, overburdened with mental labour or with engrossing care, seeks the same shade; but it is a shade after all in which, in exact proportion as he seeks it, the seeker retires from perfect natural life. To resort for force to alcohol is, to my mind, equivalent to the act of searching for the sun in subterranean gloom, until all is night.

As yet alcohol, the most commonly summoned of accredited remedies, has never been properly tested to meet human diseases. I mean by this that it has never been tested as alcohol of a given chemical composition, of a given purity, and in given measures. Wines, beers, and spirits are anythings—compounds of alcohols, and compounds of alcohols with ethers and other foreign substances. It is time, therefore, now for the learned to be precise respecting alcohol, and for the learned to learn the positive meaning of one of their most potent instruments for good or for evil, whereupon I think they will place the alcohol series in the position I have placed it, even though their prejudices in regard to it are, as mine are, by moderate habit, but confessed inconsistency, in its favour.

ORIGINAL COMMUNICATIONS.

VENESECTION TO RELIEVE DISTENSION OF THE RIGHT SIDE OF THE HEART AND PASSIVE CONGESTION OF THE LUNGS.

By HENRY G. SUTTON, M.B.,
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In this paper I hope to show the great relief, and, in some cases, continued improvement, that was obtained from venesection, and I shall moreover endeavour to point out the kind of case which is likely to be benefited by bleeding. During the last two years in the London Hospital I have had opportunities of watching the effects of venesection in cases where there was great distension of the right side of the heart. The practice of bleeding from a vein of the arm, or from one of the jugular veins, with the object of withdrawing blood from the right side of the heart, and so relieving great engorgement of the lungs, has strongly recommended itself to many Practitioners since it was so ably advocated by Dr. Markham in his Gulstonian Lectures a few years ago. Nevertheless, while many Physicians have agreed on the principle of the operation, the practice has not been widely or generally resorted to, and the reason of this may perhaps be found in the great prejudice which has existed against bleeding, and in the want of data to show that great benefit has been obtained from it. In the cases here recorded, there was great distension of the right side of the heart, great engorgement of the lungs, and the patients were much benefited by venesection.

The first case was that of William D., aged 48, admitted into the London Hospital October 22, 1867. His illness had commenced three months before coming into the Hospital with swelling of the abdomen and feet. On admission his urine was albuminous, his cough was troublesome, his breath was very short, the veins of his neck were much distended, and the expectoration was very frothy.

Physical Signs.—The cardiac dulness was not increased, excepting that it extended more to the right than normal. There was a loud systolic mitral bruit. Lungs: The percussion was flat, but there was no decided dulness in any part of the chest. Everywhere sibilant respiration was heard. He was ordered saline mixture with antimony every four hours. Six days after admission—that is, on Oct. 28, at eleven p.m.—his face was livid and swollen, the veins of his neck were very much distended, there was great dyspnœa, and he stated that he could not go to sleep on account of the difficulty of his breathing. Sixteen ounces of blood were taken from the arm, and

he expressed himself as feeling much relieved The veins of the neck were less distended, and his countenance was much less distressed. His breathing continued easier after the bleeding, and the distension of the veins of the neck gradually subsided.

Nov. 4.—He was much better; he still suffered from shortness of breath, but he had not suffered from great dyspnœa since he was bled. On listening to the chest there was still some sibilus, and there was evidence of disease of the aortic and mitral valves.

The next case was that of Robert W., aged 33, under my care while attending for Dr. Herbert Davies, July 30, 1867. On admission he was suffering from great dyspnœa, and he complained very much of pain in his chest. His heart was evidently much enlarged, for the cardiac dulness reached one inch and a quarter to the left of the left nipple, to the mid sternal line on the right, and as low as the seventh rib. All over the cardiac region a very distinct thrill was felt. A loud cooing heart murmur was heard all over the chest, but it was heard the loudest over the fourth costal interspace, close to the sternum. It was so loud that it could be heard distinctly on placing the ear about two inches from the chest wall. Respecting the lungs, there was no dulness, but the expiration was prolonged, it was accompanied by sibilus, and there was crepitation at the bases of the lungs. The liver dulness reached two inches below the ribs, and its edge could be distinctly felt. He was ordered senega mixture three times a day. August 9, he said he felt better, but he complained that his breath was very short. On the 11th there was œdema of the feet and legs. In the evening of this day his breath was extremely short, and he complained of a sensation of fulness in his epigastric region and in the neck. His pulse at 9 p.m. was 120 per minute and feeble. Respiration was 64 a minute. The veins of the neck were distended, but not very much so. Venesection was performed to 16 ounces, and while being bled he said that he felt much better. His breathing became easier and slower. Five minutes after the operation the respirations had fallen from 64 to 40 a minute, his pulse from 120 to 90 a minute; he then said that he felt a great deal better. Next day (the 12th) he was a great deal better, out of bed and in no pain. This patient continued much the same until August 29, when his breathing again became difficult. On September 1 he complained of fulness about the throat, and at 9.30 p.m. his breathing became very short indeed. His respiration was 56 a minute, and his pulse was 120. He was again bled to about 20 ounces, and he expressed himself as feeling very much relieved. At one o'clock at midnight the respirations had fallen from 56 to 36, and his pulse from 120 to 100. He remained much the same, and went out of the Hospital three or four days after the second bleeding.

It is instructive to notice that in this case the patient was apparently suffering from disease of the aortic valves and great dilatation of the left ventricle; also from vesicular emphysema and bronchitis. There was great dyspnœa, but no marked lividity of the face, and although the veins of the neck were distended they were not very much so. The first bleeding relieved him very much, and the second also, but the second not so much as the first. During the first bleeding the respiration fell from 64 to 40, on the second occasion from 54 to 36. The patient got out of bed the day after the venesection as usual. He never showed any signs of syncope, nor complained of weakness, or other ill effects from the loss of blood. He expressed himself as having been much relieved by the bleeding, and he wished to have the operation repeated on two or three occasions when he was suffering from great dyspnœa.

The third case was that of a man aged 40, suffering from disease of the mitral valves. He was under the care of Dr. Herbert Davies. While in the Hospital he suffered from great dyspnœa, which gradually increased until his breathing became extremely difficult. He was bled from the arm to 12 ounces. As the blood flowed he expressed himself as feeling greatly relieved. He said that he felt as if a weight were being lifted from his chest and head. During the two following days he stated that he was much easier. Nevertheless, the improvement was temporary. He died three days afterwards.

The fourth case was that of Charles N., aged 14, under the care of Dr. Ramskill. This patient was suffering from disease of the mitral valves and from dilated left ventricle, the result of an old attack of rheumatic fever. His urine was albuminous. There was considerable ascites and œdema of the feet and legs. His lips were livid, his skin had a yellow tinge. He suffered very much from shortness of breath, and was unable to lie down in bed. While in the Hospital various drugs were ordered, but he gradually got worse and worse. His breathing became more difficult and laboured. Leeches were twice applied over the region of the heart with some slight relief. Venesection from the arm to about 10 ounces was performed, and the patient's breathing was considerably, although only very temporarily, relieved by the bleeding.

The fifth case was that of Thomas C., aged 48, admitted into the London Hospital May 21, 1867, under the care of Dr. Ramskill. On entering the Hospital he was found to be suffering from aortic regurgitation, emphysema, and acute bronchitis. His urine was albuminous. At 3 p.m. on the day of admission his face and neck were livid, his eyeballs projected, and his lips were bloated-looking. The veins of his neck were very much distended. His skin was perspiring and felt cold. Pulse was small, irregular, and quick. Respirations forty a minute, and his breathing was so laboured and quick that he could hardly speak. Heart: The apex beat was in its normal position. The rhythm was irregular, and the first sound was inaudible. Lungs: There was diminished resonance on both sides of the chest. The respiratory murmur was very feeble. The expiration was very much prolonged, and there was crepitation at the bases of both lungs. At twelve midnight on the day of admission he was much worse, his face was livid, his breathing gasping. His face was covered with cold sweat, and his pulse could hardly be felt. He was bled to 16 ounces, and at once he expressed himself as feeling relieved. His breathing in the course of an hour became much freer, and he was able to sleep a little. Next day he looked much better—he appeared altogether a different man. His pulse was still very irregular and quick, but his respirations were slower. After this a diastolic aortic bruit was heard very distinctly. He continued to improve, and left the Hospital very much relieved. The physical signs when discharged from the Hospital showed aortic regurgitation and emphysema.

The patient remained out of the Hospital about two months, and then came in again. His old symptoms had returned. There was a systolic and diastolic aortic bruit. Rhythm of the heart was irregular; there were also physical signs of bronchitis. His liver was enlarged, his breathing was very short, and he complained of a sensation of fulness about the neck. He was in the Hospital five days, and did not improve. On August 11 his respirations were 30, and his pulse 110 a minute, and very feeble. At 10.15 a.m. he was bled to 15 ounces, and he at once said that he felt better. Two hours after the bleeding his respirations had fallen from 30 to 20, and his pulse was fuller, 115 a minute. After this he appeared to be considerably relieved. Unfortunately the relief was but temporary; for five days afterwards he died suddenly. The autopsy in this case showed disease of the aortic valves, and ulcerative endocarditis just below and in the aortic valves. Both ventricles dilated. Nutmeg liver. Emphysema, and lungs very much congested, with evidence of inflammation of the mucous membrane of the bronchial tubes.

The sixth case was that of a costermonger, aged 62, under the care of Dr. Herbert Davies. He appeared on admission to be suffering from emphysema and bronchitis, and very great dilatation of the right side of the heart. He was extremely livid in the face. His face might fairly be said to be of a purple colour. The superficial veins were dilated. The dyspnœa was so great that he could not lie down. He sat on the edge of the bed nodding, in a kind of stupor the whole day long. Expectorant medicines were tried without any relief, and finding that the difficulty of breathing was each day becoming greater and greater, I requested Mr. McCarthy, now one of my Surgical colleagues, to bleed him from the arm, and 14 ounces of blood were removed. The patient expressed himself much relieved by the venesection, and there was a marked decrease in the lividity. The dyspnœa was much relieved. He felt so much better that he insisted on being discharged from the Hospital, as his business affairs required his superintendence. In this case the bleeding gave very great relief. Before the venesection, the patient sat on the edge of the bed, was unable to walk, was extremely livid, and was apparently overpowered with sleep, or, in other words, in a state of stupor. A few hours after he was bled the stupor had passed away, the lividity was much less marked, and he was able to walk about the ward.

This patient left the Hospital very much relieved. After being out a few weeks, he again entered the Hospital in much the same state as when first admitted; he was again suffering from great dyspnœa and was extremely livid. A few days after admission he was a second time bled from the arm; the bleeding again benefited him very much, and he left the Hospital a second time. After about two months he a third time came into the Hospital under the care of Dr. Andrew

Clark, but in a worse state than when he was first admitted. After a few days, he was a third time bled from the arm, but it did not afford him much relief, and he died March 23, 1868.

Autopsy.—The body was wasted; face very livid; face, legs, and abdominal wall œdematous. The pleura over the left lung was very adherent at the base. The right lung was very emphysematous; the air vesicles near the surface were much enlarged. The surface of the lungs felt soft and downy. There was one large bladder-like spot which seemed to consist of dilated air vesicles; it was about the size of a walnut. Left Lung: In the posterior and lower third, there was a large suppurating hydatid cyst. The cyst had a thick fibrous wall. Bronchial tubes contained a quantity of muco-purulent matter; they were not dilated. Heart: The right ventricle was much dilated, and so was the tricuspid orifice. Left ventricle and its valves normal.

The seventh case was that of Jane G., aged 55, who was in the London Hospital under the care of Dr. Ramskill, March 3, 1868. On admission there were physical signs showing that the patient was suffering from dilated left ventricle and valvular disease of the heart. On the day of admission she was suffering very much from shortness of breath, and her face was livid. A saline and antimony mixture was ordered to be taken every four hours, and she was dry-cupped over the chest posteriorly. Finding that she did not improve, but that, on the contrary, her breathing had become more laboured and difficult, I asked the Resident Medical Officer, with Dr. Ramskill's consent, to bleed the patient. He did so, and it relieved her very much. After the bleeding she improved considerably, and was able to move about the ward. On April 25—that is, fifty-three days after admission—she suddenly became very much worse, and she was then seen by Mr. Clouting, one of the House-Surgeons of the Hospital.

Mr. Clouting has very kindly given me the following notes:—

"On April 25, about 4·45 p.m., I was suddenly sent for, in the absence of the Resident Medical Officer, to see this patient, who was said to have fainted in her chair while sitting up taking her tea. She was pronounced by the nurse to be dead. On seeing the patient, I was almost inclined to be of the same opinion. Her lips and cheeks were livid, her head was hanging back, and all her muscles were perfectly relaxed. She just made one feeble attempt at inspiration. She was at once placed on the bed, her clothes loosened, and two ounces of brandy, mixed with about as much warm water, was injected into the rectum, and a mustard poultice was applied over the region of the heart, Artificial respiration was kept up for a quarter of an hour. At the end of that time she had somewhat revived; she was breathing regularly, but the breathing was with difficulty sustained without artificial respiration. The jugular veins were as large as a person's finger, and persistently distended. I then commenced to bleed her from the arm. At first the blood flowed with great difficulty, until about four ounces had escaped. After this the blood flowed more freely. About 14 ounces were withdrawn, and then the bleeding was stopped. About an hour and a half after the attack the patient was sleeping quietly. From this time she gradually improved, and was sitting up in about fourteen days afterwards. This patient, five weeks after the venesection, died, and there was gangrene of the arm from which she had been bled.

The eighth patient was a female, aged 27, in the London Hospital, Feb. 11, 1868, under the care of Dr. Ramskill, suffering from disease of the mitral valves. The physical signs of mitral disease were well marked. The day after admission into Hospital there was very great dyspnœa, œdema of the feet and legs. Face and lips were livid, veins of the neck rather swollen. Pulse was very feeble and occasionally intermitting. Venesection was performed to 12 ounces. She was much relieved by the bleeding. After the operation the countenance was much less anxious, and her face was much less livid; the breathing was much easier. She appeared in every way better. She remained better until the 16th, and then the lividity returned, and she gradually got worse and worse, and died March 18. The autopsy showed great contraction of the mitral orifice, disease of the mitral valves. The lungs were in the condition known as "heart lung," or splenisation.

The ninth patient was a female, aged 36, under the care of Dr. Ramskill. She was admitted into the Hospital for acute bronchitis. On admission, she was livid in the face, and suffered very much from shortness of breath. On the fourth day of admission, she was suddenly seized with extreme dyspnœa. The veins of her neck were very much distended. Her skin was livid, cold, and clammy. She was partially unconscious, throwing her arms about and apparently suffering great distress. The action of heart was rapid and very irregular. Pulse was irregular and could scarcely be felt. She was bled from the arm to 16 ounces. The improvement was most marked; she breathed much more easily, her pulse became firmer and regular, her distress abated very much. Some slight delirium followed the bleeding, which passed off after a night's rest.

This patient lived about six weeks afterwards, and she was so sensible of the relief she had experienced from the bleeding, that she constantly begged to have the operation repeated. She said that she felt convinced that she would be cured by it. The autopsy in this case showed saccular and uniform dilatation of the bronchial tubes, gangrene of the lung, puriform matter in bronchial tubes, and dilatation of the right side of the heart.

In every one of these cases the bleeding was not resorted to until expectorant and other medicines had been tried and had failed. The patient's condition having become more and more serious, venesection was performed as a last resource. In each case the bleeding gave great, and in some patients immediate relief. One patient was so sensible of the relief she had gained, that she frequently entreated that she might be again bled, as she felt convinced it would cure her. Another patient, as the blood flowed, expressed himself greatly relieved, and said that he felt as if a weight had been lifted from his chest and head. Another patient, while being bled, said he felt much better; and when I inquired of him next day if the bleeding had done him any good, he replied that he believed it had saved his life.

In some cases, directly after the venesection, there were symptoms, both subjective and objective, to show that the patients had been greatly benefited by the blood-letting. One patient suffered extremely from shortness of breath; the veins of the neck were distended before the bleeding, and while the blood flowed he said that he felt much better, and his breathing became easier and slower. Five minutes after the operation the respirations had fallen from 64 to 40, and the pulse from 120 to 90 a minute. This patient continued better for twenty days after the bleeding, and then his breathing again became very much oppressed. His respirations were 56, and his pulse was 120 a minute. He was a second time bled to 20 ounces, and he expressed himself as feeling much better and relieved by the bleeding, and his respiration fell from 56 to 36, and his pulse from 120 to 100. Another patient on the day of admission, at 12 midnight, was suffering extremely from shortness of breath; the breathing was gasping. Face was livid and covered with a cold clammy sweat. His pulse could hardly be felt. He was bled to 16 ounces, and at once he expressed himself as feeling relieved. His breathing in the course of an hour became much freer, and he was able to sleep, and next day he appeared altogether a different man. This patient left the Hospital very much relieved. After being out about two months, he was again admitted; his old symptoms had returned, and he was suffering very much from shortness of breath. He was bled a second time to about 13 ounces, and he at once said that he felt better. Two hours after the venesection, his respiration had fallen from 30 to 20, and his pulse had become much stronger. One patient was suddenly seized with extreme dyspnœa. All the superficial veins of the neck and upper extremities were much distended. Skin was livid, cold and clammy. She was partially unconscious. She was bled to 16 ounces. The improvement was most marked; she breathed much easier, the pulse became firmer and regular, and her distress abated. Another patient before the venesection was unable to walk about the ward, was exceedingly livid and unable to lie down in bed; he sat on the edge of the bed in a state of continued stupor. While being bled he said he felt easier, the lividity diminished; a few hours afterwards he was able to walk about the ward, the stupor had disappeared, and he left the Hospital very much relieved three days afterwards.

In every one of the patients the most urgent symptom was very great dyspnœa, and in every case this symptom was much relieved by the venesection, and, as I have already stated, the respirations in more than one case diminished in frequency. Five minutes after the bleeding, the respiration had fallen from 64 to 40, and on another occasion fell from 56 to 36. In another patient the respiration fell from 30 to 20 a minute. In one case the pulse was before the venesection so feeble that it could scarcely be felt, and very irregular: directly after the venesection it became firmer and regular. The pulse in one case was 120 before the bleeding, and a few minutes after it had fallen to 90. On another occasion the pulse was 120 before the bleeding, and it fell to 100 after the bleeding. The lividity of the face was also greatly diminished by the venesection, and the veins of the neck were reduced in size.

The benefit conferred by the venesection was not simply

confined to relieving the patient's sufferings, for in three cases the patients' condition was so much improved by the bleeding that they left the Hospital and were able to resume work; one patient resumed his work for two months, another for about six weeks to two months.

On an average about 10 to 15 ounces of blood were withdrawn, and only one patient appeared to suffer any ill effects from it, and in this patient gangrene of the arm followed the venesection. Withdrawing the blood did not seem to weaken the patients; on the contrary, they obtained such relief that they appeared stronger than before the bleeding. All the patients were suffering from well-marked and advanced organic disease of either the heart or lungs. One patient was suffering from disease of the aortic and mitral valves; one from disease of the aortic valves and dilated left ventricle, emphysema, and acute bronchitis; three patients from disease of the mitral valves—one of these three patients had had rheumatic fever, and in the other two the morbid appearances in the mitral valves were such as are frequently seen in patients who have had rheumatic fever. One suffered from aortic regurgitation, vesicular emphysema, and acute bronchitis; one from an hydatid tumour in the lower part of the left lung, vesicular emphysema, and dilated right heart; one from dilated bronchial tubes and gangrene of the lung; one from dilated left ventricle.

Experience would appear to show that in cases where there is great distension of the right side of the heart, and the blood is unable to circulate freely through the lungs, the administration of stimulants, such as alcohol, does not produce any decided effect. The patient does not express himself much relieved by the stimulant, and usually the objective signs show that the patient is not benefited by it. My experience has led me to think that when patients are very livid, the veins of the neck very much distended, the breathing very laboured and quick, the pulse small and very feeble, and the skin cold, their condition is not much, if at all, improved by alcohol; whereas, on the contrary, patients in this state are very much relieved, and, as these cases show, may be for some time greatly benefited by venesection.

I would here remark that although these cases show that venesection gave great relief in some cases where there was acute bronchitis, yet the benefit to be obtained in such cases will probably depend to a great extent upon the amount of obstruction there is to the air entering the bronchial tubes. Where the patient is suffering from capillary bronchitis (so called), and the minute tubes are filled with muco-purulent matter, venesection could probably little, if anything, benefit the patient, for the pus in the tubes would prevent the air reaching the blood, and death would take place from apnœa. The same thing may be said with respect to Bright's disease, and especially where there is great œdema. There is in many cases of Bright's disease evidence to show that the right side of the heart is distended, yet the mere withdrawing the blood from the right side of the heart would probably not benefit the patient much if the lungs are very œdematous and the bronchial tubes contain a large quantity of serum; and post-mortem examinations often show that the bronchial tubes are almost filled with serous fluid, and the lungs very œdematous.

The cases that I have brought forward tend to teach that we may expect benefit from venesection where there is disease of the left side of the heart, great engorgement of the lungs, and distension of the right side of the heart, in cases where mitral or aortic valve disease is causing distension and dilatation of the right ventricle, especially if the aortic disease is accompanied by acute bronchitis, or in lung disease which is accompanied by great lividity of the face and distension of the veins of the neck, showing that the right side of the heart is distended.

It has appeared to me that in cases of mitral disease where there is evidence of great engorgement of the lungs and of the venous system, we ought to bleed more frequently than we do at present; for, although venesection may not benefit the patient for any great length of time, yet it will greatly relieve the distressing dyspnœa. It is well known that patients with mitral disease, sooner or later, frequently suffer from œdema of the lower extremities, from ascites; the veins of the neck become distended, the lips become livid, the face bloated and full-looking, and the complexion more or less yellow; the pulse is very small and feeble, and there is very great difficulty of breathing. These patients may have been benefited by iron, by digitalis, or by mercury; but there comes a time when such remedies fail to relieve these distressing symptoms, and the breathing daily becomes more and more difficult, the pulse smaller and smaller. When the dyspnœa is urgent it appears to me that we ought to take ten or twelve ounces of blood from the arm, with the view of relieving the over-distended right side of the heart, the engorged lungs, and the over-distended left auricle. And, although the undue distension of these cavities may be only temporarily relieved, yet this relief may allow the muscular wall of the right ventricle, and probably of the left auricle, to recover some of their power, may enable them to propel the blood forward with greater force, and, in this way, make greater efforts to overcome the obstructed circulation in the lungs.

It may be well to state definitively that venesection, as here advised, is not urged with a view to relieve congestion in the sense of inflammation, but simply to remove blood which is cumbering an over-worked organ. It is to relieve the right ventricle of part of its work. The patient can be no worse for want of blood which cannot be passed through the lungs, and the reports of the foregoing cases, as it seems to me, prove conclusively that the circulation became more vigorous from the loss of a certain quantity of blood. Of course, such a remedy can only be temporary. No kind of treatment could be expected to cure the organic lesions from which the dilatation results, and it follows almost inevitably that the conditions we obviate will surely return. But, saying nothing of the distress relieved, much temporary relief, in some cases for a considerable period, is great gain. And it is not too much to hope that, in cases where the urgent dyspnœa is the result of some trouble suddenly superadded to organs long unsound—say bronchitis to mitral disease—so decisive a measure may assist the system to return, not to health, but to that state of comparative health which will enable the patient for some time to perform many of the duties of life.

POISONING BY TINCTURE OF ACONITE.

ABSENCE OF THE PULSE FOR THIRTY-FIVE TO FORTY MINUTES—HYPODERMIC INJECTIONS OF LIQUOR AMMONIÆ—RECOVERY.

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In the first volume of this journal for the year 1869 will be found the account of some valuable experiments by Professor Halford, in which he injected the strongest liquor ammoniæ, diluted with two parts of distilled water, into the superficial veins of dogs that had been bitten by venomous snakes. The results of the experiments, as regards the saving of life, seemed so conclusive, that Professor Halford was led to propose venous injections of diluted liquor ammoniæ for snake poisoning in the human subject, and, at the same time, to suggest that ammonia injections might "perhaps be extended to opium poisoning, or to that resulting from infection, as in fever, cholera, etc."

Several cases of poisoning from the bites of venomous snakes, in the human subject, were treated in this manner, subsequent to the publication of Professor Halford's suggestion; and, as far as I have been able to ascertain, with such seeming success, that the injections and recoveries have all the appearance of bearing the relation to each other of cause and effect.

Professor Halford recommends that the strong liquor ammoniæ be diluted with two or three times its quantity of water before it is injected, and that from twenty to thirty drops be thrown into one of the larger veins. In the case here recorded, I did not deem it judicious to dilute the ammonia procured for me, having found that it was not a very strong preparation. He disapproves of throwing the injection merely under the skin, and believes that after the injection has been made, there is no necessity for resorting to the use of stimulants (*Ibid.* pp. 122 and 124).

Taking the hint from his suggestion to inject liquor ammoniæ into the veins in opium poisoning, etc., I injected this fluid with the most satisfactory results in the following case, the ammonia having been, however, injected subcutaneously, and not into the vein as recommended by him:—

On Thursday evening, November 12, 1869, I received an urgent message to visit Miss B., aged 25 years, who, while suffering from severe facial neuralgia, swallowed through mistake, instead of a tonic mixture, two tablespoonfuls of an aconite mouth lotion.

The mixture and the lotion being upon the dressing-table,

Miss B., in the hurry to get out for some shopping, swallowed, just after breakfast, two tablespoonfuls of the lotion, instead of an equivalent dose of the mixture, her mouth being at the time benumbed by a previous use of the lotion as such.

The mistake was made at 11 o'clock a.m. A cup of tea was next taken by her, and she left home in a few minutes. Several shops were visited on her way to the house where she intended to make most of her purchases, so that the latter was not reached until half-past twelve o'clock p.m. She had barely entered it when she became "alarmingly ill, staggered on attempting to walk, and was seized with a fearful benumbed tingling in the lower half of the back, then in the face and head, while at the same time the tingling in the mouth became more developed. The head felt as if it were distorted by the pressure of a vice, and a sensation of tightness across the nose and eyes was most distressing. In a few minutes more, the legs became so weak, and such tremor came over her, that she could not stand without assistance. She was conveyed immediately to the house of an acquaintance in the neighbourhood, her friends being under the impression that she was too prostrate for the drive home, a much longer distance. She was placed upon a sofa. The debility had become so great that she fainted on three or four occasions in attempting to sit up. Benumbed tingling of both the upper and lower extremities commenced at half-past one o'clock p.m., and vision became very imperfect, a blackness, as she described it, having come over the sight. A little time afterwards, vomiting of an olive-yellow-coloured fluid commenced, and was almost incessant up to seven o'clock p.m. Towards evening she was greatly collapsed, and having fainted when in this state, her friends fancied that she had expired."

Before I saw her she had been given brandy repeatedly, as well as acidulated drinks; but they were vomited as soon as they reached the stomach. Warm jars, also, were applied to the feet, and additional warm clothing was placed over her. There was no indication of mental aberration, and the bowels were undisturbed. I arrived at fifteen minutes to seven o'clock p.m., and found her in a most perilous state. The face was pallid, the pupils were largely dilated, and the extremities of icy coldness. Vomiting was almost constant, and loud eructations were frequent. She had, as she expressed herself, "a dreadful benumbed tingling in the legs, arms, head, face, and in the mouth, the head feeling as if it were compressed by a vice." The pulse was felt with difficulty at the wrists, and the heart's action was weak and irregular. I gave her immediately some warm brandy punch, and, in a few minutes afterwards, a mixture composed of aromatic spirit of ammonia, sulphuric ether, tincture of ginger, and camphor mixture. A sinapism was placed over the heart, and one upon the calf of each leg. The punch and the mixture were not retained upon the stomach.

She was pulseless at ten minutes to seven o'clock, and the extremities were cold as death. The pupils were much dilated, The intellect continued unimpaired.

It being obvious to my mind that death at the heart had commenced, I resolved to inject hypodermically twenty-five drops of liq. ammoniæ; but as the time that would be required to procure my own syringe might be a fatal loss to the patient, I sent to a neighbouring cutler, who was kind enough to send me one in a few minutes.

Seven o'clock p.m. . . . I injected half a drachm of liq. ammoniæ under the skin, corresponding to the insertion of the right deltoid muscle.

Ten minutes past seven o'clock: Vomiting not so frequent; but the stomach will not tolerate the stimulants. She continues collapsed and very cold; forehead covered with sweat, eyes glassy, and pupils are much dilated; tongue pale and contracted; no trace of pulse at the wrists; intellect unimpaired. Injected half a drachm of liq. ammoniæ under the skin of the outside of the right arm, about midway between the elbow and seat of the first injection.

Twenty minutes past seven o'clock: Vomiting at longer intervals; still pulseless at the wrists, and no sign of return of warmth in the extremities; complains constantly of the compressed and distorted feeling of the head; pupils have continued of the same size. Injected half a drachm of liq. ammoniæ under the skin of left infra-scapular region.

Twenty-five minutes past seven o'clock: Pulseless. Injected half a drachm of liq. ammoniæ under the skin a little below the middle of the outer part of the left arm.

Half-past seven o'clock: While my fingers were applied over the course of the radial artery, at the wrist, searching for a pulsation, I fancied I felt a weak, irregular, thready beating of the vessel. In a few minutes, this became no longer doubtful, but gradually stronger and stronger.

Eight o'clock: Pulse fully established, but a little irregular; vomiting has almost ceased; extremities warming; tingling of the skin and compressed sensation of the head and face no longer felt. The tingling, however, of the extremities, although not so decided, did not cease until half-past twelve o'clock next morning; and that of the lower lip continued until November 28.

In cases in which death is to all appearance impending, I should not like to lose time in trying to limit the injection to the vein, as suggested by Professor Halford, and would rather take the chance of a sufficient quantity of the ammonia being absorbed from the areolar tissue before its local action takes place, the chief objection to this procedure. Of the four injections made under the skin in Miss B.'s case, but one caused subsequent annoyance, the cutaneous eschar that resulted from it being about the size of one of our new halfpennies. There being no doubt that the symptoms were caused by tincture of aconite, the important matter to ascertain was the quantity that had been taken. I therefore made the necessary inquiries on the point, and learned that the lotion, if made according to the directions for compounding it, should have contained one drachm and a half of the tincture in every fluid ounce. Of this lotion Miss B. took two tablespoonfuls, as already mentioned.

Whether or not the late appearance of the symptoms was owing to the tincture being a weak preparation, or to the fact that it had been taken immediately after breakfast, or even to some peculiar idiosyncrasy, are matters for conjecture. At all events, when they were established, they were of the most alarming nature, and portended approaching death.

Although I am fully sensible of the wonderful assistance Nature renders to our art, nevertheless I believe that if she had not been herself assisted in this case, she would have failed in maintaining life sufficiently long to allow the influence of the aconite to pass away.

When we consider that none of the stimulants given by the mouth were retained upon the stomach—that Miss B. was almost pulseless at a quarter to seven o'clock, and pulseless at ten minutes to seven o'clock, and continued to be so until about half-past seven o'clock—and that during these forty-five minutes she became weaker and weaker, colder and colder—the saving of her life may, I think, be fairly attributed to the ammonia subcutaneous injections, and for the following reasons:—1. The vomiting, which had been almost incessant up to the moment of the first injection, commenced to lessen in frequency immediately after it, and nearly ceased after the fourth; 2. The disappearance of the pulse from the wrists at ten minutes to seven o'clock, and its reappearance after the fourth injection; 3. And because none of the stimulants that had been given by the mouth were retained upon the stomach, any influence they may have exerted when descending to this viscus, and for the few moments they were in it, not being sufficient to prevent the progressive failure of the circulation.

In addition to the varieties of poisoning for which Professor Halford has recommended liq. ammoniæ injections, it appears to me well worthy of trial in poisoning by chloroform and in hydrophobia. Possibly, if life could be prolonged beyond the time that death usually occurs in the latter intractable malady, it might be averted. Whatever doubt may exist as to the necessity of venous injections in a case like the one I have just narrated, there can be little as to the advisability of injecting the veins in hydrophobia; for, as the injections would probably have to be frequently repeated, such a multiplication of the cutaneous eschars it would be better to avoid.

Sanitary Precautions.—Dr. Whitmore, in his report for November, says: "In the early part of the month I caused 10,000 hand-bills to be distributed from house to house in the parish, containing directions for carrying out proper measures of disinfection in houses where cases of scarlet fever occurred, and from the great success which has attended the measures carried out by the inspector whom I have appointed to the duty, I venture to hope those directions will not be disregarded. I have also circulated bills containing printed extracts from the Acts of Parliament, showing the penalties attached to carrying persons suffering from contagious diseases in any public conveyance, penalties to which both the driver of the vehicle and the persons hiring it are both liable; these have been distributed at the different cab-stands, and have also been posted in various parts of the parish."

The annual concert of the Guy's Minstrels came off on the evening of the 17th, at Guy's Hospital.

COMPOUND COMMINUTED FRACTURE OF TIBIA TREATED BY LONG-CONTINUED IRRIGATION.

By S. K. COTTER, M.B.,
Assistant-Surgeon, St. Helena.

Having lately had a case which bore a strong resemblance to one detailed in the *Medical Times and Gazette* of July 24, 1869, under the care of Mr. Haynes Walton, I beg to send the particulars as follows:—

A sapper belonging to 32nd Company Royal Engineers, of good general health, but not too steady habits, sustained a compound comminuted fracture of left tibia on November 25 last, caused by a stroke from the fore hoof of a horse in full gallop. The fracture ran obliquely upwards and inwards from about four inches from lower end of tibia to about five inches above that. The upper fragment protruded in a sharp point for about an inch through the integument, four inches above external malleolus, where there was a large lacerated wound. The fibula also was fractured at this situation. Both bones at this situation had a thoroughly crushed feel. When seen an hour after the accident, the foot was doubled inwards at nearly a right angle, so as to present the sole of foot to the opposite ankle. Chloroform was administered, and reduction effected by sawing off about three-quarters of an inch of the protruding end of tibia. Minute portions of loose bone were also removed, and compresses of lint steeped in solution of carbolic acid applied to lacerated part, the limb fixed in metal splints, and placed in "Salter's sling." Continuous irrigation was effected by means of a strip of lint hanging out of a vessel fixed a few feet over the limb. The fluid used for this purpose was not merely water, but a very dilute solution of carbolic acid. ℞ Pulv. opii gr. ss. 4tis horis.

November 26.—Got a fair amount of sleep last night. Pulse 84.

27th.—Slept again fairly, but the face is flushed, and he is restless; complaining of extreme thirst; pulse 84.

28th.—Did not sleep so well; restless; pulse 90 and weak.

30th.—Paddings, etc., readjusted. He is still flushed and restless; slept indifferently; pulse 96. ℞ Mist. sennæ co. ℥ jss. Ft. haustus.

December 1.—Bowels moved freely.

2nd.—Restless; flushed; slept badly. A slight erysipelatous flush is apparent on leg, and slightly on outside of thigh. Also there is moderate hæmorrhage from the wound. Pulse 96 and feeble. Ordered ℥ iv. brandy, which induced sleep, and ammon. carb. gr. xl., tinct. cinch. co. ℥ ij., decoct. cinch. flavæ ad ℥ viii. M., cap. ℥j. ter in die.

3rd.—Redness intensifying, and extending upwards to the hip; thigh slightly swelled; bowels free; tongue moderately clean.

5th.—Thigh considerably swelled; redness fixed.

9th.—Bowels again confined by reason of the opium, which he has been taking every six hours. ℞ Haust. ol. ricini c. ol. tiglii, senna mixture having failed.

10th.—Bowels relieved; slept badly; tongue clean.

11th.—An opening has come in popliteal space, and about a pint of pus was thereby evacuated. Pus continues to flow from it; swelling almost completely reduced by reason of this, and restlessness much abated. A bandage applied down the thigh to the opening.

12th.—A boggy feel on front of tibia in its middle third.

13th.—Distinct fluctuation on front of tibia. A free incision made at lower end, and four ounces of pus evacuated with much relief. Popliteal opening discharging profusely.

15th.—Erysipelatous flush fading from the thigh; bowels regular; wound looks healthy; no repetition of hæmorrhage.

18th.—Another abscess at outer side of popliteal space opened, and about two ounces of pus evacuated; opening in front of tibia still discharging.

24th.—Erysipelatous flush has completely disappeared from both thigh and leg. Ammonia mixture discontinued. ℞ Tinct. ferri perchlor. ♏ xv. ter in die.

January 3.—Wound healing centripetally; granulations healthy; irrigation still continued, with occasional intermissions,

10th.—One of the splints removed; wound almost closed.

26th.—The second splint removed; sling still retained; irrigation discontinued since the 10th. The abscess behind the knee and that on tibia continue to discharge moderately.

February 12.—Is able to hobble about with crutches; leg bandaged; union of bones seems firm, no shortening. His appetite and general health are both excellent. All openings in leg closed.

27th.—Various small openings have come along the leg, and numerous spicula of bone, varying in length from an inch to a quarter, have been removed with a forceps. He is placed this day among the convalescents.

Some circumstances rendered the result of conservative treatment doubtful—viz., the severe nature of the injuries, the extreme contusion and laceration, and, finally, the rather battered state of the man's health at the time. The small addition of carbolic acid to the irrigating fluid no doubt aided much, if only to keep the limb clean and sweet, which latter is no trifle in this hot climate. The result is eminently successful; there is not any shortening. The limb is perfectly straight, and the slight impairment of motion which remains is daily diminishing.

ST. MORITZ IN THE ENGADIN.

By F. GREATHEED.

My attention has been called to a letter in your journal from your special correspondent; it is apparently the last of a series inserted under the head of "Letters from St. Moritz in the Engadine" (it should be Engadin). As my words have been quoted, I feel impelled in justice to myself to make some corrections and comments, which I trust to your love of fairness to insert. The *Medical Times and Gazette* of October 16 has only just fallen into my hands, or I should have replied sooner.

Your correspondent has seen fit to reproduce in print a portion of my remarks in the visitors' book at Herr Badrutt's Engadiner Kulm Hotel. As I was known to be resident there, I can hardly think it was a courteous act to have done this without having consulted my wishes on the subject.

It is said by him that the following statement of mine would not bear criticism—"That a temperature of 56° Fahr. would be unbearable in winter in the more humid climate of England." I wrote—"Owing to the extreme dryness of the air, we never found our sitting-rooms comfortable above 56° Fahr., a temperature that would be unbearable in winter in the more humid climate of England." Is it not plain that I mean unbearable in a sitting-room in England? If your correspondent takes the trouble to test the temperature of our English sitting-rooms, he will find that it ranges usually above 60°. By the term "unbearable" I do not mean a cold that could not possibly be borne, but simply that a temperature of 56° would be found so far unbearable in England that a fire would immediately be required and made.

Whether it be an error of the compositor or of my transcriber I do not know, but where my words stating the lowest winter temperature are quoted there is an omission of the minus sign (—) before the "18·5°," and this renders my "viz., 50½° below freezing point," unintelligible.

The following remarks call for some comments:—"I cannot contemplate a winter residence in this valley, practically almost shut off from communication with the rest of the world, the ground covered the whole time with several feet of snow, shut up in a stove-heated room for all but four hours a day (and that on fine days), from which, however, one has to make periodical flights for five minutes every two hours for purposes of ventilation, without regarding it as a modified form of penal servitude."

1. The Engadin is less shut off from communication in the winter than in the summer, since sleighing is more rapid and less clumsy than diligence travelling. Six hours in a sleigh will at any time transport one to the mild region of Chiavenna, whence the Riviera may be reached in fifteen hours. As to the snow, last winter its depth was two feet; some winters, but rarely, it may be four feet. Snow is no more an impediment in the Engadin than in Canada, where, as every one knows, the winter is a most enjoyable and lively season. Amongst the Engadiners there is an immense deal of movement in the winter; they at least do not feel shut off from their neighbours; they take their little holiday trips at this season down into other parts of Switzerland, or Italy and Germany, and it is in the winter that they lay in their stores of provisions and wine for the summer. About fifty sleighs cross the Julier, Maloja, and Bernina Passes each daily. Balls, concerts, and theatricals are the winter amusements of the Engadiners as of other Europeans, and to these may be added the invigorating ones of skating, sleighing, and shooting.

2. Your correspondent does not apparently advocate the necessity of phthisical patients breathing constantly renewed air; otherwise he might perceive benefit in my plan of thoroughly ventilating a room. By the way, your readers must bear in mind that rooms abroad communicate immediately with each other, so that to pass from one to another is not such a severe form of "penal servitude" as the crossing of a passage or ascending a staircase might otherwise make it; but I look upon the constant airing of a room as equally necessary in other places, and under all circumstances. The stoves here, too, not being purely iron (for when iron they are thickly lined with stone) have not so injurious an effect as ordinary English ones, though, like them, they dry the air; this can, however, be remedied by placing a pan of water on them. Our "stove-heated rooms," as I noted, never exceed in temperature 56° Fahr.

3. I would point out the inconsistency that objects, first, to our being "shut up" in a "stove-heated" room, and then to our "periodical flights" every two hours.

Lastly, your correspondent destroys the force of my meaning in using the word "average" when he asserts we were out "four hours a day," and adds in parenthesis, "and that on fine days." I wrote "On an average we were out four hours daily." Some days I was out seven or eight hours; others less; and thus I drew a daily average. I cannot remember during the whole winter a single day on which I could not go out.

In consequence of some sarcastic remarks of somewhat questionable delicacy, I am constrained to observe that I had during the winter the "companionship" of my sister; there was in the hotel one other English lady, a friend, who was ordered to winter at St. Moritz by Dr. Hermann Weber, and who travelled with us. Your correspondent concludes I spent the winter agreeably because I had the society of "three of my countrywomen!"

There is an error as to the duration of the stay of the other English. So far from their leaving before the winter was much more than half over, one family left on February 3, by the advice of the Doctor here, who feared their child might take hooping-cough, which had broken out in the village; the others left on March 8, and we on the 25th.(a) Both began their winter season before we did. I have since heard that the invalids have in each case derived great benefit from their stay at St. Moritz, and these are the terms in which a member of one of these families writes of it:—"November 23, ... It is such a comfort to see my husband so well and strong, thanks to St. Moritz winter and Dr. ———'s kind care. We can never be sufficiently grateful to him for his advice. Is Samaden just the same, and all the dear old places? You would hardly believe what an affection I have for St. Moritz." There is not much of dissatisfaction in such a retrospect.

As one who has derived the greatest benefit from testing this new system, I have no objection to being considered "an enthusiast" in my wish to commend it to others. Had your correspondent so suffered and so benefited, he might realise the feeling which now appears totally beyond his power of conception. But want of imagination need hardly lead him to discredit and disregard facts that *do* exist, though unrecognised by him, and then to treat them as pretexts got up by the "wide-awake Swiss" to induce the "gullible Englishman to spend his winters as well as summers amongst them." So far from this being the case, it is with the greatest difficulty that the proprietor of the Engadiner Kulm at St. Moritz has been persuaded to keep his hotel open during the winter, and, indeed, the Engadiners generally strike one as rather averse to winter invasion, appearing to look upon it as an encroachment on their lawful holiday.

In speaking of cases reported to have been cured by a winter residence here, your correspondent complains of the extreme meagreness of the data and of the absence of well-authenticated information. If he had taken the trouble to put himself into communication with the Medical men of the place, Dr. Berry and Dr. Brügger, he would have had no difficulty in obtaining the information, but I have reason to know that he has formed his opinion without having done so. Further, he would easily have obtained the history of the various cases of Italians who had benefited by their winter sojourn here, together with my own and that of the son of the English clergyman of the place, who had been declared consumptive by some of the first authorities in London, and who has been entirely restored to health by prolonged residence at St. Moritz.

Before concluding, I can scarcely refrain from expressing my astonishment at the disparaging terms in which, in a previous letter, your correspondent writes of the local Physicians, who have in cases of severe illness treated me and my fellow-countrymen with great skill.

St. Moritz, Ober-Engadin, Suisse, November 26.

(a) Perhaps the misstatement grew from the fact that one gentleman, who came in the middle of the winter, professedly only for a few weeks on his way elsewhere, left after a visit of between three and four weeks.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

THE LONDON HOSPITAL.

OPERATIONS.

We attended at this Hospital on Wednesday, December 8, to witness the operations, but were somewhat disappointed to find but a meagre list for this eminently "operating" Hospital. Owing, doubtless, to the near neighbourhood of the Thames, with its docks and wharves, and also to the numerous large manufactories in the close vincity, a far larger number of severe accidents and strangulated herniæ are received here than in any other institution in London. Indeed, the place has acquired a hardly enviable notoriety amongst the Whitechapel natives, on account of its fine field for the display of Surgical skill. Thus we remember hearing of a gentleman journeying down east in an omnibus, asking the conductor to "set him down at the London Hospital," and being considerably dismayed at the free translation of his request roared across the top of the vehicle to the driver, "'Ere, Bill, gentleman wants yer to stop at the slaughter 'ouse!" And this reminds us of another melancholy sign of the ingratitude of the poor towards an institution so full of comfort and blessing for them. We remarked to one of the Surgeons that there was scarcely a square inch of bandage on which the words "London Hospital" were not marked in huge blue letters, and we were informed that this had been rendered necessary by the constant pilfering of bandages by the patients. Moreover, every bottle in which patients receive their physic has this pleasing legend upon it, in raised letters, "Stolen from the London Hospital," and we were assured that, in spite of this precaution, it is not uncommon to see these singularly characteristic bottles containing the vinegar which is so largely consumed at peripatetic oyster vendors' stalls by the thirsty poor of the East-end.

All three cases which were brought into the theatre were under the care of Mr. Jonathan Hutchinson. The first was a girl, aged about 15, with necrosis of the left tibia. Whilst the patient was being put under the influence of chloroform by means of a Skinner's inhaler, Mr. Hutchinson pointed out to the students the nature of the proposed operation. He said that the girl had suffered from symptoms of necrosed bone for three or four months, and although one could rarely tell whether a sequestrum was loose or not by probing, and the rule, therefore, was to wait some eight or ten months, yet that in this case one could do no harm by exploring, and one might greatly shorten the girl's complaint if the bone were found loose. On cutting down upon the part, however, a large mass of necrosed bone was discovered quite firmly fixed, although already beginning to separate at its lower end. Carbolic acid lotion was therefore sponged into the wound, and this was brought together again with strips of lint in the same lotion, and a bandage put over the whole.

A man about 60 years old was next brought in, suffering from angular curvature of the spine and strumous testes—senile struma, as Mr. Hutchinson said it might be termed. It was explained that, besides the usual implication of the epididymis, the body of the right testis was also involved. Another point of interest was that a fungating mass which protruded through the lower part of the scrotum differed from the usual fungus of a strumous testis, in being made up of many small lobes, and in being unusually hard, suggesting almost the malignant nature of the disease. The incision was made behind, instead of the customary anterior vertical cut, and included the skin around the fungating mass. The cord was secured by a clamp before being cut through, the bleeding vessels tied, wire sutures inserted, and the wound dressed with carbolic acid. The testis being subsequently cut across showed a large strumous abscess with thick walls in the body of the organ, besides the disorganisation of the epididymis. There was no sign of malignant disease about it.

The last case was that of a boy, aged about 15, who, Mr. Hutchinson said, had been the subject of what Mr. Simon has termed "necrosial fever." In this disease—which is probably

a form of pyæmia, and is usually met with in young people—severe febrile symptoms usher in a sudden attack of acute peritostitis, affecting several bones at once. In the present instance, the right humerus and left tibia had suffered. Mr. Hutchinson had already excised the elbow-joint, with a good result; and he mentioned, with reference to the tibia, that the prominent budding granulations projecting through holes in the skin over most of the shin were sufficient indication of the looseness of the dead bone, whilst the absence of great thickening showed that the amount of necrosis was not great. The correctness of this opinion was proved when the soft parts were divided, and many thin spicula of bone were withdrawn. A small trephine was applied twice to the head of the bone, together with the free use of chisel and mallet to release some pent-in central necrosis. This wound also was afterwards dressed with carbolic acid lotion.

Strangulated Inguinal Hernia in a Child, aged 3 years—Operation on the Fourth Day—Recovery.

(Under the care of Mr. MAUNDER.)

William B., a thin delicate-looking child, aged 3, was admitted on November 23, 1869, with a tumour, the size of a bantam's egg, in the right groin, and with symptoms of strangulated hernia. The rupture was not congenital, but had been induced when the child was eighteen months old. The bowel was then easily returned, and no truss had been worn afterwards. Four days before admission, however, the swelling reappeared, could not be reduced, vomiting and other signs of strangulation set in, and, after waiting for four days, the boy was brought to the Hospital.

Taxis failing, Mr. Maunder at once cut down upon the neck of the tumour, hoping to find the constriction at the ring. He was, however, forced to open and slightly divide the neck of the sac before the bowel could be returned. The child recovered without a bad symptom, and, when we saw him on December 8, the wound had all but healed.

UNIVERSITY COLLEGE HOSPITAL.

NECROSIS OF NEARLY THE WHOLE OF THE LOWER JAW—REMOVAL OF THE DEAD BONE, INCLUDING ONE CONDYLE—RECOVERY WITH PERFECT MOVEMENT OF JAW.

(Under the care of Mr. CHRISTOPHER HEATH.)

EGBERT H., aged 22, from Aylesbury, was sent to Mr. Heath by Mr. Ceely with necrosis of the lower jaw.

In August, 1868, he had typhus fever in Walsall Union, and during the attack the face became swollen, and discharged both externally and into the mouth. His teeth were all loosened, but none were extracted. In December he was passed on to Aylesbury, and came under Mr. Ceely's care.

On February 24, 1869, patient was admitted into University College Hospital under Mr. Heath's care. The right side of the lower jaw was immensely swollen, and two inches below the angle was a sinus through which a probe passed up towards the base. Another sinus existed below the right canine tooth, and there had been a third below the left angle, which was now closed. The teeth were all more or less loose, and there were several openings in the gums, from which a most offensive discharge passed into the mouth. The man was well nourished and otherwise in good health, though he had when a child suffered from hip disease. On the day of admission, under chloroform, Mr. Heath extracted the molar teeth of the right side which were loose, and, having divided the gum, extracted a very large sequestrum, comprising the right side of the body of the jaw from the canine tooth to the angle, and containing the mental foramen. The hæmorrhage was very free, but was checked by plugging the shell of new bone from which the sequestrum was taken. The plugs were removed on the second day, and the mouth syringed out daily with disinfecting lotion.

On March 3, 1869, under chloroform, Mr. Heath cleared out some small fragments of necrosed bone left in the right angle of the jaw, and then proceeded to remove the necrosed portion on the left side, which extended as far as the second molar tooth. Mr. Heath attempted to save the incisor teeth, it appearing at first that the alveolus of that part of the jaw was not involved. It proved, however, that the disease had affected the whole thickness of the bone, and the teeth were necessarily sacrificed. Upon removal of the sequestrum there was left a complete framework of new bone, with a deep groove extending from the right angle (which was quite hollowed out) to the second molar tooth of the left side. The mouth bled freely, but this was checked as before by stuffing with lint. The patient made a good recovery, and was able to return to the country in a week, the discharge having almost entirely ceased, and there being a deep groove in the new structures of the jaw from which the sequestrum had been extracted.

On June 16 the patient returned, there being a portion of diseased bone on the right side. This Mr. Heath extracted, under chloroform, with some difficulty through the mouth, when it was found to include the angle and a great part of the ramus of the jaw. From this operation also the patient made a speedy recovery, and returned to the country, and was not seen again by Mr. Heath until October, when he returned with yet more necrosis, involving the remainder of the right ramus. This was removed with difficulty on October 30, and the man has not since suffered from pain or discharge, so that it seems that the whole of the dead bone has now been taken away.

Perhaps the most singular feature in this case is the fact that the man has now (December) as perfect movement of the jaw as if no disease had existed, notwithstanding that at the last operation the whole of the right condyle was removed entire with about a third of the ramus. The repair has, in fact, been as complete as possible. When we saw the patient five weeks after the last operation, there was some fulness and prominence about the right angle of the jaw, and when the mouth was widely opened the lower jaw was drawn slightly to the right side; but otherwise all the jaw movements were perfectly performed without any pain or inconvenience, a deep groove in the gum, reaching from the right angle to the second left molar, alone remaining to show the former seat of such extensive disease.

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Medical Times and Gazette.

SATURDAY, DECEMBER 18, 1869.

HÆMOSTATICS.

THE animated discussion which followed the reading of Mr. Cooper Forster's paper on torsion at the meeting of the Clinical Society last week proved, at least, that there is anything but unanimity of opinion on the subject of hæmostatics amongst the Hospital Surgeons of London. It is sufficiently remarkable that on so important and practical a point as the arrest of hæmorrhage there should be such wide diversity of opinion as was displayed in the debate on Friday evening. We learned, for instance, that whilst at Guy's Hospital many of the operating Surgeons had not used a ligature for two or three years, all the vessels being twisted, at St. Bartholomew's the ligature was the almost invariable practice, acupressure having been seldom employed in its place. At the London Hospital Mr. Maunder had extensively employed torsion, and with excellent results; at St. Mary's Mr. Gascoyen did not remember to have seen the practice once; at University College Hospital Mr. Heath had used and been well-content with torsion, whilst at

the Middlesex Hospital alone was any stand made for acupressure. Torsion had not been employed to any extent here, but Mr. Moore expressed himself as too well satisfied with the results of acupressure to need any other method.

It will be interesting to search for the cause of the prevalence of so great a variety of opinions on a subject which has now been prominently before the Profession for some years. It is probable that the ligature was never wholly approved of, although in such universal use during so many years before the publication of Sir James Simpson's work on acupressure. In the first place, it is an undoubted fact—and we were surprised to find both Mr. Paget and Mr. Callender dissenting from it at the meeting—that secondary hæmorrhage does occasionally attend the separation of the thread. Every operating Surgeon must have seen more than one such occurrence, and perhaps no accident is more dreaded in Surgical practice. We have become used to the more than occasional fatal *contretemps* attending the exhibition of chloroform, and both patients and Surgeons are willing to run the infinitely small risk for the sake of the undeniable comfort and advantages of the anæsthetic; but a death from secondary hæmorrhage is still regarded by all with feelings of the liveliest dread and horror, and there can be no doubt that very many Surgeons would be only too glad to adopt any simple hæmostatic free from this rare but terrible risk. For the rest it is clear that the ligature has received of late much unfair abuse. The promoters of acupressure went obviously too far in imputing to the thread pyæmia and erysipelas. It has been abundantly shown—and perhaps most clearly in the practice of ovariotomists—that the distal portions of tied vessels become united with the surrounding living tissues, and eventually incorporated with them. And the proposition that the ligatures are of no little value in affording a vent for the discharges which would otherwise collect in a stump is not fairly answered by the assertion that they are themselves the cause of the discharges they help to drain; for we have constantly seen in London—whatever the Aberdeen practice may be—stumps in which needles only have been employed, failing to unite by first intention. And, on the other hand, it unquestionably happens that a wound often heals practically without suppuration although ligatures are used. Still, it must be admitted that the presence of threads in a wound does tend to retard perfect union, and few would refuse to dispense with them if they felt that the step might be taken with safety. It is a significant fact that acupressure has been tried, and, we believe, fairly tried, in almost all the London Hospitals, and yet at the present moment it is hardly ever witnessed in any of our operating theatres. All seem to have been disappointed in it. Even Mr. Moore, who stood forth almost its only advocate in the Clinical Society, almost invariably ties his vessels in Hospital practice, whilst Mr. Cooper Forster, now so enthusiastic a champion of torsion, was equally warm in his praises of acupressure but three years since. So that it is probable that the admirers of acupressure have gone too far in their unqualified praise, and that some very real causes exist for disappointment beyond the mere mechanical difficulties of the method. Indeed, we have ourselves heard of both secondary hæmorrhage and pyæmia following the application of needles in the place of threads.

Now we are not at all sure that torsion is not being as injudiciously vaunted in its turn as was acupressure. What can be simpler and easier than the art of tying a thread about a severed vessel? And yet we are told by the Surgeons of Guy's that torsion is really far easier than deligation. Of course, in practised hands any method becomes easy, but we are convinced, from personal experience, that torsion is not, at first at least, an easy and infallible process. We have seen again and again bleeding points seized and twisted several times without the immediate arrest of the bleeding. It has been said that this results from the untwisting of the elastic vessel on the removal of the forceps, and at the debate we are discussing Dr. Anstie attributed this elastic recoil of the unbroken vessel to the mistaken lenity of the operator in not using sufficient abruptness, humorously comparing the process to that of twisting a bird's neck. This explanation is probably the true one, and it is, at least, more satisfactory than Mr. Forster's unsupported assertion that such untwisting of a twisted artery is physically impossible. The method as used at Guy's is to seize the open mouth of the bleeding vessel, taking care not to include surrounding structures in the forceps, and vigorously and rapidly give it four or five turns. Mr. Bryant described the sensation of rupture of the inner coats which warned the Surgeon that the process was complete, and he gave a valuable hint as to the treatment of rigid and brittle atheromatous vessels. Being on one occasion vexed to find that three turns sufficed to break off a femoral artery so diseased, he caught the mouth again and twisted it twice only, feeling the inner coats go with the second twirl, and the bleeding was effectually stayed. All the speakers appeared to practise what is known as "free" torsion—that is to say, the simple seizure and twisting of the open mouth of the vessel without the aid of another pair of forceps holding the artery higher up. The common objection to this practice has been that one is apt to loosen the artery in its sheath for some little distance, and so, by tearing the vasa vasorum, to run the risk of sloughing of the end of the artery. This does not seem to have been observed, however, and we imagine that the reason is that the injured extremity of the artery contracts adhesions with and derives vitality from the surrounding living tissues, just as does the part beyond the site of deligation, as we have already pointed out.

The argument urged with greatest force against torsion is that it has already had its day. All the present enthusiasm and zeal in its favour are but the echoes of louder praises sounded many years since; and when men are asked to revive an obsolete custom, they are apt to pause to inquire into the reasons for its disuse. It may be that the true answer to this argument was furnished by Mr. Heath, when he said that torsion needed before everything good eyesight, that Surgeons, finding the difficulties of the method increase with increasing years, quietly returned to the old ligature, and that their pupils, seeing the change in their seniors' practice, and not perceiving the motive, themselves abandoned torsion. If this be the real cause of the failure of torsion in former years, we look forward with confidence to a fairer trial now that the movement in its favour is confined almost wholly to the younger Surgeons. It is certainly not a little remarkable to find a singular unanimity prevailing amongst those who have recommenced the practice. There is no lack of experience, for most of the speakers in the Clinical Society who had practised torsion at all seemed to have employed it in at least six femorals and two brachials each, besides a very large number of smaller vessels; and yet all concur in expressing complete satisfaction, and many affirm that the process is even better adapted for large than for small arteries, since, with equal security in all cases, the larger vessels are more readily isolated and caught. We suspect that what is required to convert Surgeons generally from the use of the ligature to either torsion or acupressure is, first, a scientific exposition and comparison of the closing process in the various methods—a subject of great interest, to which we may refer on a subsequent occasion; and secondly, a number of recorded cases large enough to show some definite difference in the results of the several practices. Once prove that secondary hæmorrhage is less common, that the various lesions grouped under the name of pyæmia are less frequently met with, and that patients recover more speedily and favourably after the employment of one plan than another, and surely neither long-established prejudice nor trifling difficulty in manipulation will prevent English Surgeons from unhesitatingly transferring their allegiance from the ligature to either of its struggling rivals.

SANITARY MATTERS IN NEW YORK.

The good citizens of New York, with its million and a half of inhabitants, are setting us on this side of the Atlantic an example which we shall do well to ponder. They have taken in hand the task of making their grand city a wholesome place of residence, and they are not doing their work by halves. It is only four years ago that a Citizens' Association was organised with a Council of Hygiene and Public Health—a voluntary association, which, by individual sacrifice of time and personal efforts, succeeded in laying bare the conditions which were at that time degrading, physically and morally, the tone of their rapidly growing community. The volume of reports which the Association published, and which we had the pleasure of reviewing, was a model for all future reports of a similar character. The facts which this inquiry elicited were not allowed to remain barren. The Association asked of the people of the City and State of New York "that the needed works of sanitary improvement be immediately begun by competent minds and competent hands." The demand was met, as such demands deserve to be met, in a spirit of earnest determination. A metropolitan Board of Health was constituted, sanitary ordinances were made, and a large staff of Medical inspectors appointed, among whom the several districts of the metropolis were distributed. We have now before us the third of the annual reports issued by the Board of Health. It is a volume of 635 closely printed pages, containing an immense mass of most valuable information, and is most creditable to the body which has put it forth.

What strikes us most forcibly in the pages of the report is the evidence it furnishes of the thoroughness of the work performed by the Board. We may illustrate this by one or two instances. It appears that it is one of the duties of the Bureau of Vital Statistics to keep an accurate register of what are there called "tenement houses"—that is, houses let out in rooms to distinct families. We in London ought to do the same thing, our several vestry authorities being so empowered by our Sanitary Act. In New York the law exists, and is acted on. But more than this, in the same office a separate special history of deaths in tenement houses is made up week by week, and, the number and causes of deaths in every such house being thus recorded, sanitary maps are constructed for future use by the Board and its officers. Over these tenement houses, thus kept strictly in constant view, a control is exercised of a very stringent character, as is evidenced by the fact that, during the single year to which the report relates, no fewer than 3756 actions for penalties were commenced by the Attorney of the Board for violations of the Tenement House Act of 1867. We in London should do well if we copied the mode of procedure adopted in such cases. No time is lost in notices and repeated visits, as with us. When the report of an inspector is received showing a violation, it is at once laid before the Board, and a direction to commence a suit is obtained. Notice of this fact is then given to the owner or lessee, and he is allowed fifteen days in which to remedy the evil complained of. If not remedied at the end of the time, an action is at once commenced for penalties. The violation of the Act is thus an offence for which a penalty can be enforced. The result is that in at least three-fourths of the cases the evils are remedied before the suit comes on for hearing. Owners have to deal in New York with a central board determined that the law shall be obeyed, and not, as amongst ourselves, with bodies of men gathered from a class mostly interested more or less in the perpetuation of that very state of things which it is their business to alter.

Another illustration is found in the establishment of a system of "permits" to parties engaged or desiring to engage in the various business pursuits which, if improperly or carelessly conducted, are, or are liable to become, detrimental to the public health. In all cases applications for permits are referred to sanitary officers, and the Board bases its action upon their reports of personal inspections and their written statements as to the condition of the premises, the manner of conducting the business, and the character of the machinery and appliances used therein, and such other facts as are necessary to a proper understanding of the subject. As all permits are liable to be revoked, this sanitary supervision secures the due attention to cleanliness and to the rules and regulations of the Board. Short work indeed is made of some of the more offensive businesses. Thus the very offensive business of bone-boiling has been banished from the built-up portions of the district. The number of fat-melting establishments has been greatly reduced; the business is only tolerated when conducted with steam-tight tanks and other modern appliances, and it is confidently predicted that at no distant day this business will be conducted in connexion with large slaughtering establishments only. At the time of the report of the Citizens' Association cow-keeping under the most disgusting conditions was a standing nuisance in New York. We read now that the nuisance arising from the practice of keeping milch cows in dark, crowded, and unventilated stables, where they are fed upon swill from adjacent distilleries, has entirely disappeared from the city. During the next year it is intended to remove all the slaughter-houses now existing in the densely populated portions of the city, and to locate them in the immediate vicinity of the rivers, while largely reducing their actual number. And all this is done by a democratic government. It dares and does what we, who pride ourselves on popular local government, dare not attempt. We should very soon hear such proceedings denounced as an arbitrary and unjust interference with private rights.

There are two reports bound up in the volume to which we must advert, both being of high scientific value. One is the report of the Registrar of Vital Statistics, which is illustrated by some well-executed graphic representations of the mortality and death-rate in their relation to atmospheric conditions, which deserve, as they must obtain, a very careful study. It is the counterpart for New York of our Registrar-General's annual report, with the difference, however, that it is so constructed as to have a more direct and immediate application to the sanitary needs of the district. It is the advantage gained by the direct subservience of the Registrar to the Board of Health. The other report is one which we must take an early opportunity of summarising. It is an admirable report upon investigations relating to the Texas cattle disease with reference to certain practical questions in hygiene. We need only say here that it will not lose by comparison with the scientific reports on cattle plague issued by our own Government a few years ago.

THE WEEK.

TOPICS OF THE DAY.

The *Gazette* of Tuesday last contains the announcement that the Queen has been pleased to appoint William Walker, Esq., Fellow of the Royal College of Surgeons, Edinburgh, to be Surgeon Oculist in Ordinary to her Majesty for Scotland, in the room of William Mackenzie, Esq., M.D., deceased. Mr. Walker is Senior Surgeon to the Edinburgh Eye Dispensary, and Surgeon to the Eye Wards of the Royal Infirmary. We congratulate him upon the honour.

Different countries have different manners and customs. It is not to be expected that strangers should appreciate the one or understand the other. We, therefore, will not commit ourselves to any expressed opinion as to the character of the reasons for, or the manner of the dismissal of, Dr. M'Dowel from the Surgeoncy of Sir Patrick Dun's Hospital in Dublin. We only congratulate the Medical Profession here on the fact that in England such a proceeding would scarcely be possible, and we certainly were not prepared for its occurrence so near home as Dublin. The following is a plain unvarnished tale of

Dr. M'Dowel's dismissal, and we believe it to be unprecedented in the history of Medical charitable institutions. In 1865 Sir Patrick Dun's Hospital was converted into a Medico-Chirurgical Hospital, the appointment to the post of Surgeon was vested in the Board of Trinity College, and Dr. M'Dowel, Professor of Anatomy and Surgery, was elected to fill it. On August 14 of the present year a man named M'Keown was brought to the Hospital, having fallen from a scaffold eight feet high. Dr. M'Dowel was sent for, and attended immediately. He found the man perfectly conscious—able to describe his accident—and presenting only a bruise over the right malar bone. Dr. M'Dowel says he examined the man carefully and gave directions as to treatment, but did not think seriously of the accident. The same evening the man became worse, and the resident pupil sent for Dr. M'Dowel, who, however, was from home. The messenger then went for Dr. Butcher, another member of the staff, who saw the man on the same evening, and prescribed for him. On the following day (Sunday) no further message was sent to Dr. M'Dowel, but Dr. Butcher, on the occasion of his visiting his own wards, again saw M'Keown. It does not appear that Dr. M'Dowel received any intimation that his patient had been worse until his visit to the Hospital on Monday morning. The man, however, seemed then better, and the apparent improvement continued until Friday, when grave symptoms set in, and the man died on the following Monday, ten days after the accident. On the Tuesday before M'Keown's death Dr. M'Dowel received the following letter from the Registrar of the Hospital:—

"Sir Patrick Dun's Hospital, Dublin, August 17, 1869.

"Dear Sir,—I am directed by the Board of Governors to refer to you as to the case of James M'Keown, and to ask for explanation in reference to the same. It appears that James M'Keown was brought into the Hospital on Saturday morning, suffering from a severe injury in the head, the result of a fall from a scaffold; that you attended the case in the discharge of your duty on his being brought in, and did not see him again until Monday morning, thus having left a patient, who was suffering from a grave accident, without the benefit of your attendance and care for a space of two days. As the Board are of opinion that the interests of the poor patients require a daily attendance in all cases, and in cases of this kind even more than a daily attendance, they think it their duty to refer the case to you, and ask for any explanation you can give to justify your absence. Yours faithfully,

"Joseph Mullen, Registrar.

"Benjamin G. M'Dowel, Esq., M.D."

The following is Dr. M'Dowel's reply:—

"August 21.

"Gentlemen,—In reply to your letter of August 17, I have to observe that I entirely agree with the opinion you express as to the duties of Hospital Medical officers with regard to the poor. During all my Professional life I have acted on the principle of bestowing on the sick poor the same attention and skill as on the sick rich. I have thus repeatedly visited two and three times daily urgent cases in Hospital, and have always given immediate attention to all requests to visit cases of a serious nature.

"As to the case of James M'Keown, I saw him on Saturday, soon after the accident he met with. From the state the man was in, and the account he himself gave of the accident, I did not regard his case as a serious one (I had given the resident pupils directions to send for me whenever they saw any necessity for doing so, and on Sunday, as there was no message from the Hospital, I concluded there was no necessity for my calling). Later in the day, on Saturday, however, M'Keown became worse, and the pupil on duty very properly sent for Dr. Butcher, who prescribed for him; and as Dr. Butcher saw the case again on Sunday, and gave all necessary directions as to its treatment, the resident pupil did not send me any message to visit the man. I have to admit that I was guilty of an error of judgment in regarding the case as less serious than it proved to be, but this error may well be excused when I state that for four days no symptoms indicating any serious lesion showed themselves. It is now evident that the case will terminate fatally; but everything which could be done was done from the first, to avoid serious consequences, if possible.

"I am, &c. "B. M'Dowel."

To this the Board of Governors answered that they did not consider Dr. M'Dowel's reply was satisfactory—that in their opinion the Surgeon should attend daily, and that an examination of the books had shown that Dr. M'Dowel had not been in the habit of visiting the Hospital on Sundays. They also intimated their intention of sending the correspondence to the Board of Trinity College. This the Board of Governors carried into effect, and the upshot has been that the Provost and Fellows of Trinity College, refusing to hold any investigation, although requested to do so by Dr. M'Dowel, have summarily dismissed that gentleman from his office for what they are pleased to term "irregular and insufficient" attendance. It is to be borne in mind that the sole charge brought against Dr. M'Dowel throughout the whole correspondence is that of not having always visited the Hospital on Sundays. Now, as we have said, we do not presume to criticise this case. We do not know what the rules of Sir Patrick Dun's Hospital may be; we do not know what was the exact nature of the contract into which Dr. M'Dowel entered when he undertook the office of the Surgeon; we do not know what the phrase "irregular and insufficient attendance" may mean in Dublin; but we do know that in none of our principal London Hospitals are patients visited by the Surgeons and Physicians on Sundays except under extraordinary circumstances. We know that in England the Medical and Surgical officers of public institutions are generally admitted to be better judges of how frequently they should visit their patients than are the lay governors, and we also know that to condemn a man of high position in the Medical Profession, and to dismiss him ignominiously from a public post without granting his request for a public inquiry, would, on this side of the Channel, be called injustice.

A New York paper, the *Evening Post*, has attacked the Medical Profession of Philadelphia for their protest against the commixture of the sexes in classes of Clinical Medicine and Surgery. The *Evening Post* says that in New York "male and female students" "pursue their science in undisturbed fellowship." What is meant by "undisturbed fellowship" we do not know. But we learn from the same paper that the laws of the New York State prevent the exclusion of women from clinical instruction, and that, even in New York, there is a party strongly opposed to the intermingling of the sexes. It is also a very significant fact that the Philadelphia Medical Society have determined to exclude from their fellowship Professional men who meet women in consultation or give instruction in the Medical sciences to women. The evils arising from "the lady-doctor movement" must be tolerably patent before the members of a scientific society would commit themselves to such a stringent measure of repression.

The reports of two coroners' inquests are before us, which, as they possess some features in common, we may notice together. In both a suspicion of poisoning was entertained by Medical men who saw the patients, but who had not been in attendance on them from the commencement of the respective illnesses. In both the poison was supposed to have been in the medicine prescribed by the deceased's ordinary Medical attendant, and in both a post-mortem examination and a thorough investigation of the case led the coroners' juries to return a verdict of death from disease or natural causes. One of these cases occurred at Skewen, near Swansea. A woman named Rees was being attended by Dr. Ryding, of Neath, on account of choleraic diarrhœa. Dr. Ryding prescribed chalk, with five minims of laudanum, five minims of chloroform, and a little capsicum and catechu every four hours. Dr. Riding saw the woman on Tuesday and Wednesday, and his partner, Dr. Thomas, saw her on Thursday morning. On the same day Dr. Griffiths, of Swansea, was asked to visit her, and he came to the conclusion, from her symptoms, that she was suffering under an overdose of opium. He wrote to Dr. Thomas to that effect. It appears, however, that she had not

taken any medicine containing opium for many hours before her death, and that she had only been supplied with eight doses in all. The post-mortem examination showed a highly congested state of the rectum and part of the colon, engorgement of the vessels of the brain, and effusion of serous fluid into the lateral ventricles and between the membranes of the brain. In this case the verdict of the jury was "Death from congestive or serous apoplexy." In the other case, which occurred at Liverpool, a Medical Practitioner—Mr. Irvine—was attending the wife of a licensed victualler for constant vomiting depending on liver disease. He had prescribed for her a mixture containing five minims of officinal prussic acid, ten minims of a sedative solution of opium, and half an ounce of creosote mixture, to be taken in water every four hours. It appears that this medicine was taken in larger doses than Mr. Irvine prescribed. After having been under treatment for several days the patient became suddenly worse, and a neighbouring Practitioner, Dr. Falloon, was called in. On his arrival he found the patient dead. He very properly refused to give a certificate, but the next day he wrote to the coroner a letter containing the following sentence:—"However it happened, there is no doubt the woman was poisoned." The post-mortem revealed extensive disease of the liver of apparently very long standing, on which inflammation had supervened, and this was held by Dr. Taylor, who made the post-mortem, to be amply sufficient to account for death. We offer no judgment as to whether in either of these cases suspicion was reasonable, but we would strongly express our opinion that when a Medical man is called to a patient whom he finds to be under the care of another Practitioner, and in a state which may admit of two interpretations, it is his clear duty not to breathe a word of suspicion to the friends or attendants until he has first made known his doubts in consultation to the Medical man originally in charge of the case. Of course, this reticence, which should be absolute, need in no way interfere with the adoption of any remedial measures that may seem necessary or advisable for the safety of the patient.

The present Government has further evinced its anxiety to foster the interests of science and to reward its cultivators by abolishing one of the very few public posts of honour and emolument which have been hitherto regarded as prizes to be bestowed by the nation for successful scientific labour. It is announced that no reappointment to the office of Master of the Mint will be made. The chair of Newton and Graham is to be left empty. The present Deputy-Master, Mr. Freemantle, is to preside over the establishment, which is to be attached to the Treasury.

The recent catastrophe at King's College is traced, by a writer in the *Builder*, to the excavation of the foundations of the Thames Embankment, and to the pumping up of water by steam-engines, which was necessary to keep the foundations clear. The writer says that a perfect river of water has been pumped up and discharged from this subterranean source. The result has been "gradual loosening of the permeable stratum, displacement of the smaller particles, consequent tendency of the larger ones to come down together, disposition of the whole water-supplying area to move—microscopically—infinitesimally, maybe—but still with mathematical certitude." He believes that, if the process be continued in the same way along the banks of the Thames, it is quite possible that St. Paul's may be affected in the same way as Somerset-house.

The case of Davies *v.* Remmett, which occupied a large portion of the law reports last week, was of great Medical interest. A gentleman brought an action against the landlady of a furnished house at Kensington for letting it to him in a state unfit for occupation by reason of the bad state of the drains. There was ample evidence of the fact that the drains were in a very offensive state, and Drs. Habershon and Gull proved that the recovery of the plaintiff's children from scarlatina was delayed, and the disease was aggravated, by the foul state of the air in the house. The jury, however, found a verdict for the defendant, the landlady, and they were perhaps justified, as it was proved that the plaintiff had not complained to the landlady or her agent at the time, and that therefore she had no opportunity of remedying the evil. We regret, however, in the interests of the public, that a precedent has not been established by which some check may be imposed on the practice of letting houses in an unwholesome condition—a practice which, we know, is often the cause of disease, especially amongst domestic servants, who, occupying the basement, are most exposed to emanations from drains.

CHOLERA IN PESHAWUR.

By later accounts from this station there appears reason to hope that the recent very severe epidemic of cholera may have been on the decrease. We regret to observe the announcement of the death of Assistant-Surgeon R. F. Maunsell from fever at Cherat, where he was doing duty with a detachment of the 104th Regiment from Peshawur. He had only been in the service since October 1, 1867.

LARYNGOSCOPIC DEMONSTRATIONS.

Professor Czermak, who is staying in London for a few days, gave some very interesting laryngoscopic demonstrations at the Hospital for Diseases of the Throat, on Thursday last week, in the presence of a large number of Practitioners. Besides many ordinary cases, Dr. Morell Mackenzie had placed at the disposal of the Professor several which particularly illustrated the different phases of syphilis and phthisis. In addition to this, there were cases of growths on the vocal cords, and of paralysis, and one in which one side of the larynx was atrophied. The advantages of the oxy-hydrogen light for demonstration were well exemplified.

THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

The meeting of this Society on Tuesday evening was signalised by what we too seldom hear, though we long to hear it more frequently, a good paper and a discussion worthy of a good paper. The subject was essentially a practical one, and such as was likely to call out our best Surgeons, of whom the author of the paper is one of the most esteemed. The paper was by Mr. George Pollock, its subject amputation at the knee-joint. Mr. Pollock gave his own statistics of the operation, exhibiting it in a most favourable light, and he cited comparatively those of others as well as his own as opposed to the results of amputation in the lower third of the thigh. The features of Mr. Pollock's operation are a long anterior purely skin flap, its base comprehending two-thirds of the circumference of the thigh at the condyles, and its apex reaching five inches below the patella; the other tissues cut at right angles to the length of the limb, and a very short skin flap behind. As was mentioned by one speaker, it is much to be regretted that Mr. Pollock was unable to separate cases of amputation at the knee proper from those of Carden's operation, where the femur is divided; but foreign statistics mix the one so with the other that to separate them is impossible. Mr. Pollock and most of the speakers were strongly in favour of retaining the patella, even if it was partly diseased, as the diseased portion might be removed, and its retention serves to fill the gap in front between the two condyles, as well as to supply a firmer origin to the quadriceps. Mr. Pollock also exhibited an admirable stump formed in this way, and a cheap form of foot invented for it, excellent in its way. Curiously enough, Mr. Birkett said he would have done this operation much oftener had he not been told by the makers that it was scarcely possible to make a limb for the stump. As another speaker remarked, this came of the instrument makers having such bad

stumps to deal with; they could not fit a good one. In the ordinary amputations through the thigh the sharp stump cannot bear the weight of the body, and the bucket of the artificial limb takes its bearings from the pelvis. Here the whole weight of the body could be borne on the broad condyles of the femur without any difficulty. Mr. Holmes referred to another operation introduced by an Italian, where the femur was cut through, and the divided patella adjusted to it, as in Pirogoff's amputation at the ankle. He had done it once, but could not yet give the result. Several Surgeons referred the diminished mortality of amputation at the knee to the greater distance of the site of operation from the trunk, and for the same reason said they would prefer amputation through the head of the tibia to amputation at the knee. Altogether, the evening was a most instructive one, and Mr. Pollock's paper was most warmly applauded.

DR. B. W. RICHARDSON ON THE SCIENCE OF CURE.

The address delivered by Dr. Richardson at the recent meeting of the St. Andrews Medical Graduates' Association contained much of wholesome doctrine, very necessary and suitable in the present state of therapeutical science. We do not endorse all that he advanced, and especially as to the low value which he ascribes to individual experience we differ from him widely, but we heartily applaud the general tenor of his address, and acquiesce in many of his conclusions. Dr. Richardson took as his text the saying of Ambrose Paré, "I treat them, God cures them," but he only allows its truth in a certain transcendental sense, which we suspect was not that which was meant by the honest Huguenot. Dr. Richardson says:—

"The sentiment is specious, because of the many ways in which it may be interpreted; but for my part, after thinking over it for many years as a sentence supposed to embody the whole meaning or meaninglessness of physic, I am forced to throw it aside in all interpretations of it except one, in which it becomes a flat truth—viz., that we are all, as the procedures from a common divine power, the mere instruments of that power, so that the thing we effect is the real agency of the power itself by which we are and do."

If this, however, is the only and limited sense in which Paré's saying has truth in it, the truth must apply not only to our cures, but to our failures. It seems a very startling proposition that when we fail we are "the mere instruments of a common divine power, so that the thing we (fail to) effect is the (failure) of the power itself by which we are and do." But this is the logical conclusion to be drawn from Dr. Richardson's gloss on Ambrose Paré—which gloss, however, carried into the region of morals, would be utterly fatal to any belief in man's free will or free agency, or in good or evil in human conduct. We, on the other hand, can heartily endorse Dr. Richardson's repudiation of the interpretation of Pare's saying which makes it mean that what Medical men do in the treatment of the sick is not, in effect, action towards cure, but is something done for the sake of doing, the issue of cure having no absolute relation to our skill as curers. Such a view he characterised as contemptible, false, and wicked. We thoroughly agree with him. The Medical man who does not act with the sole intention of bringing about the recovery of his patient is a Physician only in name, whatever his attainments may be in diagnosis or pathology. Dr. Richardson divided the main part of his address into a consideration of the obstacles to and the methods for advancement in the science of curing. The chief obstacles to be removed he holds to be "dogmatic generalisation—individual experience that cannot be made general experience patent to all who will learn it, and convincing to all, and fear of popular criticism and popular demand." We might cross lances with him as to what seems to us a low estimate of the value of individual experience, of which all that is or can be real in the art of curing is and must be the legitimate fruit; but we must draw attention to the flat treason which he utters against the time-honoured goddess, the *vix medicatrix naturæ*. He absolutely has lost all faith in her, if he ever had any. He says:—

"The *vis medicatrix naturæ*, what is that? Is it a word or a fact? We dwell upon it as if it were a fact; we dwell upon it as if it were a principle on which we can often rely altogether, and on which we can always rely to some considerable extent. Is this correct belief? In my way of thinking the belief has in the abstract no basis whatever: by which I mean that nature goes her own way without putting out any hand to us for our special and particular aid. If nature were a curer, as is supposed, then all diseases were spontaneously curable, and all other curers than herself were impostors. But nature pursues her way with men as regardless of their infirmities as of their powers; her general course being towards some grand and unknown end in which the individual sinks into his true insignificance by the side of the vastness of her structure, work, design. The physical living being is born, and by the force of birth is launched into space; but from the moment it is on the earth it is under the physical influence of the earth. As when I take a stone and cast it into the air, it moves for a time against gravity, then finds a point in which there is almost balance between the initial velocity and the attraction, and anon begins in gentle curve to fall, until it has fallen and lies, dead; so man, passing through his curve, endowed with initial velocity or motion of life, is making really and always towards the earth. He is weak, the earth is dragging him; he is faint, the earth has drawn him nearer; he dies, the earth takes him to herself. I speak, of course, now only of the physical man."

All we can reply is—How does a cut finger heal? Although, therefore, we do not accept all Dr. Richardson's positions, we can heartily commend the scope, earnestness, and freedom from conventionality of his address. We are sure that our readers will find in it much and good material for thought. It will be published in the forthcoming volume of the *Transactions* of the Association.

AMERICAN INDUSTRIES.

From South Carolina we have some interesting as well as amusing accounts of the industrial resources of the State, which now seems to be emerging from the prostration caused by the fatal war. At the State Agricultural Fair held at Columbia, South Carolina, a variety of new pursuits were illustrated, but the one which seems to have carried away the heads of the assembled people was the production of a textile fabric called *ramie*. This fabric, which under the above name is unknown to us, is said to be already extensively used for mixing with silk and cotton. It has a fine white and glossy appearance, and is produced, as flax and hemp is, from the stalk of a plant. This plant is perennial, and is usually propagated by the root, and it is said these are now selling at a dollar a dozen. Once planted, it lives many years, throwing up from the perennial rootstock an annual growth of osier-like twigs. One enthusiastic grower of ramie calculated he could make four times as much by its cultivation as by cotton, although South Carolina has always been the most famous cotton-growing country in the world. Another gentleman was enthusiastic about cotton—not its growth, but its manufacture. By detailed calculation he showed that he could produce No. 20 cotton yarn, and lay it on the counters of New York merchants at five cents a pound less than the Lowell spinners could do; but this is not all, for the same enthusiast maintains that he can send it to Manchester at 4·75 cents less than they can make it there. Our Lancashire friends must look to their laurels. Starch made from Irish potatoes is no great novelty, but a substance exhibited by Dr. M. R. Clarke certainly deserves a word. This was a manufactured honey which could be sold at ten cents a pound, bee-made honey selling at twenty. The manufactured honey, it is said, looks, smells, and tastes like the real thing. We wonder if it is a product of the nature of Hamburg sherry. A Mr. Passmore exhibited a specimen of brown sugar made from the sorghum. This plant has long been used for the production of a sweet syrup; the novelty lies in its crystallisation. He says it can be made for 5 or 8 cents a pound, ordinary sugar

costing 15 to 17 cents. A specimen of opium, made in the same State, was exhibited, and found of fine quality, but no price was attached, and this, after all, is the main thing. Capital opium can be made in England, but it does not pay. An electric fan for improving the flame of the kerosene lamp, another new textile fabric, okru hemp, native-made hay, and a variety of native wines, were also exhibited. The moral of all this is, to our minds, that South Carolina is to be no longer a solely cotton-growing country. The change in the condition of the blacks renders it necessary to seek some more lucrative crop, and the above attempts show in how many ways the more active of the inhabitants are attempting to attain their object. That the object is a just and commendable one all will admit, even although it entails on us coarser and dearer "shirtings" and calicoes; but it also entails on us the necessity of looking elsewhere for a fabric which has been one cause of England's greatness, and may possibly be one of the means of leading to her downfall.

FROM ABROAD.—OVARIOTOMY, WITH REMOVAL OF THE ENTIRE UTERUS—STATISTICS OF THE LYONS HOSPITALS FOR 1868.

At the meeting of the Académie de Médecine December 7, M. Péan presented a patient who excited great interest on account of the nature of the operation she had undergone. Indeed, M. Péan, one of Nélaton's most distinguished pupils, has already established a high reputation as a famous operator. First coming forward to establish, what had long been denied, the possibility of performing ovariotomy with success in Paris, he next introduced a patient to the Academy whose spleen he had removed, and now exhibits another, not only as an example of success in a complicated case of ovariotomy, but of the far more remarkable fact of having undergone the removal of the entire uterus and its appendages. The case was, indeed, a complicated one, for there was a very large cyst of the left ovary, the uterus was greatly hypertrophied, mounting up above the umbilicus and containing a cyst, while a fibrous tumour occupied the right ovary, and a cyst the right tube. The existence of a movable fibrous tumour, independent of the cyst and of hypertrophy of the uterus, was recognised prior to the operation; but in what proportions these lesions existed could not be ascertained by reason of the adhesions which united the various tumours to each other. Having exposed the ovarian cyst by a long incision, M. Péan commenced, as is his custom, its removal piecemeal (*morcelant*), employing his long cauterising irons heated to whiteness. Having in this way removed a notable portion of the cyst, he came upon the uterus, enormous in size, soft, fluctuating and adherent on every side. The adhesions were very vascular, and any rupture of these gave rise to hæmorrhage, which had to be arrested by heated irons. The only thing that seemed feasible was the removal of the diseased uterus at the same time with the other tumours. M. Péan would not cut through the cervix, as this was excessively hypertrophied, equalling a fist in size, but carried his incision through the vagina. He next passed a double thread by the abdominal wound through the vagina from before backwards, by means of which he practised two ligatures. That on the left side comprised the great ovarian cyst, and the other embraced all the portion of the vagina corresponding to the uterus, together with the right ovary and tube. An incision was made just above the ligatures, and the parts comprised were removed by a considerable amount of traction, the double pedicle thus formed being brought in contact with the abdominal parietes. This portion of the wound was not united, three caoutchouc tubes being inserted. The adhesions were too intimate to allow of the separation of the fundus of the cyst from the wall of the lesser pelvis. It was left *in situ*, but was spontaneously discharged on the thirtieth day, by which time solid adhesions had closed up the vaginal incision, without leaving any perforation where the ligatures had been. The recovery was complete, and when the patient was presented the operation had been performed three months.

From the Report on the Civil Hospitals of Lyons for 1868 some figures may prove of interest. Of Medical patients there were admitted, during 1868, 9108, and of these 1680 died, being 1 in 5·37 at the Hôtel-Dieu, and 1 in 5·55 at the Croix Rousse. This great mortality is in part accounted for by the overcrowding of the wards with chronic and fatal ailments, owing to the absence of a Hospital for incurables. In proof of this, it is found that, of 1236 deaths at the Hôtel-Dieu, 374, or 1 in 3·305, died of phthisis—a proportion very similar to that observed at Paris, where this disease accounted for 3028 of the 10,602 deaths. At the Croix Rousse 78 of the 483 deaths, or 1 in 5·50, were from phthisis. Among acute diseases the chief mortality arose from typhoid fever and pneumonia. Of 187 cases of typhoid treated at the Hôtel-Dieu, 43 died, or 23 per cent., while at Paris 21 per cent. died. From pneumonia 68 deaths occurred in 229 admissions at Lyons, or 31 per cent. —a proportion which, high as it is, is somewhat less than at Paris, where 722 deaths occurred in 2259 cases, or 31·96 per cent. It would be interesting to ascertain the causes of so great a mortality from a disease which is so much less fatal in private practice; but the returns furnish no data with respect to age, complication, duration of the disease, etc., whence some conclusions might be drawn. At the Charité Children's Hospital there were altogether 1826 admissions and 238 deaths, or 1 in 7·67. There were 23 cases of croup, of which 17 underwent operation, 19 died, and 4 recovered. Diphtheria and scarlatina have been but little met with at Lyons, and assumed a mild character.

At the Maternités the mortality varied much. Thus, at the Hôtel-Dieu, there were but 6 deaths in 414 deliveries, or 1 in 69, and at the Croix Rousse 5 in 219, or 1 in 43·80, while at the Charité there were 72 deaths in 1106 patients, or 1 in 15·36; of these 72 deaths 57 arose from puerperal fever, and this great mortality has occurred in spite of the opening of new wards for the prevention of overcrowding. The mortality of newborn infants has not been observed in the same proportion as that of the *accouchées* at the different Hospitals. Thus, at the Hôtel-Dieu, there are returned 413 living infants to 18 dead, or 1 in 22·44, at the Croix Rousse 203 to 7, or 1 in 28·14, and at the Charité 1048 to 85, or 1 in 12·33. Under the head of dead children are included those born dead and those who die during the first week. At the Charité, of the 85 dead 78 were born dead. Syphilis is especially the cause of these premature deaths. Among 1048 children born living at the Charité 21 were syphilitic.

The returns for the Surgical patients are given so imperfectly as to be of little use. At the Hôtel-Dieu 326 deaths took place among 5152 patients, or 1 in 15·80, and 89 in 807 at the Charité Children's Hospital, or 1 in 9. The great mortality among the Surgical cases at this last Hospital is accounted for to some extent by the fact that many severe Medical cases are treated in the Surgical wards. The establishment of a *crèche* for syphilitic cases has been attended with very good effects, as, of 312 infants admitted, 203 have been cured, and 109 have died—a very encouraging result, when the frightful mortality this disease usually produces in young infants is considered. The success is chiefly derived from the cases of the elder infants, the disease being excessively fatal during the first few days after birth. Of 50 infants admitted to the *crèche* in 1868 10 died, and usually within the first week after birth. Of the 20 who were cured the ages varied from three months to a year.

PROFESSOR WILSON, F.R.S.—This distinguished dermatologist has just presented another large and most interesting collection of illustrations of cutaneous diseases to the Hunterian Museum. These are in continuation of those already presented to the same institution by Mr. Erasmus Wilson, and have reference more particularly to syphilitic and cancerous, as well as to the more common eruptions.

REPORT ON THE TEACHING OF THE OUT-PATIENT DEPARTMENTS OF THE LONDON HOSPITALS.

The out-patient department at

Charing-cross Hospital

is, in many respects, well represented.

1. There are three Assistant-Physicians (Drs. Pollock, Silver, and Green) and two Surgeons (Messrs. Barwell and Hird), with care of out-patients. One of the Physicians and one of the Surgeons attend daily, so that each of the Assistant-Physicians attends twice a week, and each of the out-patient Surgeons three times a week.

2. With regard to special branches of Medical and Surgical practice—

(*a*) Cases of skin disease are seen twice a week by Dr. Beigel, Tuesdays and Thursdays at 1.

(*b*) Diseases of women and children, by Dr. Watt Black, three times a week, Mondays, Wednesdays, and Fridays, at 1.

(*c*) Dental Surgery, by Mr. Parkinson, every day, except Saturday, at 9.

(*d*) Laryngoscopy, by Dr. Silver.

(*e*) Ophthalmology, and the use of the ophthalmoscope, by Mr. Hancock, at the Westminster Ophthalmic Hospital, which is close adjacent. Dr. Silver also instructs the pupils in the use of the ophthalmoscope in appropriate Medical cases of brain disease, Bright's disease, etc.

3. The average daily number of cases seen by each Physician and Surgeon in the out-patient department varies according to the day of the week—in Medical cases from 130 to 50; in Surgical cases from 50 or 60 to much fewer; in diseases of women and children about 20.

4. The average length of time of daily attendance varies also according to the day. Dr. Pollock states that he is constantly occupied for four hours and a half on Mondays and for four hours on Thursdays seeing out-patients, whereas on Wednesdays and Saturdays Dr. Green is not detained longer than an hour and a half or two hours. Dr. Silver lectures at half-past three, and endeavours to finish seeing his patients by that time.

The out-patient Surgeons' visit lasts a much shorter time—viz., from one to two hours, or something much less. One o'clock is the hour at which all the out-patient Medical officers attend.

5. The number of students who attend the practice of the out-patient department is not great, four or five being the average. The reason of this is, that the students are discouraged from wasting time over useless cases. The cases best adapted for teaching are selected, and the patients instructed to come on special days at fixed hours.

6. The out-patient Physicians have clerks, on whom, however, devolves no responsibility.

7. As to the nature of the cases most commonly seen amongst the Medical patients, Dr. Pollock observes "that although a large number are of a most uninteresting description, there is a good attendance of useful and instructive cases. Among these latter we find phthisis, pneumonia, pleurisy, bronchitis, epilepsy, hysteria, gout, rheumatism, various forms of cardiac disease, colic, diarrhœa, dyspepsia, cirrhosis of liver, amenorrhœa, menorrhagia, constitutional syphilis, etc. All the above afford ample material for teaching, and are freely used for that purpose." The Surgical cases are much the same as those seen at all other Hospitals—the minor accidents, ulcerated legs, abscesses, fistulæ, hydroceles, strictures, tumours of various kinds, all forms of venereal diseases, etc.

8. As to the amount and kind of teaching attempted, Dr. Pollock takes "a special class of clinical study on Thursdays." Dr. Green has "a special class for auscultation every Tuesday." For this both out-patients and in-patients are available. He also has special demonstrations of cases occurring during the week on Saturday mornings. Dr. Silver gives instruction in case-taking, superintending and correcting the note-taking both among out-patients and in-patients; he also gives demonstrations in the theatre as cases present themselves. Many of the best cases are drafted into the wards for clinical instruction there.

In these classes cases of lung and heart diseases are examined carefully, with a view of "demonstrating the various morbid sounds that may be detected with the stethoscope, and their value as means of diagnosis; to illustrate the various forms of valvular mischief, the seat of the 'bruit,' its significance, etc."

Dr. Pollock complains that there is considerable "apathy in the general body of students" with regard to attendance on out-patient practice, which cannot be fairly attributed "to any lukewarmness on the part of their instructors." Complaints, however, have been made to us that the out-patient Surgeons devote but very little time to the work of teaching, and the accommodation and arrangements for seeing Surgical out-patients certainly seem scarcely satisfactory.

Dr. Pollock suggests that "one great difficulty in the way of utilising the out-patient department for clinical teaching is the large number of patients that attend, and who have to be seen and prescribed for by the Physician or Surgeon himself. This alone occupies so much time, that little is left for teaching. There is some little delay occasioned by the patients being admitted into the consulting-room only *one at a time*, but I am quite convinced that this is the proper course to pursue." The same Physician observes, with reference to any assistance that might be afforded the out-patient Medical officers by Resident Medical Officers or advanced students, "Many of the poor patients wait hours and hours in the hope of seeing Dr. So-and-so, and I believe their disappointment is often very great when they are seen and prescribed for by some one else. Doubtless, however, such assistance would materially increase the opportunities of successful teaching, by drafting off all the uninteresting cases."

"THE NATIONAL HOSPITAL FOR THE TREATMENT OF DISEASES OF THE HEART.

"SUPPORTED BY VOLUNTARY CONTRIBUTIONS, AIDED BY SMALL WEEKLY PAYMENTS FROM IN-PATIENTS,

"*Newman-street, Oxford-street, W. Founded* 1857.

"*President.*—The Right Hon. Earl of Dudley.
Vice-Presidents.—Twelve noblemen, four bishops, several clergymen, and gentlemen.
Patronesses.—Seven ladies of rank.
Treasurer.—W. C. Jay, Esq., Cavendish-square and Regent-street.

"HONORARY MEDICAL STAFF.

Consulting-Physicians.—Dr. Eldridge Spratt, 3, Bolton-row, Mayfair; C. J. Aldis, Esq., M.D., F.R.C.P., 45, Chester-square, Belgravia; R. King, M.D., M.R.C.S., Queen Ann-street, W.
Consulting-Surgeon.—Vacant.
Physician.—Dr. Archdeckne Duncan, 88, Gower-street, W.
Honorary Medical Superintendent.—Dr. Eldridge Spratt.
Resident Physician.—J. W. Moseley, Esq., M.D., M.R.C.S. Ed., and L.S.A. Lond.
Honorary Dentist.—F. A. Eskell, Esq., 25, Hanover-square.
Honorary Solicitors.—Messrs. Lewis and Lewis, Ely-place.
Honorary Secretary.—J. E. Leese, Esq.
Matron.—Mrs. C. Cherry.
Bankers.—Messrs. Barclay, Bevan, and Co., Lombard-street, and the Bank of England, Western Branch, to whom it is respectfully requested cheques may be crossed."

We have quoted pretty fully the title and office-bearers of an institution which is making, as we are told, great efforts to obtain money. Applications are made to persons in Liverpool, and there appear to be some "accredited receivers" in Bath, Messrs. Pocock and Son, 24, Union-street, to whom donations may be paid. The prospectus speaks in glowing colours of the benefits of the institution; but though there is a list of contributions, there is no balance-sheet. It is true that the accounts are said to be audited by Mr. F. Arnold, of Fleet-street, and that they are open to the inspection of the governors. But we of the public, finding appeals for money sanctioned by Lord Dudley and others, beg to ask Lord Dudley, or the Archbishop of York, or Mr. Jay, or Drs. Duncan, King, or Aldis, or Messrs. Lewis and Lewis, to let us know how much they get, how much they spend, how the money goes, and who spends it, at the "National Hospital for Diseases of the Heart." Of whom does the House Committee or Board of Managers consist? We may ask other questions afterwards.

An amateur performance for the benefit of the Birmingham Hospital took place at the Prince of Wales Theatre on Friday last week. The house was crowded, and the performances very successful.

INDIAN SANITATION.

A "Report on Measures adopted for Sanitary Improvements in India during the year 1868, and up to the month of June, 1869, together with Abstracts of Sanitary Reports for 1867, forwarded from Bengal, Madras, and Bombay," has just been issued from the India Office." The appendix contains a series of memoranda by the Army Sanitary Commission on the former report published by the Sanitary Department of the India Office in September, 1868, on the sanitary measures adopted in India up to the end of 1867, and, on the whole, the present volume forms a most valuable addition to the series of reports published annually by order of the Secretary of State for India in Council.

Having already noticed or given abstracts of most of the sanitary reports of each presidency at the time of their publication in this country, particularly of that by Dr. Cutcliffe on the Hurdwar cholera epidemic of 1867, as also of last year's India Office Sanitary Department Report, we shall now limit our abstracts and observations to the more recent information on the progress of sanitary endeavours in India, and to the comments of the Army Sanitary Commission contained in the appendix.

The Army Sanitary Commission, after a careful consideration of the history of the Hurdwar cholera epidemic of 1867, has come to the conclusion that it is most desirable that a special inquiry into the whole subject of epidemic cholera in the East should be undertaken. For this purpose a most elaborate code of "Instructions for conducting an Inquiry into Cholera in India," and copies of registers, have, with the concurrence of the Secretary of State for India in Council, been despatched to India for distribution to Medical officers, with directions that the special inquiry on the whole subject of cholera therein suggested should be at once instituted, and the results reported to the India Office in the form indicated in the communication from the War Office Sanitary Commission. The same form of register, as far as circumstances will permit, is to be used for the record of cholera cases in regiments; and we find, accordingly, that the memorandum of the Army Sanitary Commission and the form of register are published in the Army Medical Department Report for 1867. At some future time we may notice these instructions more fully; so merely say at present that, from our rather hurried perusal of them, they appear to have been framed with that *nimia diligentia* which has been found only too often to stand in the way of practical results. Drs. Cunningham and Lewis, of the Indian and British Medical Services respectively, having previously visited Germany, and having had interviews with Professors de Bary at Halle, Hallier at Jena, and Pettenfoker at Munich, and having made themselves acquainted with the latest inquiries into the nature of cholera and the microscopic character of the organisms to whose existence in the human body cholera has been attributed, proceeded to India early in 1868 to inaugurate a series of investigations into the mode of origin and spread of cholera in the East.

On the subject of the extent to which officers of health in India should be entrusted with executive authority, the Army Sanitary Commission has given an opinion which was transmitted to India by the Secretary of State on April 22 last. It is to the effect that, when theoretical and scientific knowledge on sanitary subjects are combined in one individual with executive ability, common sense, and temper, it might be advisable in certain localities that the possessor of such exceptional qualifications should be employed as the executive head of a health department—that is, the law might direct what is to be done, and he might be intrusted directly with giving effect to the law, but that such powers could not safely be placed in the hands of men whose sole qualifications are merely scientific and theoretical. This combination of consulting and executive functions will be found most desirable and even necessary in the presidency towns and other great cities, where an officer with the necessary qualifications would, in fact, combine in his own person the powers of officer of health and inspector of nuisances; he would have under his control all matters concerning cleansing of streets, impure wells, unwholesome trades, and nuisances of all kinds—everything, in short, in which the direction of labour for a given local object is concerned, and he would see it done. But in cases where new works, involving expenditure present and prospective, are required, he would report either directly or indirectly to the executive engineering authority, who would then provide the plans and estimates for submission to the municipal or other authorities. From the report of the Health Officer of Bombay for the quarter ending March 31, 1869, also at this moment on our table, we find that this subject of the executive functions of the health officer is one of the vexed questions of the municipal community of that city. The exponents of native thought, and foremost among them is the Rao Sahib Vishvanath Narayen Mundlik, are of opinion that the health officer should not combine executive and inspectorial functions. The Health Officer, by the way, in recording *in extenso* the above high-sounding titles, appears to enjoy the sensation of having to some extent avenged himself of his adversary, who had in plain terms defined the executive officer of health as "a superintendent of halalcores (scavengers) on 2000 rupees a month." The liability on the part of an English gentleman of education and ability to the application of such a title, shows how necessary for a health officer in India are the ideal qualifications of common sense and temper insisted upon by the Army Sanitary Commission.

In regard to district officers of health, when such are appointed in India, the Army Sanitary Commission advises that, as a general rule, they also might "have directly executive functions on all matters of cleanliness, examining wells, tanks, &c., and ordering on the spot precautions for preserving purity of water; but in all questions of works they should have simply to report their opinion to other authorities as to the necessity of such works for planning and execution."

The three reports on analysis of water in Bengal by Dr. F. N. Macnamara form the text for admirable papers by the Army Sanitary Commission and by Dr. Angus Smith. Copies of these have been forwarded to the three Presidencies, with directions that reports on the water of each should be prepared and transmitted to the Home Government. It is also suggested that the whole subject of water sources be at once taken up in India, with the view of devising some practical method for providing troops and the civil population with pure water. It has been shown by the examinations already made that the best available sources of water in India are rivers, streams, and lakes, and it is suggested that in some places impounding reservoirs might be constructed, and that in many cases an important source of supply for drinking and cooking purposes at military stations, would be found in the roof water of buildings, if filtered and stored so as to avoid all possible means of contamination. It has been found in some instances that in India filtered water contained more organic matter than unfiltered, the impurity having been communicated by the filter. This was particularly the case with small filters which had been used too long without cleansing or removal. This is a matter to which, we believe, the Army Sanitary Commission has lately directed very anxious attention, with the result, as we are informed, of having come to the decision that, from the extreme difficulty or almost impracticability of thoroughly cleansing any of the filters in general use, particularly in large numbers at remote stations, it would be advisable to re-adopt —with the necessary modifications—for use in military stations in India the old-established and frequently condemned mode of filtration through freshly prepared charcoal and sand, contained in sets of earthen vessels arranged one above the other, the lowest vessel, not containing the filtering material, being the reservoir for the filtered water after having passed through the upper ones.

The connexion between the use of the highly nitrous well-water of Delhi and the production of the sore peculiar to that district is dwelt upon at some length. It is a remarkable fact that during the second year spent at Delhi by the right wing of the 98th Regiment, by whom the water of the river Jumna was used, the attacks of Delhi sore diminished by nearly 5 per cent., while in other corps using the highly saline well-water there occurred an increase of from 15 to 27 per cent. We understand, however, that Surgeon-Major Alexander Smith, of her Majesty's British Medical Service, having devoted much time and study to the consideration of this subject, inclines to the opinion that the Delhi sore is produced rather by the external than by the internal use of the impure well-water; also, that microscopic examination of the tissues, in some instances, appeared to Dr. Smith to indicate a parasitic origin for this troublesome disease.

Water Supply and Drainage of Calcutta.

The Report of the Calcutta Municipality for 1868 has just been received. It is satisfactory to learn that the water supply works, commenced in January, 1867, by the contractors, Messrs. Brassey, Wythes, and Aird, are advancing with a rapidity "truly astonishing," and that there is but little doubt that early in 1870 the inhabitants of Calcutta will be in possession of the comfort of a plentiful supply of pure filtered water, derived, it must be admitted, from the Ganges some miles above the city, and liable to more extensive and revolting

contamination than any water supply source in this country; but with filtering-beds and service reservoirs on a corresponding scale, there can be no doubt that the new water supply will be an immense boon to all classes in Calcutta. The new drainage works, commenced in 1864, have also been pushed on vigorously, and are advancing towards completion, and, so far as they have been tried, have answered their purpose, and have improved the sanitary condition of the areas into which they have been introduced. Nuisances have been diminished—public latrines have been introduced for the poorer classes—the proper cremation of Hindoo corpses insisted on, and it may now be confidently stated that no dead bodies are thrown into the river from Calcutta. "The justices confidently assert that any person who has been absent from Calcutta for a few years would, on his return now, be struck with the improved appearance and sanitary arrangements of all the southern portion."

There had, however, been an increase of 1636 in the mortality as compared with the previous year; the total number of deaths was 13,733. The excess is attributable to cholera, which had been more prevalent than in former years. The total deaths from all causes in 1868 amounted to 31·9 per 1000, of which cholera caused 9·7 deaths per 1000. In 1867 the deaths from all causes were 28·1, and from cholera 5·3 per 1000.

Dr. Macrae, the officiating Health Officer, remarks that this death-rate for Calcutta does not contrast unfavourably with that of the great cities of Europe, and even of Great Britain, where the rate of mortality ranges from 23·39 in London to 26·43 in Liverpool.

The past five years have certainly been remarkable for the advance which has taken place in all sanitary matters in India, and will form a by no means unimportant era in the history of our connexion with and tenure of that country. The first steps only have been taken, but they have been taken energetically and well, and there is every reason to hope that the improved sanitary conditions now inaugurated, may lead steadily onward to moral amendments, and eventually to the complete civilisation and ultimate self-government of India.

REVIEWS.

On Chronic Bronchitis, especially as connected with Gout, Emphysema, and Diseases of the Heart. Being Clinical Lectures delivered at the Middlesex Hospital. By E. Headlam Greenhow, M.D., F.R.C.P., Senior Assistant-Physician to the Middlesex Hospital. London: Longmans. Pp. 236.

As Dr. Greenhow remarks, some diseases claim attention on account of their rarity and obscurity; others, again, by their frequency and consequent importance to the majority of Practitioners. He has assigned most justly the latter cause as the *raison d'être* of his book, and he has treated of the disease in four phases—first, what we might call simple chronic bronchitis; and, secondly, as connected with or arising from gout, emphysema, and heart disease. Perhaps a more logical grouping might have been attained; at all events, this one is practical.

First, then, of bronchitis arising from exposure or mechanical irritation. This group Dr. Greenhow reduces to a minimum by showing that in a great majority of instances there was some family or personal history of other diseases predisposing to or connected with the bronchitis—especially gout. Now we are somewhat inclined to believe that Dr. Greenhow places too high a value on some of these concomitants. At one spot he says that acute bronchitis may arise from severe catarrh, but when the disease becomes chronic, there is almost invariably found to exist also a predisposing cause; in another, "even a mild attack of bronchitis may, especially in persons whose health is otherwise not perfect, become the starting-point of a chronic bronchial affection." Are we to hold, then, that the predisposing cause is almost invariably specific, or may it consist in health not otherwise perfect? We confess our predilection for the latter view; for we find chronic bronchitis quite as common in parts where gout is unknown as where it abounds. It is well known that if a series of men be exposed to the same cold, many will be differently affected—one will have bronchitis, another rheumatism, a third neuralgia, and so on; but we apprehend that the bronchitis would be more readily induced by previous lung disease—say of the bronchitic kind—than by anything else, just as with the neuralgia and the rheumatism.

That, however, Dr. Greenhow has been able to point out a large number of cases of specific bronchitis associated with gout, no one will seek to deny. And we should be the last to deprive him of this credit, for out of the ninety-six cases dealt with no fewer than thirty-four had a gouty history, attached either to themselves or their relations. This, we think, read aright, means that gouty people are very liable to bronchitis, rather than that gout is one of the most common predisposing causes of bronchitis. Undoubtedly, however, Dr. Greenhow has shown that a connexion between the two does exist, and it is our business to utilise the knowledge. There is one thing Dr. Greenhow might have done for us. In closely connected diseases the impress of the one is generally manifest in the other, and this is well known to be the case with gouty dyspepsia—is there any such in gouty bronchitis? Perhaps in Dr. Greenhow's narrated cases there is a slightly greater tendency to periodic dyspnœa than in the more common sort; is this the mark of the gouty impress? It would, perhaps, seem to be so from what subsequently appears. But yet another point has been made by our author; he has shown the frequent association of scaly eruptions with both gout and bronchitis, in certain instances the one alternating with the other. All this is very interesting, and it is very practical, and it does Dr. Greenhow great credit.

The next subject is emphysema, which is well handled. First of all the views of Laennec, those of Gairdner, and those of Jenner are reviewed. The first theory, that emphysema depends on inspiration for its production, is rejected. The theory that emphysema is *always* compensatory is also rejected, whilst it is admitted that, in certain cases, partial emphysema does take place in the healthy portions of otherwise diseased lungs. The occasional origin of emphysema in this fashion cannot be, we think, denied; at the same time, cases brought forward by Dr. Greenhow would seem to show that expiratory efforts, not necessarily coughing, acting on a somewhat degenerated lung, will produce permanent dilatation of the air-cells. It is evident, in this case, that the degeneration must be the primary source of the emphysema, and the author seeks its source also in the gouty constitution. But what is its nature? It is easy to say fatty, because the insufficient nutrition which the dilatation implies will necessarily follow. But what was the primary state previous to distension? On this point Dr. Greenhow is silent. He says that the specific nature of the primary change which renders the air-vesicles prone to dilatation must vary, but that is all, and it must not be forgotten that his theory necessitates such a degeneration, which is not the case with Gairdner's. Our author thus recognises three forms of emphysema, that depending on the unascertained degeneration—viz., constitutional or substantive emphysema—bronchitic emphysema, and senile emphysema. Certain cases related in support of the first form of emphysema are highly instructive. Of bronchitic emphysema the author recognises two varieties, according as he imagines the lung to be degenerated prior to, or simultaneously with, the development of the bronchial inflammation, or whether the dilatation of the air-sacs depends on purely mechanical causes. Then, again, these two causes may act in common.

The two last chapters are occupied with a class of cases unfortunately too well known and too hopeless—bronchitis associated with cardiac lesions, whether of the left side or of the right side. They are known to all Physicians, and although for the time being they not unfrequently get well, yet they almost invariably prejudice the sufferer's chance of prolonged life.

Now, as to the general character of the book, in our opinion it savours strongly of the Medicine of the age, careful clinical research, interspersed with imperfect therapeutic memoranda. To take two of the most painful features of the diseased conditions which Dr. Greenhow has so thoroughly mastered—cough and dyspnœa—were there any means of beneficially influencing these without prejudicing the diseased condition, it would be a great boon to sufferers. But Dr. Greenhow does not help us. Then, again, in dealing with bronchitis associated with heart disease, he does but hint at bleeding in connexion with one case where an attack of hæmoptysis afforded great relief, whilst of another potent agent in a certain number of these cases—we mean senega—he says nothing.

Spare the rod and spoil the child. We have criticised Dr. Greenhow's work chiefly because we esteem it highly. The chapters on gouty bronchitis, on emphysema, and on emphysematous bronchitis we especially commend to our reading brethren, who will find them both original and suggestive.

The foundation-stone of the Rotherham Infirmary will be laid early in the new year, with Masonic honours, by Earl De Grey and Ripon, Provincial Grand Master of West Yorkshire.

GENERAL CORRESPONDENCE.

CHLORAL.

LETTER FROM DR. HENRY BENCE JONES.

[To the Editor of the Medical Times and Gazette.]

SIR,—A note which I have received from Professor Dubois-Reymond, dated December 12, contains the following passage, which may be of interest to some of your readers:—

"Liebreich has recently added a very interesting fact to our knowledge of chloral. He takes three rabbits of equal size, and into one (A) he injects two grammes of chloral. Into another (B) he injects 0·0015 grammes of strychnia. Into the third (C) he injects first the same dose of chloral, and, after the chloral has begun to act, the same dose of strychnia. (The injections are made under the skin of the back.) The chloral is injected in four portions, and the strychnia at once. Two grammes of chloral for a rabbit of 1·5 kilos. are equal to 100 grammes for a grown-up man of 75 kilos. (a dose absolutely mortal). The rabbit (A) collapses very soon. Touching the cornea seems to cause contraction of the lids, and (A) dies after perhaps half an hour. The dose of strychnia administered to (B) is also absolutely mortal. After eight minutes the strongest tetanus ensues, and generally after twelve minutes the rabbit dies, and half an hour afterwards it already becomes stiff.

"Now, the new fact is this. The rabbit (C) which has received the dose of strychnia after that of chloral very soon revives; never shows a distinct attack of tetanus; one hour and a half after the beginning of the experiment gets upon its legs, and soon after will feed as though nothing had happened.

"I have witnessed the experiment up to the stage when A was dead, B dead and stiff with rigor mortis, and C rallying and trying to sit up.

"So we have the extraordinary fact of the action of chloral and strychnia interfering with one another, and strychnia proving an antidote in the case of chloral poisoning. The reverse does not happen, because the action of strychnia is too rapid compared to that of chloral. The animal poisoned with strychnia dies of tetanus before the chloral is fairly brought into action.

"Liebreich was led to these experiments by the result of a strong dose of chloral administered to a patient with idiopathic tetanus. The jaws, which had not been opened for a week, relaxed, and the patient could take some food. Eventually, however, he died."

I am, &c. HENRY BENCE JONES.

NEW CLAMP FOR HÆMORRHOIDS.

LETTER FROM MESSRS. SCHMIDT AND ROBINSON.

[To the Editor of the Medical Times and Gazette.]

SIR,—Mr. Sydney Jones's clamp, of which a description and drawing were given in the *Medical Times and Gazette* of December 4, is so constructed that the edges of the blades are always parallel, from the point of greatest separation—say one inch—to that of perfect approximation. This perfect parallelism of the blades is not effected by Mr. H. Smith's clamp, with which Mr. Sydney Jones was not unacquainted. The difference may be clearly seen by comparing the two instruments. The shape of the clamp described on December 4, and its scooping action, are of great advantage in its application. The shape of the scissors has been necessarily modified; although not simple, they are thoroughly effective. Apologising for trespassing on your valuable space, We are, etc,

267, Strand, W.C. SCHMIDT AND ROBINSON.

DEATH OF M. ROBINET.—This distinguished member of the Section of Pharmacy of the Académie de Médecine died on the 2nd of this month. Formerly president of the Academy, and then one of its vice-presidents and most active members, and holding various appointments in connexion with public hygiene, he continued, although in his seventy-third year, actively employed to the last. Indeed, the immediate cause of his death was the fatigue he incurred in repairing to the Pharmaceutical Congress held at Vienna. He was the author of numerous works and reports, and, at the time of his death, was engaged in analyses for the completion of his great *Dictionnaire Hydrographique*.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

TUESDAY, DECEMBER 7, 1869.

RICHARD QUAIN, M.D., President, in the Chair.

DR. MURCHISON, on behalf of Dr. Bristowe and himself, read an elaborate report on Dr. Moxon's case of Pulmonary Embolism. They were of opinion the obstruction had caused death, but they thought there was no sufficient proof of the motion of the clot from remote parts. There were many clots, not a single one, and these may have been minute emboli, or may have been the result of thrombosis.

Mr. CALLENDER and Mr. ARNOTT reported on Mr. J. D. Hill's specimen of Diaphragmatic Hernia. Generally, they agreed with Mr. Hill's description. The stomach was contained in a sac of the diaphragm. There was no evidence as to the time or cause of displacement.

Dr. MURCHISON narrated a case of an Impacted Gall-stone, three-quarters of an inch long, situated at the end of the bile-duct. The patient was a lady, aged 45, and had been seen by a good many men before coming to Dr. Murchison. Different opinions had been given, but there was a good history of gall-stones—colic, jaundice, etc. About Christmas last she had an attack of colic, with a daily return till April, but there was no jaundice. She then became much worse, and jaundice supervened and continued till October, when she was seen. After this she again became worse, and one day she felt as if something had given way, and she brought up some blood. After death the mucous membrane of the duodenum was found to have given way, and the end of the stone lay exposed in the duodenum. The cystic duct was enormously distended; probably the stone lay there till the jaundice finally supervened.

Mr. DAVY exhibited the Deep Flexors of the Fingers Cut across by Accident. The patient got quite well, but the fingers, remaining useless, had to be amputated. Also the Ruptured Spleen of a patient who had been run over in the street, and brought to Westminster Hospital. One part of it seemed to have been crushed off, and another to have been nearly separated. There were also four rents in the liver, and eight ribs were broken, but the lungs were not injured.

Dr. CRISP exhibited a Urinary Calculus of a rounded form, and weighing 400 grains, from the bladder of a Japanese dog. The remarkable circumstance connected with the case was that the animal was a female. A table containing a list of urinary calculi from various animals was quoted, and one fact was mentioned that was thought to be of great practical importance—viz., that no urinary calculus had been found in a purely carnivorous animal. Dr. Crisp believed that well-directed experiments upon the lower animals would throw much light upon the origin of renal and vesical calculi in the human subject. He (Dr. Crisp) could produce generally fatal obstruction in the male sheep by a peculiar diet (sugar and beans), in consequence of a large amount of gravelly deposit in the bladder, although the presence of solid calculus in the urinary bladder of this animal was extremely rare.

Dr. CRISP also exhibited several specimens (in wax and in alcohol) of Imperfectly Formed Ova and of Diseased Ova in Hens kept in the neighbourhood of London, congested and inflamed oviducts being a common cause of the first-named condition.

Dr. LEARED exhibited a specimen of Cancer of the Lung, from a labourer who had shown many of the symptoms of phthisis, but there was a tumour in the axilla raising the scapula. Dulness gradually extended till death. The two upper thirds of the lung were very soft, looking like encephaloma. They had found cancer cells in the sputa. Some of the ribs were absorbed by the mass at certain points. Referred to committee.

Dr. HILTON FAGGE brought before the meeting a female exhibiting certain specimens of scleriasis, a link between keloid and morphœa. She had been some months ill, and had exhibited first some induration or thickening at the back of the neck. This had gradually extended to other parts, and now stretched over the cheeks and forehead, the arms and back, the chest and abdomen. The woman was rather older than was usual in such cases, but she presented a young appearance owing to the obliteration of the marks on the face. She had sensation in these parts as usual. In front of each elbow was a unique band extending upwards and downwards—a cicatrix-like structure, as in Addison's keloid. The patient was improv-

ing. The cuticle on the band was elevated, not smooth. She was taking cod-liver oil, and had warm baths.

Dr. Crisp asked what relation this had to the brawny condition seen in some young children.

Dr. Faoge had not seen it in infants—in them there was œdema. Rasmussen's notions as to these indurations were erroneous: he referred to quite another class of cases.

Dr. Tilbury Fox said these cases had nothing to do with elephantiasis. The spots were brown, with anæsthetic centres. He thought the condition due to proliferation of the subcutaneous cellular tissue.

Mr. Weeden Cooke showed a girl, aged 17, who at the age of 4 broke her leg and had limped since, the limb not being properly set. She had a curved spine and bad health. Three years ago there began a thickening of the skin of the left thigh, gradually extending downwards to the knee. The skin was very thick, and could be pulled out a long way from the muscles. The patient had at one time glycosuria, but had none now.

Dr. Tilbury Fox thought that by-and-by all these affections might be brought into one group, designated by hypertrophy of the subcutaneous connective tissue. In this case there was not much contraction, and each case varies with this. The lymphatics might have something to do with it.

Dr. Murchison said a similar case was recorded in vol. xvii. of the *Transactions* by Dr. Wright.

Dr. Pye Smith exhibited a specimen of Suppuration of the Heart, removed from a subject in the dissecting-room. There were many small abscesses in the walls of the organ. There was also a large mass of connective tissue in the left hypochondrium, uniting the viscera. The centre of this was softened, and was something like a syphilitic lesion. The liver was puckered with deep cicatrices, and the testicles appeared syphilitic.

Dr. Pye Smith also showed the Spleen of a Chlorotic Girl who had suffered from diarrhœa and depression with excessive anæmia. The immediate cause of death appeared to be diphtheritic inflammation of the colon. There was also a slight affection of the fauces. There were no symptoms of the latter during life. The heart was fatty. The spleen weighed 12 oz., and was dark, with light nodules scattered through it; these were about the size of a pea (some bigger), and looked like emboli, but were surrounded by no red halo. The Malpighian bodies were distinct. There was no affection of the lymphatics. Most likely the bodies were adenoid, and the disease an anæmia lymphatica.

In reply to Dr. Murchison, the exhibitor said the blood clots were pale. There were not many white corpuscles.

Dr. Bastian thought leucocythæmia alone enough to raise temperature. In a simple case, recently under Dr. R. Reynolds, the temperature was 100-101° Fahr.

Mr. Lawson exhibited a specimen of cystic disease of the breast from a woman aged 60. It had enlarged two years, and had attained such a size that mechanical support had to be adopted. Some parts of the tumour were dusky. Only two cysts were found in the centre of the tumour, apparently primary.

Mr. Lawson also showed a fatty tumour, removed from the margin of the anus, as the patient found it extremely inconvenient when sitting down.

Mr. Pollock exhibited for Mr. Wilks, of Salisbury, some specimens of diseased bone removed from the elbow by excision. The boy had fractured his humerus at the lower part; subsequently several pieces of bone were removed, but afterwards resection was had recourse to. The boy did well, a very large amount of bone being renewed.

Dr. Thomson Dickson exhibited two specimens of Dura Mater from insane patients. In one the brain was wasted and the dura mater thickened. In the other the dura mater was thinned, and closely adherent to the skull. The falx was ossified, and there were nodes on the occipital bone. This patient had been subject to outbreaks.

Mr. Pick showed a Tracheotomy Tube which had been retained *in situ* for five years. In 1864 the patient had syphilitic laryngitis, and laryngotomy was performed. On the twelfth day he could breathe by the larynx, but, being nervous, was allowed to retain the tube. This year he came with bronchitis, and it was found that the tube had not been moved for two years. It was taken away, and the man breathed well without it. Most of the tube was gone.

Mr. Nunn thought the respiratory movements wore out the tubes. In one year a man had worn out five or six tubes.

Mr. Hulke did not think friction necessary, as the plugs formerly used for the nasal ducts were frequently found to corrode in the same manner, so much so as to fall into the pharynx.

Mr. Croft had seen a case in point corroborating this at St. Thomas's.

Mr. Pick showed a Fractured Humerus in which the fractured portion had been carried upwards and fixed at right angles to the bone. On it a new articulatory facet was worn.

OBITUARY.

EDWARD HEADLAND.

The grave has just closed over the remains of one of those members of our Profession whose career deserves to be recorded in our pages. Edward Headland was born at Tonbridge in 1803, and was educated at the grammar school of that town, the head master of which at that time was Dr. Vicesimus Knox. Mr. Headland's father, who was a gentleman of position, having died suddenly, Edward was thrown early on his own resources. Having served an apprenticeship with Mr. Morris, of his native town, he came to London, studied anatomy under the celebrated Joshua Brooks, and entered a student at St. George's Hospital.

He commenced practice in Featherstone-buildings, Holborn, removed thence to Guildford-street, and subsequently to Upper Portland-place, where he died, on the 8th inst., at the age of 66, having been actively engaged in the practice of his Profession for forty-five years. Mr. Headland's career as a Practitioner is identified with a wholesome change in the position and practice of what was called at the time the "subordinate grade." He commenced, as did all his brethren, with "physicking" his patients "*à la* Pennington," who was then in the full zenith of his fame. But he soon became disgusted with this vicious and degrading system. He was one of the foremost, if not the first, to insist upon being paid for his services as a "Physician and Surgeon," and not for the medicine he supplied. This determination on his part was not so much the result of policy as of a honest conviction that the abuse of "physicking" was a serious evil to the public as well as to the Profession, for though he had no faith in drugs, he had great confidence in "medicines." His practice, therefore, in this particular was a model one. He employed medicine when he thought it necessary, but never resorted to it as a mere *placebo* or as a means of remuneration. He scorned all such paltry imposition on his patients. But in the result his mode of practice proved eminently serviceable to himself. He soon became known for his talents, acquirements, and independence of character, and at a comparatively early period in his career was one of the leading "General Practitioners" in the metropolis. If his predecessor, then in popular favour, was the "founder of homœopathy," Headland was one of its most strenuous and able opponents. This was due not more to his sagacity and powers of diagnosis than to his intimate and profound knowledge of therapeutics. This knowledge he enunciated in principles, and these he laid down with a precision and ability which entitles him to be regarded as a master in this branch of our Profession. Mr. Headland was a prominent Fellow, at one time President, of the Medical Society of London, which then held its meetings in Bolt-court, in the house bequeathed to the Society by Lettsom, to whom also he left his splendid library. At the time of which we are speaking, the Medical Society numbered amongst its Fellows some of the most distinguished members of the Profession, and Edward Headland was in the first rank. The debates were carried on with great spirit. In fact, it was the chief arena then open for the display of discussion in the Profession. The Medico-Chirurgical Society all but ignored debate, and the Westminster was so liberally constituted that it admitted to its ranks any Medical student who could obtain a recommendation and pay his guinea for admission. We have no desire to underrate the important part which the Westminster played in the progress of liberal ideas and of practical Medicine; but the Medical Society was the "House of Commons" of the Profession, in which "constitutional" ideas were uttered and promulgated. Seldom was there a debate thirty-five years ago in which Edward Headland did not take part; he was always clear in his exposition of a subject, and at the same time a formidable opponent. In that assembly, though not the "Rupert," he might be called the Cromwell of debate. Energetic, cool,

often sarcastic, he was listened to with profound attention and respect; and it was no uncommon event to see the President doff his three-cornered hat, and vacate his chair, to answer, on equal terms, the accomplished and able orator. The writer of this sketch cannot refrain from paying his tribute of admiration to the kindness and independence of Headland at this period. The clever but imprudent Lambert had been shortly before expelled almost unanimously from the Society in consequence of his report of a case of lithotomy which had been performed at Guy's Hospital by Mr. Bransby Cooper, and which had given rise to the celebrated trial of "Cooper *v.* Wakley." The writer, then a student, was the successor of Lambert, and obtained permission to report the proceedings of the Society on the condition that he sat upon a back bench, and was to receive no assistance in his labours either from the Fellows of the Society or from the Secretary. At the present time, when every facility for reporting is given, it is difficult to realise the wretched position of the reporter of that day. Afraid to communicate in any way with the representative of a journal which was then in such disgrace, the Fellows either shunned him, or treated him with a studied coolness. The first man to break through this *cordon* was Edward Headland, and the writer of this tribute to his memory can never forget his kindness upon that occasion. He was anxious to get some information from Mr. Headland with respect to a paper he had read at the Society, and called upon him for that purpose at his house in Featherstone-buildings. He dreaded the interview. He had formed an opinion that the man he was about to visit was haughty and unapproachable. What a mistake he had made! He was received not only with courtesy, but kindness; the assistance he asked for was rendered, and a friendship was formed which terminated only with the decease of the principal actor in the scene nearly forty years after.

We have said that Headland had great faith in remedies—it may be added in their special action—and he lost no opportunity of proclaiming this, whether in public or in private. He gave the results of his experience to the world in his Fothergillian essay "On the Action of Medicine in Disease," one of the few "essays" which may still be studied with advantage. Mr. Headland had liberal views in respect to reform, and, though he took no prominent part in the discussion of that subject, did much by the example he set in his own person to forward the cause.

When Pennington retired from general practice he practised as a Physician; but Headland remained to the last in the "subordinate" grade, though, in truth, he had long ceased to dispense medicine or attend obstetric cases. The fact was a degree could add no lustre to his position, which was of the highest, and he was contented to remain, as was "the Great Commoner," amongst those with whom his life had been passed. This was owing probably as much to his pride as to his love of those whose interests had always been identified with his own. Mr. Headland married in early life, and has left two sons and six daughters. His eldest son Frederick is one of the Physicians of Charing-cross Hospital, and author of the well-known and able work on "The Action of Medicines," which has passed through several editions. His second son is rector of Broadway, Dorset. Two of his daughters are married to Medical gentlemen.

In person, Mr. Headland was above the middle height, of a fine presence, and remarkably intelligent expression of features—albeit somewhat cynical. He dressed in the Professional style, and always wore a white cravat. In estimating the character of Edward Headland, we must pay a just tribute to his thorough independence, to his consistency, and to his integrity. He was independent, in the noblest sense of that word, when he was struggling with difficulties in his comparatively humble abode in Featherstone-buildings; he was independent in his aristocratic house at the West-end, when he, still a "general Practitioner," was on equal terms with the first "Physicians" and "Surgeons" of the day. He was consistent in his determination to assert for those of his class a position which before his time they had never occupied. He was consistent in carrying out his opposition to the drugging system, with all its baneful consequences. His integrity was never called into question. To say he had no faults would be inconsistent with human nature. He was somewhat too dogmatical—somewhat, perhaps, obstinate, and even haughty; but those who knew him best will not fail to testify to his real kindness of heart, and his claim to be regarded as

"An honest man the noblest work of God."

J. F. C.

NEW INVENTIONS.

AN OPHTHALMOSCOPE WHICH MAY BE USED WITHOUT DARKENING THE ROOM.

By enclosing the reflector and lens in a tube to the side of which is adapted a small paraffin lamp with a large plano-convex lens, Dr. Beale has succeeded in arranging an ophthalmoscope which can be used in an ordinary room. The arrangement is such as to effectually exclude any diffused light or reflections from the space between the lamp and the mirror. The illumination is so strong that it is not necessary for the tube to fit at all accurately to the margin of the orbit, and, indeed, the instrument can be used quite successfully even if two or three inches traversed by daylight intervene. The reflector is fixed in the tube at the proper angle, and the lens is made to incline a little so as to remove the reflections upon either surface out of the field of vision. With this instrument the optic disc is at once brought into view without any difficulty, and as the lamp moves with the mirror and lens, inexperienced persons can use the apparatus successfully almost upon the first trial. The instrument weighs nearly a pound, but it can be made very much lighter. The lamp is the same as that which Dr. Beale has adapted to the hand microscopes he used for the demonstration of objects in his lectures. For making ophthalmoscopic drawings, the instrument can be fixed to a pillar and stand. The artist can work in daylight with very little effort, while the patient can retain the eye fixed in the proper position without exertion.

The instrument has been made by Mr. Hawksley, of Blenheim-street, Bond-street, who is now engaged in simplifying the arrangements, as much as possible, for carrying out some improvements and reducing the weight of the metal work. Mr. Hawksley thinks the cost will be less than two guineas.

COLMAN'S BRITISH CORN-FLOUR.

We have received specimens of a new article of food called Colman's British corn-flour, produced by Messrs. J. and J. Colman, a firm with the name of which our readers are all familiar. The flour is perfect of its kind, pure, and of excellent quality, and, as it is very easily prepared as a food, it is certain, we think, to find favour with the Profession and the public at large. It is said to be obtained from rice. It makes a good and palatable *blancmange*.

MEDICAL NEWS.

University of Dublin.—At the Winter Commencements held on Wednesday, the 15th inst., in the Examination Hall of Trinity College, the following degrees in Medicine and Surgery were conferred by the Right Honourable Sir Joseph Napier, Bart., Vice-Chancellor of the University:—

Baccalaurei in Medicinâ.

Bird, Johannes Drought.
Blenkinsop, Gulielmus Henricus.
Grant, Gulielmus Cameron.
Ievers, Eyre.
Lett, Ricardus Alfredus.
Parsons, Georgius.
Rainsford, Ricardus.
Smith, Gilbart.
West, Arthurus Annesley
Woods, Oscar Thomas.

Magister in Chirurgiâ.
Ievers, Eyre.

Doctor in Medicinâ.
Salaman, Selim Myer.

Apothecaries' Hall.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, December 9, 1869:—

Bossy, Alfred Frederick, Stoke Newington.
Ling, Edward Clayton, Saxmundham.

The following gentlemen also, on the same day, passed their First Professional Examination:—

Cartwright, J. H., St. Thomas's Hospital.
Dunstan, H., University College.
Haines, A. H., Guy's Hospital.
Hill, C. H., St. Bartholomew's Hospital.
Ling, J. M., University College.
Longhurst, A. K., University College.

Milner M. Moore, Resident Registrar and Chloroformist to St. Mary's Hospital, has been appointed Resident Medical Officer in charge of the Lock wards at the Royal Albert Hospital, Devonport.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

DYLE, D. H., Medical Officer to the Board of Guardians for the Relief of the Jewish Poor—Resident Medical Officer for three months to the New Infirmary at Highgate.

POLLARD, FREDERICK, L.R.C.P., M.R.C.S., late House-Surgeon to St. Thomas's Hospital—Resident Medical Officer to the St. Pancras and Northern Dispensary.

ROSSER, WALTER, M.B., M.R.C.S.E., L.S.A.—House-Surgeon to St. Thomas's Hospital.

SAUNDERS, HENRY WILLIAM, M.R.C.S.E., L.S.A.—House-Surgeon to St. Thomas's Hospital.

THOMAS, LLEWELLYN MORGAN, M.R.C.S.E., L.S.A.—Resident Accoucheur to St. Thomas's Hospital.

WALKER, WILLIAM, F.R.C.S. Edin.—Surgeon Oculist in Ordinary to her Majesty for Scotland, in the room of William Mackenzie, M.D., deceased.

WILLIAMS, CHARLES—Assistant-Surgeon to the Norfolk and Norwich Hospital.

NAVAL AND MILITARY APPOINTMENTS.

ADMIRALTY.—The following appointments have been made:—Thomas G. Wilson, Surgeon, to the *Valorous;* Dr. Thomas Milne, Assistant-Surgeon, to the *Duncan;* William S. Roche, Surgeon, to the *Ganges;* and Geo. R. Lawrenson, Assistant-Surgeon, to the *Royal George.*

BREVET.—Native Surgeon Moodeen Sheriff, to have the local and honorary rank of Assistant-Surgeon in India.

BIRTHS.

AVELING.—On December 6, at Holly-cottage, Homerton, the wife of Charles T. Aveling, F.R.C.S., of a daughter.

BRIGHT.—On December 7, at Priessnitz, near Dresden, the wife of Dr. George Charles Bright, of a daughter.

HOLTON.—On December 7, at 4, Eglinton-park, Kingstown, the wife of F. Holton, Surgeon, 77th Regiment, of a son.

JONES.—On December 10, at Hyde Lodge, Clarendon-road, Watford, the wife of George T. Jones, M.D., F.R.C.S., of a daughter.

MAURICE.—On December 13, at Marlborough, Wilts, the wife of Dr. James Blake Maurice, of a son.

MONRO.—On December 10, at 87, Gloucester-street, Belgrave-road, Pimlico, the wife of James Monro, M.D., of Craiglockhart, Midlothian, of a daughter.

WADD.—On December 7, at Beaconsfield, Bucks, the wife of Dr. Frederick J. Wadd, of a son.

MARRIAGES.

CLARKE—PARR.—On December 9, at the Parish Church, Preston, Lancashire, Alfred F. S. Clarke, M.D., Royal Artillery, only son of the late Frederick H. Clarke, Esq., barrister, of Lincoln's-inn, to Janet Annie, youngest daughter of the Rev. Canon Parr, rector of Preston.

COBBE—MATTHEWS.—On December 8, at St. Stephen's Church, Shepherd's-bush, C. B. Bereford, elder son of Charles Cobbe, M.R.C.S.E., Wimpole-street, Cavendish-square, to Adela, daughter of George Matthews, Esq., late of the Castle, Wexford.

GAUSSEN—BAYLEY.—On December 9, at St. John's Church, Paddington, James Robert Gaussen, M.B., Assistant-Surgeon Royal Artillery, youngest son of Charles Gaussen, Esq., of Gardiner's-place, Dublin, to Alicia Fenton (Alice), youngest daughter of W. H. Bayley, Esq., of 25, Cumbridge-square, Hyde-park, formerly of H.M. East India Civil Service.

JOLLIFFE—SHERWOOD.—On December 8, at Rusthall Church, Tunbridge Wells, John Jolliffe, M.R.C.S., R.N., to Catherine Owen Sherwood, youngest daughter of the late Rev. W. Sherwood, M.A., incumbent of St. James's, Bradford, Yorkshire, formerly Lieutenant Royal Navy.

STEPHENSON—COYNE.—On December 14, at St. Paul's, Avenue-road, Hampstead, John Stephenson, barrister-at-law, son of the late John Stephenson, M.D., of Montreal, Canada, to Margaret, eldest daughter of the late Joseph Stirling Coyne. No cards.

TREVOR—BOKENHAM.—On September 22, at Tarapaca, Peru, Arthur Tudor Humphreys Trevor, M.R.C.S., M.R.C.P., son of the late Chancellor Trevor, of Bangor, to Enriquetta, eldest daughter of the late Dr. Bokenham, of Iquique and Tarapaca.

DEATHS.

BADELEY, FANNY, daughter of the late J. C. Badeley, M.D., of Guy Harlings, Chelmsford, on December 12, aged 22.

BARRETT, EVELYN CLARK, Esq., second son of the late Samuel Barrett, M.D., of Ewell, Surrey, at Burlington-house, Eastbourne, on December 8, aged 22.

BERRELL, CHARLES, M.B. Lond., Medical Superintendent of the Northampton General Lunatic Asylum, at 29, Cambridge-terrace, Clapham-road, on December 15.

BRYSON, ALEXANDER, M.D., C.B., F.R.S., etc., Physician-Extraordinary to the Queen, late Director-General of the Medical Department of the Navy, at the Hermitage, Barnes, S.W., on December 12, aged 67.

COOPER, ISABELLA, the beloved wife of Sir Henry Cooper, M.D., of Hull, suddenly, at Hornsea, near Hull, on December 12.

HAIR, ARCHIBALD, M.D., late of the Royal Horse Guards, at his residence, Sanquhar, Dumfriesshire, on December 14, in his 85th year.

LANGER, EATON, M.D., at New-house, Bromfield, Salop, on November 20, of emphysema of the lungs, aged 47.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

ABINGDON UNION.—Medical Officer for the Second District. Candidates must be duly registered and possess the qualifications prescribed by the general orders of the Poor-law Board. Applications and testimonials to Mr. B. Challenor, on or before the 18th inst. Election on the 20th.

AMALGAMATED FRIENDLY SOCIETIES' MEDICAL-HALL, PRESTON, LANCASHIRE.—Medical Officer, Assistant, and Apothecary. Candidates for each vacancy to send their testimonials, with full particulars, to the Secretary, Mr. W. Jenson, 149, Friargate, Preston, on or before the 20th inst.

BOROUGH OF IPSWICH LUNATIC ASYLUM.—Resident Medical Superintendent. Applications and testimonials to the Town Clerk's office, Ipswich, addressed to "The Lunatic Asylum Committee," on or before January 15, 1870. The Asylum will be ready for occupation in April or May.

BRITISH LYING-IN HOSPITAL, ENDELL-STREET, LONG-ACRE.—Honorary Physician. Applications and testimonials to the Secretary, at the Hospital.

CHESTERFIELD AND NORTH DERBYSHIRE HOSPITAL AND DISPENSARY.—House-Surgeon and Dispenser; must be legally qualified. Applications and testimonials to the Secretary, Mr. J. W. Fearn, Newbould-road, Chesterfield, on or before January 4, 1870.

DOWN DISTRICT LUNATIC ASYLUM, DOWNPATRICK.—Resident Medical Assistant; must be qualified and be unmarried. Applications and testimonials to the Resident Physician on or before December 30. Election on January 1, 1870.

GERMAN HOSPITAL, DALSTON.—Honorary Medical Officers, an Honorary Physician, and an Honorary Assistant-Surgeon. They must both be natives of Germany, or prove themselves fully conversant with the German language. Candidates must produce a diploma from a British or foreign university. Applications and testimonials to the Honorary Secretary on or before January 3, 1870.

HOLBEACH UNION.—Medical Officer for the Sutton Bridge District. Candidates must have the qualifications prescribed by the general orders of the Poor-law Board. Applications and testimonials to Mr. E. G. Ayliff, Holbeach, on or before December 24. Election on the 27th.

ST. MARY'S HOSPITAL AND DISPENSARY FOR WOMEN AND CHILDREN, MANCHESTER.—Resident Medical and Surgical officer; must have both Medical and Surgical qualifications and be registered. Applications and testimonials to the Secretary, 41, John Dalton-street, Manchester, on or before the 31st inst.

SUNDERLAND INFIRMARY AND DISPENSARY.—Junior House-Surgeon; must possess both Medical and Surgical qualifications and be registered. Applications and testimonials to the Secretary on or before January 26, 1870. Election on February 3.

WESTMINSTER HOSPITAL.—Resident House-Physician; must be qualified to practise under the Medical Registration Act of 1858. Applications and testimonials to the Secretary on or before the 23rd inst. Election on January 4, 1870.

WESTMORELAND LOCK HOSPITAL.—Surgeon-Apothecary. Applications and testimonials to the Chairman of the Board of Guardians on or before December 21. Candidates to attend on the following day at 3 p.m.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Burton-upon-Trent Union.—Mr. G. A. Cope has resigned the Etwall District; area 17,527; population 4153; salary £50 per annum.

Highworth and Swindon Union.—The Second District is vacant; area 12,013; population 9622; salary £72 10s. per annum. Also the Workhouse; salary £35 per annum.

Kingsbridge Union.—The Thirteenth District is vacant; area 6377; population 1219; salary £20 per annum.

APPOINTMENTS.

Anglesey Union.—Wm. Evans, L.R.C.P. Edin., M.R.C.S.E., to the Workhouse.

Castle Ward Union.—Alexander Pole, M.D. St. And., M.R.C.S.E., to the Whalton District. James Marr, L.R.C.P. Edin., M.R.C.S.E., to the Ponteland District and Workhouse.

Chippenham Union.—Edward M. Little, M.R.C.S.E., L.R.C.P., L.S.A., to the Sutton Benger District. Thomas Kitchener, M.D. St. And., M.R.C.S.E., to the Pewsham District and the Workhouse.

Tynemouth Union—Byron Bramwell, M.B. Edin., M.R.C.S.E., to the Tynemouth District and the Workhouse.

Westhampnett Union.—Charles Osborn, L.R.C.P., M.R.C.S.E., L.S.A., to the South Bersted District.

THE examiners for the Radcliffe Travelling Fellowship give notice that the next examination for a Fellowship will commence on Monday, January 31, at ten a.m. Candidates are requested to send their names on or before Wednesday, January 19, by letter addressed to the Regius Professor of Medicine, Museum, Oxford. H. W. Acland, G. Rolleston, B. C. Brodie, examiners for the Radcliffe Travelling Fellowship.

MEDICAL TEACHERS' ASSOCIATION.—LIST OF OFFICERS AND COUNCIL FOR THE YEAR 1869-70. — *President:* William Allen Miller, M.D., D.C.L., F.R.S. *Vice-Presidents:* T. King Chambers, M.D.; Bernard E. Brodhurst, F.R.C.S. *Treasurer:* Francis Sibson, M.D., F.R.S. *Secretaries:* Walter Rivington, F.R.C.S.; Henry Power, F.R.C.S. *Elective Members:* A. Whyte Barclay, M.D.; William H. Broadbent, M.D.; John W. Bristowe, M.D.; J. Langdon Down, M.D.; G. G. Gascoyen, F.R.C.S.; T. Henry Green, M.D.; A. Dupré, Ph.D.; Headlam Greenhow, M.D.; Christopher Heath, F.R.C.S.; Timothy Holmes, M.A., F.R.C.S.; Carsten Holthouse, F.R.C.S.; Robert Liveing, M.D.; Charles F. Maunder, F.R.C.S.; T. W. Nunn, F.R.C.S.; John W. Ogle, M.D.; Hyde Salter, M.D.; Alexander Silver, M.D.; Tilbury Fox, M.D.; Henry Trimen, M.B.; John Wood, F.R.C.S.

EXAMINATION IN ARTS, ETC.—The preliminary examination in Arts of candidates for the diploma of Membership of the Royal College of Surgeons commenced on Wednesday last, at the Whittington Club, and did not terminate until after 6 on Friday. During these three days 382 gentlemen were examined—viz., 66 for the Fellowship of the College, and 316 for the Membership. The result of the examination, which was conducted by the staff of the College of Preceptors, cannot be made known for several weeks, owing to the very large number of papers to be read by the examiners.

ROYAL COLLEGE OF SURGEONS.—The usual report of the proceedings of the Council was suspended in the hall of the College on the 16th inst., for the inspection of those Members interested in the matter. From this report it appears that the Council decided, on a reference from the Committee appointed on August 12 last, that the word *conjoint* in resolution of August 12 last be understood to mean the consideration of the question of the conjoint action of all the English examining boards under Schedule (A) of the Medical Act. Letters from the legal adviser of the College having been read in reference to Mr. Erichsen's proposed addition to Section XVIII. of the by-laws, Mr. Erichsen, in pursuance of his notice of October 14, moved that the Fellows may meet in this College for the purpose of discussing matters affecting its interests or connected with its management. The motion having been seconded by Mr. Holden, it was moved by Mr. Charles Hawkins, and seconded by Sir William Fergusson, as an amendment —"That after the word *Fellows* the words *and Members* be inserted, and that the words *or connected with its management* be omitted from such motion." On the demand of Mr. Charles Hawkins and Mr. Spencer Smith, the names of those voting for and against the amendment were directed to be entered on the minutes—viz., minority for the motion, six: Mr. Hilton, Sir William Fergusson, Mr. Quain, Mr. Curling, Mr. Hawkins, Mr. Smith; majority against the motion, ten: Mr. Solly, Mr. Busk, Mr. Hancock, Mr. Clark, Mr. Birkett, Mr. Simon, Mr. Humphry, Mr. Holden, Mr. Gay, Mr. Erichsen. The amendment was consequently lost, a majority being against the same. Moved by Mr. Simon, seconded by Mr. Busk, as an amendment—"That it is expedient that meetings of the Fellows and Members of the College in accordance with the provisions of the by-laws, Section XVIII., be from time to time held in the College, and that it be referred to a Committee to consider in what way facilities may best be afforded for the holding of such meetings." On the demand of Messrs. Charles Hawkins and Spencer Smith, the names of those voting for and against the amendment were directed to be entered on the minutes—viz., majority for the motion 11. Mr. Hilton, Sir Wm. Fergusson, Mr. Lane, Mr. Busk, Mr. Hancock, Mr. Curling, Mr. Clark, Mr. Hawkins, Mr. Smith, Mr. Birkett, Mr. Simon. Minority against the motion, 0. The amendment was consequently carried *nem. con.*, and being put as a substantive motion on the demand of Messrs. Humphry and Gay, the names of those voting for and against the same were directed to be entered on the minutes—viz., majority for the motion 14—Mr. Hilton, Sir Wm. Fergusson, Mr. Lane, Mr. Busk, Mr. Hancock, Mr. Curling, Mr. Clark, Mr. Hawkins, Mr. Smith, Mr. Simon, Mr. Humphry, Mr. Holden, Mr. Gay, and Mr. Erichsen. Minority against the motion 0. The amendment having therefore been carried *nem. con.* as a substantive motion, the original motion was not put. Mr. Henry Wooldridge, of South Yarra, Melbourne, admitted a Member on November 28, 1834, was elected a Fellow.

MEDICAL BENEVOLENT FUND.—The following annuitants were elected on December 7 from a list of twenty-one candidates, whose ages varied from 61 to 84:—1. M.R.C.S. and L.S.A., aged 66; married; afflicted with heart and lung disease; presented to one of the houses at Chippenham, given by Mr. Bailey; recommended by Dr. G. C. Jonson, G. Curme, Esq., Dr. S. Dyer, Miss Carnegie, and Miss Druitt; annuity, £10. 2. Widow, aged 78, of a Surgeon in practice before 1815; only income £10; relieved several times from fund, and has been on list of candidates more than five years; recommended by H. Sterry, Esq.; annuity, £20. 3. M.R.C.S., aged 84; married; practised for many years in Kent; has had an annuity from sale of practice, which has ceased this year, leaving him without means; recommended by Dr. Samuel Hill; annuity, £20. 4. Widow, aged 67, of a L.S.A. who practised in Somerset; no income; living with married daughter, who is unable to do more than give her a home, without further assistance; recommended by Charles Smerdon, Esq., and William Cross, Esq.; annuity, £20. 5. Widow aged 79; husband in practice before 1815, in London; dependent on occasional help of friends; suffers much with rheumatism and tumour; relieved from fund several times; recommended by Dr. Felce, Honorary Secretary, Dr. Collinson, and E. P. Young, Esq.; annuity, £20. 6. M.R.C.S. and L.S.A., aged 65, London; two daughters, 18 and 15; only income from practice, averaging about 10s. per week; almost blind, and very lame; assisted once from fund; recommended by Dr. John Dixon; annuity £20. The fund has now 35 annuitants, 13 having been elected during the present year.

ON Monday evening, December 13, Dr. Oppert read a paper before the Royal Institute of British Architects on the system of tents and sheds in Hospitals. He recommended them as appendages to existing or future Hospitals, but did not think they would supplant substantial Hospital buildings. He considered the present time, when an epidemic of relapsing fever existed in London, extremely opportune for drawing the attention of architects to the advantages of such buildings for fever patients. Dr. Hardwicke read a paper on mortuaries on the same evening.

DR. LEO ROSS will read at the Store-street Concert-hall, Tottenham-court-road, on Monday evening, December 20, at 8 o'clock, in aid of the funds of University College Hospital. *Part* 1.—Richard III., act 1, scene 4 (Shakespeare); The Newcastle Apothecary (Colman); The Rapids (J. B. Gough); My First and Last Play—Scotch—(Delta). *Part* 2.—The Raven (E. A. Poe); The Furlough—Irish—(Hood); The Charge of the Light Brigade (Tennyson); A Day with the Surrey Hounds (Thackeray).

THE KINGSTOWN DISPENSARY CASE.—In referring to this case last week, we naturally believed that the matter had terminated, and that the reprimand conveyed to the Medical Officers by the Board of Guardians, and the reproof contained in the letter of the Poor-law Commissioners, would have been deemed sufficient condemnation of an error in judgment. It appears, moreover, that Drs. Ledwith and Newland had assigned as a reason for having shown the books the opinion of Mr. Cope, Clerk of the Union, "that every ratepayer was entitled to see them," and, indeed, it would seem to be not unreasonable that those who supply the funds should have the power of ascertaining that these are not misapplied. Nevertheless, an indignation meeting, convened by the Very Rev. Canon M'Cabe, P.P.V.G., who was eventually prevented by illness from attending, was held on Sunday last, in the Temperance-hall, Kingstown, at which the "reprehensible transactions," by which "official partisans have been enabled to deprive the poor ratepayers of the protection of the franchise," were denounced, and a sworn inquiry before the Poor-law Commissioners was demanded. The meeting was attended by four Roman Catholic clergymen, the chairman, and seven others of the Town Commissioners, etc.

ARMY MEDICO-CHIRUGICAL SOCIETY OF PORTSMOUTH.—A meeting of the members was held on Wednesday, the 1st inst., Deputy Inspector-General Dr. Gordon, C.B. in the chair. After the usual preliminaries Surgeon Franklyn, Royal Artillery, read some remarks on a case of aneurism of the aorta in the person of a sergeant of the 12th Brigade. The tumour connected with that vessel had extended downwards into the abdomen, pressing upon the bodies of the first and second lumbar vertebræ, and causing the absorption of a considerable portion of them, at the same time that it projected to such an extent backwards in the loins as to threaten to give way. The extent of the tumour where it thus projected was six and a half by five and a half inches, and a point of interest in the case was the circumstance that its subject had been able to continue at his work up to a comparatively short time before his death. Sketches illustrative of the disease were handed round. Assistant-Surgeon O'Leary, honorary secretary, read a paper by Assistant-Surgeon Murray, R.A., on the advances in Surgery during the last quarter of a century. The author alluded to the benefits to Surgery due to chloroform, contrasting not only the suffering of patients under operation, but their subsequent mortality prior to and after the introduction of that agent; to local anæsthesia, whether by the application of ether spray as introduced by Dr. Richardson, or congelation after the plan of Dr. Arnott. He proceeded to advert to the operation for ovarian dropsy, first performed in 1823 by Mr. Lizars, of Edinburgh, then for a time allowed to fall into disuse, but more recently revived and now practised by several Surgeons of eminence, to the improved treatment of aneurism in accessible situations by pressure, to the resection of joints as a substitute in certain cases for amputation, especially with reference to the knee joint, and in gunshot injuries generally. He referred to the operation of crushing calculi so successfully

performed by Sir H. Thomson as a great improvement in the method of treatment as compared to the more severe operation of lithotomy, to the introduction of silver wires in supersession of ordinary sutures, to acupressure as a substitute for ligatures to divided arteries, and to the treatment of wounds by water and other cleanly applications instead of by poultices and unguents as formerly. He remarked upon the injurious extent to which the administration of mercury had previously been pushed, and the improved system under which that drug is now administered, and concluded by observing that Medicine as a science had not, in his opinion, made such advances as Surgery. A brief discussion followed the reading of the above, and the proceedings terminated.

John Hunter.—The foundations of Kensington new church are laid, and we are glad to hear of a movement the object of which is to perpetuate the memory of at least one Kensington worthy by erecting a memorial window in his honour in the church. We allude to Hunter, who not only purchased land and built a house in the parish, but there prosecuted the researches which have immortalised his name. The *Athenæum* calls on the College of Surgeons and the Medical Profession generally to aid in this object of doing honour to Hunter. The following interesting letter on the subject of discussion at Guy's Hospital which proved fatal to our great physiologist will no doubt be read with great interest; it is from the Hunterian manuscripts in the possession of Mr. T. M. Stone, of the College of Surgeons:—

"Sir,—My three colleagues having opposed a resolution of mine respecting the pupils who enter under me at the Hospital, and hearing that there is a custom against it as an argument in their favour, I beg leave to submit the enclosed reasons for having deviated from that custom, and I take the liberty to observe that the custom which they say has subsisted so long makes no part of the established laws of the charity, and has been gone into without the consent of the governors. I have transmitted these reasons to you for your deliberate perusal, that you may be enabled thoroughly to understand them when they are read at the general court.

"Your most obedient servant, "John Hunter.

"Leicester-square, February 27, 1793."

The protest was read, and at a subsequent meeting one of his colleagues (Gunning) thought it necessary instantly and flatly to contradict a statement he was making, whereupon Hunter hurried into an adjoining room, when with a deep groan he fell lifeless into the arms of Dr. Robertson.

Health of Scotland.—The deaths of 2788 persons were recorded in the eight chief towns of Scotland during November, of whom 1366 were males and 1422 females. Allowance being made for increase of population, this number is 410 above the average of the corresponding month of the last ten years, and is the greatest number registered during any month of November since the Registration Act came into operation in 1855. Previous to this, the highest number for November was in 1865, when 2557 deaths were recorded.

An Electrical Infant.—There is a wonderful account in all the French papers of an astounding baby just dead, at the age of ten months, at St. Urbain, near Lyons. The strongest Medical evidence is said to be given that the child was so highly endowed with electricity that all the persons in the same room with him received constant electric shocks. Its end was apparently painless, but accompanied by still more astounding manifestations. At the instant of death luminous effluvia proceeded, it is affirmed by the doctors, from the body of the child, which continued for several minutes after its decease. The case is supposed to be quite unprecedented in the world of science.

Sarsaparilla.—That this root possesses all the virtues attributed to it has often been doubted, but in a recent work by Captain A. J. Kennedy, R.N., on La Plata, Brazil, and Paraguay, he gives the following amusing story of General Urquiza, the former President of the Argentine Republic, showing its great virtue:—Dining with the General, he was told by him that he attributed his good health to a particular kind of water he drank; and on Captain Kennedy expressing his curiosity, some of this water was handed to him. It proved to be a very strong-smelling compound, made up apparently of mud and water in equal quantities; and, when Captain Kennedy put it down to settle, he was told it should be drunk while it was fresh. The look of the mud was bad enough, but the smell completed his discomfiture, and he put down the glass untasted, with unmistakable signs of disgust. Loud laughter went round the table, and Urquiza himself said, with a grim smile—"Yes, of course it takes time to get used to it, but it is a fine thing. The deep colour is caused by the sarsaparilla plant. I have been drinking it for many years, and find it very wholesome." What a capital advertisement for old Dr. Jacob Townsend!

Petrified Giants in America.—A giant eleven feet high was lately found lying in the soil, petrified, near Syracuse. He has been taken out and carried to that city. His features are European, though his antiquity is probably older than any historic settlements. There is but little doubt of its authenticity. We suppose those who have sneered at the Bible for saying there were giants in those days, will now sneer at it as not being old enough to account for this specimen. How every real discovery confirms the word of God! Other skeletons of giants have been found near Syracuse.—*Zion's Herald* (Boston, U.S.).

American Health Resorts.—The Americans are beginning to find out health resorts nearer home than the shores of the Mediterranean and the Spas of Germany. The following is from a recent number of the *New York Evening Post*:—"It only needs to be told what attractions are offered to persons in delicate health by certain parts of Florida and South Carolina to make the number repairing thither as great as the wild geese that bear them company and point out to them the way. Magnolia, in East Florida, is one of the most desirable spots for a winter residence in the whole South. It is readily accessible by steamer from New York, by way of Charleston and Savannah, or by railway to Jacksonville, and thence by the river steamboats. The air is dry and pure; the orange tree loves the soil; the woods are fragrant with the magnificent blossom which gives its name to the settlement; and no long, inclement seasons confine the invalid to the house. All this would be as nothing if the comforts of civilisation were not at hand. But Magnolia has passed into the proprietorship of Messrs. Rogers and Harris, who have greatly enlarged and improved the buildings, and furnished the rooms in the best style. Their care of invalids, in the excellence of the table and the general good conduct of the establishment, is praised by many well-known Physicians of the North who have spent a winter at Magnolia. Mr. Harris is from Worcester, Mass., and Dr. Rogers is from Pomfret, Conn. Both know what is required for the comfort of northern people in delicate health, from experience in ministering to their wants. For the information of invalids who may be thinking of a winter trip to Florida, we may say that the whole expense for the best accommodations there is set down at from $75 to $125 per month for each person. Aiken, in South Carolina, is another place much visited by northern invalids. It is easily reached by railroad, and lies eight miles east of Augusta, Ga., in a forest of pines. The climate here, from November to March, is like a long Indian summer. The sky is of the deepest blue, the air is singularly tranquil and balmy, and severe frosts are almost unknown. The hotel at Aiken has lately changed hands, and is now a first-class house in every respect. The cost of living there we are unable precisely to state, but it probably does not vary much from the figures given for Florida.

Throat diseases have prevailed extensively throughout the year. The principal affection included under the above heading has been diphtheria. It has now scourged this city upwards of a year, carrying off vast numbers and committing fearful ravages. Within a month lanes have been thinned, families swept away, and the population greatly diminished. Funerals are seen everywhere. The people in large numbers are clothed in white—here the emblem of mourning—and the general and almost invariable answer to every question on the subject has been "died of throat disease." In a family, which came lately under observation, of 26 individuals, 24 were carried off in 27 days. In the beginning of the year it predominated chiefly in the West, but now it has extended to the East and South. Very few indeed of the number affected have applied for relief, partly owing to the great distances, the difficulty of transport, the foreign Surgeon, the sex, the females being on the whole more frequently affected, but the chief cause has been the suddenness of the attack and the shortness of its duration before death closed the scene. All classes have been subject to it, but probably more children have died than adults. In the West large numbers between 3 and 10 years of age appeared; deaths have not, however, been confined to youth. Many at 50 and 60 years of age have also gone the way of all the earth.—*The Fifth Annual Report of the Peking Hospital, by Dr. John Dudgeon.*

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Philadelphia.—Your instructions shall be attended to. We are glad to find you have received the *Medical Times and Gazette* with such "marked promptness and regularity."

M. von Lippewerth, Heidelberg.—See Spencer Wells on Chloral, *Medical Times and Gazette*, September 18 and October 2, and Dr. Richardson on the same, October 30 and November 6.

Indian Medical Department.—Ten vacancies are now announced as about to be filled up in the Indian Medical Service by competitive examination in February next. The correspondent on whose authority we stated last week that there would not be any vacancies was evidently misinformed.

A. Z.—There is a chapter on the subject in Copland's Medical Dictionary.

Studens (Guy's) should apply to the Secretary of the College.

Beta.—There is no doubt on the subject.

Lex.—Baker on Coroners; Taylor's Medical Jurisprudence.

M.D.—The by-laws of the College are clear upon the point. A Fellow cannot sue for his fees; a Licentiate can.

Anxious (Birmingham) should apply to any respectable Surgeon in his own town. Advertisers should be avoided.

Protoplasm, Chatham.—You will find an abstract of Professor Gulliver's very interesting lecture on the "Red Corpuscles of the Blood," etc., delivered before the East Kent Natural History Society on the 25th ult., published in the last number of our contemporary, *Scientific Opinion.*

Proposed Legislation for Drunkards.

A legal correspondent suggests that any proposed Bill for the Protection of Habitual Druukards should contain a clause inflicting a penalty on any one selling liquor to a person convicted of drunkeuness. A Medical correspondent suggests the following addition to Section XIII.:—And be it further enacted that any person commonly known to be an habitual drunkard shall be deemed a proper person to be proceeded against, not only for the proper security of his property, but for his own security against the commission of any wanton or criminal acts, and for his own reformation."

Medicus.—A legally qualified Practitioner, whether acting as principal or assistant, if in actual practice, is fully competent, under the clauses of the "Medical Witnesses Act," to give evidence in the Coroner's court. The framer of the Act was too sensible a man to legislate in so bungling a manner as to disqualify a highly respectable and numerous class of his Professional brethren. The Coroner in the case referred to has misinterpreted the words "in actual practice."

America.—The *Nation* has a leading article on the late disturbance at the Philadelphia Hospital respecting the admission of women to the classes in that institution. We cannot congratulate the *Nation* either on the taste or the *animus* which pervades its articles with reference to the men students of the Hospital. They may be wrong, but they are not justly liable to the sweeping condemnation of the *Nation.*

Norwich.—The attempt to enforce a "law" respecting proxies at the late election of Assistant-Surgeon to the Norfolk and Norwich Hospital was not in a good spirit. It appears that many of the proxies brought forward on the part of one of the candidates were objected to by a lawyer governor. The objection raised was "that all proxies bearing an adhesive stamp, and not having the stamp cancelled by the signature or initials of the voter and the date of the meeting being written across it, were illegal, and the votes were null and void." A discussion of considerable length took place on this motion being made, which resulted in its withdrawal. Technical objections of this kind should not be raised in elections such as that in question, and we are glad that the attempt to enforce a mere legal quibble signally failed.

The Habitual Drunkard.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Inasmuch as the draft of an Act for the repression and reformation of this offender, proposed by you, would be efficient for the same purposes as the American, it must deserve the support of the Profession and all persons desirous of preventing the evil consequences of drunkenness. To deny it would be equal to let a blind man walk over a precipice, or, more truly, an infuriate murder a wife or child, when both, by a bold and summary interference, may be prevented. The question, however, arises, how shall your draft after the American model be put in process to receive the Professional, public, governmental, or parliamentary attention necessary to make law of it? The Right Hon. J. Stansfeld, at the Anchor dinner, Bristol, recently intimated that the Government contemplated some measure to deal with this evil; if so, no doubt they would be glad to have their hands strengthened from without. In London, the grand centre of our Professional rule and reputation, would not some public demonstration by meeting, or having a petition numerously signed, subserve this object? I merely beg leave to allude to some plan of the kind—not to dictate, but, at the same time, I would urge that any legislation falling short of the American in at once summarily dealing with the individual known as a drunkard in the same manner as a lunatic not allowed to be at large, would be of little or no use whatever. Our Vaccination Act, for want of the boards of guardians being ordered to carry it out, is a great failure, after the manifold employment of Parliament upon it. The registrars who send out their commands to parents to have their children vaccinated might just as well send a printed card of compliment and invitation, perhaps with more effect.

I am, &c.

Nailsworth, December 6. Thomas Stokes.

Nauticus, Plymouth.—The late Dr. Bryson succeeded Sir John Liddell as Director-General of the Naval Medical Department. The latter gentleman succeeded Sir William Burnett.

Dermatologist.—Professor Erasmus Wilson will commence his course of lectures on cutaneous diseases on Monday, January 31, 1870, in the theatre of the Royal College of Surgeons. No programme has yet been published.

Argus, M.D., Llandudno.—There have been many similar cases. The work alluded to, a copy of which is now before us, is entitled—"A Relation of a very extraordinary Sleeper at Tinsbury, near Bath, with a Dissertation on the Doctrine of Sensation, the Powers of the Soul, and its several Operations, together with Physical Causes assigned for this Strange Phenomenon. By William Oliver, M.D., F.R.S., and of the College of Physicians, London. Printed for A. Bell, at the Bible and Cross Keys, in Cornhill, 1707."

A Former Competitor.—There were no competitors for the Jacksonian Prize on the Structure and Diseases of the Lacrymal Passages, etc., in 1861. Mr. John Wood, F.R.C.S., of King's College, obtained the prize in the same year for his admirable essay on the Best Method of Effecting the Radical Cure of Inguinal Hernia. Write to Messrs. Churchill and Sons.

The late Mr. Davis, of Bramshott.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Permit me space for a few lines. Few people can realise the labours of a Medical man situated in the midst of a large rural population, or the dangers to which he is exposed in the performance of his, mostly, Samaritan duties. The life of such a one who has laboured hard in his Profession for the poor and needy for many years, Mr. F. V. Davis, of Bramshott, Hants, has been suddenly cut off in the midst of a career of usefulness, leaving a widow and eight children (the youngest but three weeks old) totally unprovided for.

Any assistance from a benevolent public, addressed to the Rev. Edward Greene, D.D., Liphook, Hants, or to C. Hewett, Esq., Union Bank, 2, Princes-street, London, will be gratefully acknowledged.

I am, &c. N. Stevens.

1, Alexandra-villas, King Edward-road, Hackney, Dec. 13.

P.S.—Contributions will be acknowledged in your columns.

Homœopathy v. Science.—A correspondent, *apropos* of certain remarks of ours, writes thus:—"I have just been reading Professor Ringer's work on therapeutics, which I remember was much lauded at the time of its appearance in the *Medical Times and Gazette*, and I had come to the conclusion that homœopathy is being very extensively adopted under the name of scientific Medicine." Now, after regretting that our correspondent has not had recourse to Dr. Ringer's book earlier, and taking the opportunity of again "lauding" the book as one of the best of its kind notwithstanding its faults, we shall take the trouble of replying to our correspondent, as these sort of remarks are becoming very common. The foundation of homœopathy is the law of similars—that like cures like—a law which, as certain enthusiasts would have it, is universal as the laws of gravitation. Superadded to this nowadays, although Hahnemann himself did not always practise it, is the homœopathic dose, which is closely associated with the superstition of dynamisation—*i.e.*, that the very process of trituration and subdivision increases the potency of the drug. Now, supposing that all homœopaths are agreed to the doctrine of similars (if not they are not homœopaths), this is far from being the case as to the dose, some recommending doses not far different from those of orthodox Practitioners using the mother tinctures or the first or second dilutions, others using high potencies, doses of decillionths of a grain. It is plain, therefore, that the question of dose, apart from its being a small one, is not a homœopathic dogma. Now let us see how stands it with Dr. Ringer. The head and front of his offending lies in his use of ipecacuan wine in one-drop doses frequently repeated as a remedy for sickness and secondly in his preference for small doses of other remedies, also frequently repeated, as of calcium sulphide in the scrofulous sores of children. He orders one grain to be dissolved in half a pint of water, a teaspoonful to be given every hour. Now, in both of these instances the benefits arising from the medicine are matters of experience, for we are not called upon to decide whether this is or is not good practice. Drop doses of ipecacuan wine either do or do not cure sickness. If they do, as practical men we are bound to use such or similar treatment in suchlike cases. Are we to be called homœopaths on that account? Certainly not. We have all along held that as matters now stand, whatever may hereafter turn up, the basis of therapeutics is an enlightened empiricism, the exercise of which is something very different from being bound hand and foot by an untruthful dogma.

Do homœopaths use bromide of potassium in epilepsy? Assuredly they do, although it is in direct opposition to the doctrine of *similia similibus* (by the bye, we have heard that some clever homœopath has discovered that it is, after all, *simile, similius*, or *simillimum*—we are not sure which—to epilepsy.

Again, certain remedies have been called homœopathic. Against such appropriation we vehemently protest. Is a man to be proscribed from giving quinine in ague because the homœopaths assert it to be homœopathic to that disease? Such a notion is preposterous. And if, as they would seem inclined, the homœopaths lay claim to all medicines which are specific or approximately so, and we are to be hindered from prescribing such, the doctrine of homœopathic remedies to be used exclusively by homœopaths becomes simply ridiculous.

Oiling a Gristly Stricture.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—About four years ago I attended a patient for what has been termed "old gristly stricture" of the urethra, about its membranous part. It was of a most formidable character, and, to make matters worse, he himself had forced a false passage, and was bleeding profusely. This was the second time this had happened with him, from using an old rough "sound" that had somehow got into his possession. The state of things was such at last that, despite all the means that could be thought of—warm bath, opium, etc.—it was found impossible to relieve the bladder, the stricture being impassable. Before using the knife or the trocar, I determined to try a method which it had struck me would be pretty sure to succeed in such cases. I got our watchmaker to drill me a hole about large enough to admit an ordinary pin in the very extremity of a medium-sized catheter. Removing the wire and stopper, I filled it with fine oil. While the patient lay on his back in bed, I passed the instrument on to the stricture. Removing the forefinger from the open end of the catheter, I allowed the oil to flow into the stricture for two or three minutes. I then applied the least possible amount of pressure to the instrument, and it found its own way, in an easy undulatory manner, through about an inch or an inch and a half of stricture that had many times previously given me trouble enough, and then on into the bladder, much to the mutual satisfaction of Surgeon and patient. I should be glad if others would give this method a trial when, or even before, all other means fail, as they so often do in our Hospitals.

I am, &c.

St. Just, Cornwall, November 25. William Chenhalls, M.R.C.S.

COMMUNICATIONS have been received from—

Dr. T. D. Griffiths; Dr. Flemino; Dr. Andrew O'Flynn; Mrs. Theobald; Mr. W. B. Young; Mr. T. Bryant; Dr. Whitmore; Dr. Fayrer; Dr. E. L. Copeman; Mr. M. von Lippewerth; Dr. Sanson; Mr. N. Stevens; Mr. F. G. Passmoae; Medicus; Messrs. W. Oliphant and Co.; Mr. S. W. Fearn; A Scientific Doctor; Mr. D. H. Dyte; Dr. F. E. Jencren; Dr. E. Hughes; Mr. T. Stokes; Mr. C. Williams; Mr. M. M. Moore; Colonel Lane Fox; A Constant Reader; Mr. R. W. Stewart; Dr. Charles Kido; Mr. F. Pollard; Messrs. L. Seaman and Co.; Dr. Arthur Mitchell; Dr. Felce; Dr. H. Bence Jones; Dr. W. Richards; Dr. B. Wills Richardson; Mr. J. Hutchinson; Dr. F. R. Wilson; Dr. Lionel S. Beale; Mr. J. Chatto; Mr. B. Redwood; Mr. T. M. Stone; Mr. J. F. Clarke; Dr. Gervis; Dr. B. Ward Richardson; Dr. Macpherson; Dr. De Hartsen.

BOOKS RECEIVED—

Roth on Paralysis in Infancy, Childhood, and Youth—New York Medical Journal, No. 57—Lewis on the Pathology of Bright's Disease—Moore's Results of Sanitation in India—Stokes on Medical Ethics—Leared on Digestion—Cottam's Observations on the "Goodenough" System of Shoeing Horses—Report on the Sanitary Condition of St. Pancras Workhouse Infirmary—Boom's Catechism of the Decimal, Albert, and Metric Systems of Weights, Measures, and Coins—Macnamara on Asiatic Cholera—Journal of the Scottish Meteorological Society.

NEWSPAPERS RECEIVED—

Cambrian—Norfolk News—Indian Medical Gazette—Aris's Birmingham Gazette—Westminster Weekly Times—Liverpool Daily Courier—Norwich Mercury—Medical Press and Circular—New York Medical and Surgical Reporter.

VITAL STATISTICS OF LONDON.

Week ending Saturday, December 11, 1869.

BIRTHS.

Births of Boys, 1136; Girls, 1131; Total, 2267.
Average of 10 corresponding weeks, 1859-68, 1915·5.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	954	805	1759
Average of the ten years 1858-67	729·2	733·1	1462·3
Average corrected to increased population	...	...	1608
Deaths of people above 90	...	1	1

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-cough.	Fever.	Diarrhœa.	Cholera.
West	463388	...	3	13	3	15	4	2	...
North	618210	3	5	43	1	11	13	4	...
Central	378058	...	2	17	...	4	5	1	...
East	571158	1	12	66	...	17	9	3	...
South	773175	7	13	70	4	24	9	3	...
Total	2803989	11	35	209	8	71	40	13	...

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·886 in.
Mean temperature	39·2
Highest point of thermometer	49·8
Lowest point of thermometer	28·6
Mean dew-point temperature	37·4
General direction of wind	E.N.E.
Whole amount of rain in the week	0·43

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, December 11, 1869, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the year 1869.	Persons to an Acre. (1869.)	Births Registered during the week ending Dec. 11.	Deaths. Corrected Average Weekly Number.	Deaths. Registered during the week ending Dec. 11.	Temperature of Air (Fahr.) Highest during the Week.	Temperature of Air (Fahr.) Lowest during the Week.	Temperature of Air (Fahr.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3170754	40·7	2267	1462	1759	49·8	28·6	39·2	0·43	43
Bristol (City)	169423	36·1	115	76	*108	49·2	26·5	37·2	0·19	19
Birmingham (Boro')	360846	46·1	285	175	174	47·8	30·4	37·5	0·18	18
Liverpool (Boro')	509052	99·7	379	295	293	49·1	32·2	38·0	0·33	33
Manchester (City)	370892	82·7	258	210	*271	47·0	32·0	38·8	0·25	25
Salford (Borough)	119350	23·1	89	60	74	46·6	30·5	38·1	0·28	28
Sheffield (Borough)	239752	10·5	180	126	187	47·0	29·0	38·2	0·25	25
Bradford (Borough)	138522	21·0	100	71	83	48·2	31·0	39·9	0·20	20
Leeds (Borough)	253110	11·7	198	129	123	48·0	34·0	39·2	0·37	37
Hull (Borough)	126682	35·6	84	59	71	46·0	31·0	38·1	0·43	43
Newcastle-on-Tyne, &c.	130503	24·5	91	69	74	46·0	32·0	39·7	0·44	44
Edinburgh (City)	178002	40·2	144	86	126	48·7	27·0	37·7	0·40	40
Glasgow (City)	458937	90·6	334	268	378	48·3	24·0	35·5	1·47	148
Dublin (City, etc.†)	320762	32·9	175	158	152	50·8	32·0	40·9	0·36	36
Total of 14 large Towns	6546587	35·5	4699	3244	3873	50·8	24·0	37·0	0·40	40
Paris (City)	1889842	...	...	...	882 Week ending Dec. 4.	...	...	...	...	...
Vienna (City)	605200	...	...	...	...	Week ending Dec. 4. ...	...	...	...	...

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·886 in. The barometrical reading decreased from 30·40 in. on Monday, Dec. 6, to 29·25 in. on Saturday, Dec. 11.

The general direction of the wind was E.N.E.

Note.—The population of Cities and Boroughs in 1869 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous.

* The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

† Inclusive of some suburbs.

APPOINTMENTS FOR THE WEEK.

December 18. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 2 p.m.

Metropolitan Association of Medical Officers of Health, 7½ p.m. Meeting.

20. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 1½ p.m.; St. Peter's Hospital for Stone, 2½ p.m.

Medical Society of London, 8 p.m. Dr. Leared, "On Sulpho-cyanides in the Blood and in the Urine." Dr. Farquharson, "On Longevity and Premature Decay, with special reference to our Military Population."

21. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.

Ethnological Society, 8 p.m. Prof. Busk, F.R.S., "On an Ancient Calvaria assigned to Confucius." Major Millingen, F.R.G.S., "On the Koords and Armenians." Dr. Gustav Oppert, "On the Kitai and Kara-Kitai."

Pathological Society, 8 p.m. Dr. Moxon, "Thrombosis of Inferior Cava, with Embolism of Pulmonary Artery; Congenital Absence of Right Kidney." Dr. Clapton, "Perforating Ulcer of Stomach." Mr. Sydney Jones, "Aneurism of Aorta, with Caries of Clavicle." Sir Wm. Jenner, "Mass of Hair from Stomach." Dr. Whipham, "Cystic Disease of Kidney." Dr. Dickinson, "Pyelitis," etc.

22. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.

Society of Arts, 8 p.m. Meeting.

23. *Thursday.*

Operations at St. George's, 1 p.m. Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

24. *Friday.*

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

ORIGINAL COMMUNICATIONS.

NORWEGIAN NOTES.

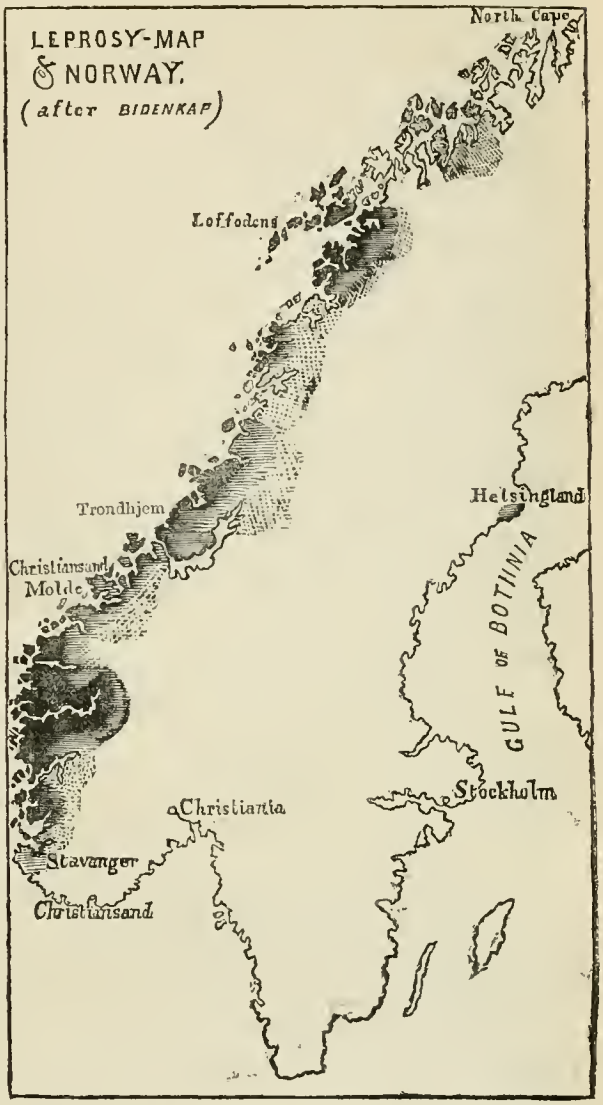
By JONATHAN HUTCHINSON, F.R.C.S.,
Senior Surgeon to the London Hospital, Surgeon to the Moorfields Ophthalmic Hospital and to the Hospital for Diseases of the Skin.

(*Continued from page* 246.)

After a long interval from the interruption of other pursuits, I must resume and finish my Notes. I have hitherto avoided the most interesting feature in the Medical history of Norway. It was the wish to see Leprosy on a large scale, and to visit the regions in which it originates and prevails, that chiefly attracted me to that country. I saw a few lepers at Christiania, and many at Bergen and at Molde, and at the latter two places I visited special Hospitals for their care. It has seemed more convenient to reserve the notes which I made at these different places for mention together, rather than to take up the same topic repeatedly in connexion with each place. The subject of leprosy has received such a large amount of attention from the Medical Profession of Norway, and of other countries also, that I can scarcely hope, as the result of such a short visit, to be able to gather anything new. The impressions which I formed may, however, be of some interest to the English Profession, and if, as regards my friends in Norway who have been long familiar with the disease, I succeed in avoiding the display of ignorance, it is, perhaps, as much as I can expect.

At Christiania I conversed with Prof. Boeck and Dr. Bidenkap on the subject, and from the latter received much information, as he had not long before been employed by Government in investigating it. I may here state that leprosy is unknown in Christiania, excepting as an imported disease. Cases are brought from the leprosy districts to the Christiania Hospital for the instruction of students. I pressed my friend Dr. Bidenkap closely as to what he thought were the characteristics of the "leprosy districts" which made them productive of the disease while the neighbourhood of Christiania was not so. He admitted that it was a proposition of extreme obscurity, and after we had confuted the hypothesis of general defect of civilisation, he expressed a suspicion that it must be due to some telluric emanation. From Dr. Bidenkap's map (see his report on leprosy) made to illustrate the regional prevalence of leprosy, I have had the appended woodcut, with some slight alterations, copied. By its aid the reader will easily appreciate the chief facts as to the distribution of the disease. He will see that the parts which are shaded dark to imply its endemic prevalence are all situated on the west coast, and that they do not extend to the most southern nor yet to the most northern part. A district beginning a little above Stavanger, and extending northwards a few hundred miles, is the one which chiefly suffers. Let me ask especial attention to the fact that this is the district upon which the Gulf Stream strikes. The harbour of Christiania, although much south of Bergen, is frozen up in winter, whilst that of the latter place is kept open by the influence of the warm tropical water. Mexican drift is sometimes found on the west coast north of Bergen, nearly as far as the North Cape. Let us remember in passing that leprosy is endemic also in the Gulf of Mexico.

It will be observed, in looking at the map, that the dark shading does not pass far inland. Leprosy is met with almost exclusively in the islands, the coast border, or the sides of the long arms of the sea, which, under the name of fjords, run inland. It is yet more closely restricted to the borders of these salt-water lochs than the shading of the map might suggest, since in many parts the population is scarcely met with anywhere else in the district. The shading covers the parish, but in many instances all the parish, excepting the borders of the fjord, is uninhabitable mountain. At Bergen and at Molde, the largest and most important-looking buildings in the town are leper Hospitals. At Molde there is but one, whilst at Bergen there are no fewer than three. At Trondhjem there is also a large establishment, but this I did not see. To me of far more prominent interest than the investigation of the details of its pathology was that of the possible or probable cause of the disease. Some years ago, from an examination of published facts, and of a few cases which had come under my own observation, I was induced to express my conviction that a fish diet is the only agency which can plausibly be alleged to explain the local prevalence of this most peculiar malady. In my Norwegian visit I kept this speculation in view, and with the result of finding my conjecture much strengthened.



Explanation of Map.—The town of Bergen (which is not marked) is situate on the coast, about midway between Stavanger and Molde. The shading indicates the prevalence of leprosy. Where no shading is introduced, no cases whatever occur. Where the shading is light, there the proportion to population is small, and it increases with the depth of tint. Where small dots are introduced, sporadic cases are met with. At Helsingland, in the Bothnic Gulf, leprosy occurs in a small district, but it is not met with anywhere else on the Swedish coast.

The opinion of most of those with whom I conversed was that poor food, uncleanly habits, and extreme hardship in the way of exposure to weather, are the real causes. All admit that it is transmitted hereditarily, and all deny that it is contagious; some believe in hereditary transmission so strongly as to hold that at the present day it is almost the only cause. Against this notion, however, we have the fact that leprosy can be produced in immigrants who have come from districts which are exempt, and who are of perfectly healthy family. These instances are few in number, but they are undoubted. Dr. Bidenkap mentioned to me several, and one in which a very short residence in the Bergen district had sufficed. I hope he will be induced to publish full details of this last, as it is certainly very exceptional. At Bergen I found all authorities, and Dr. Danielssen especially, very unwilling to admit that leprosy could easily be induced in immigrants, and the fact that such instances are rare was illustrated by the circumstance that the same case was mentioned to me by several different Surgeons. It was that of a German officer, who came to live near Bergen, and after some years passed into undoubted leprosy. One of my informants cited this case in proof that low civilisation was the cause of the disease. "The fellow," said he, "degraded himself—if indeed a German officer could

degrade himself—he took to drinking, he lived with the fishermen, and he lived as they did, and he got leprosy, as he well deserved to do." We may note that the better-class inhabitants of Bergen have no more fear of becoming lepers than have those of London. They consider the disease to be essentially one connected with poverty and privation. That it is not so in every individual instance is very evident, for we see children and young persons in apparently good health, and not as yet subjected to any ill influences, become its subjects; but in these instances the doctrine of hereditary transmission explains the event. The temptation to believe in this opinion is certainly great if we restrict our attention to leprosy in Norway only. The Norwegian peasantry undoubtedly lead hard lives. But we must remember that leprosy is precisely the same disease when it is met with in the tropics, and that in the Gulf of Mexico and many other places it affects those who have not been exposed to any kind of privation. A case which I recorded in the first volume of the *London Hospital Reports* is, to my mind, conclusive against any belief in "low civilisation" as the real cause of leprosy. A robust Scotch captain traded for thirty years backwards and forwards to Jamaica. He lived comfortably, was cleanly in his habits, and never stayed longer in the Mexican Gulf than about six weeks at a time. Yet he became the subject of leprosy in a form as well characterised as that of any inmate of St. Jorgen's at Bergen. It must be observed that the entire district in which leprosy is found in Norway is remarkably productive in fish, of which it exports immense quantities. Ships from all parts frequent the Bergen harbour to receive her salted fish. Bergen has, indeed, two sights to show in which probably she can beat the world—her Fish-market and her Leper-house.

(*To be continued.*)

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Medical Times and Gazette.

SATURDAY, DECEMBER 25, 1869.

ANNUS MEDICUS 1869.

It seems to be more than probable that the year 1869 will be noted in the annals of our Profession, in England, for having seen the real and active commencement of very large and weighty changes in its educational policy and management. Indeed, almost throughout Europe the year has been remarkable as a period of unusual excitement and change in national life and government; and speakers and writers will, according to their diversities of education, temperament, and habits of life and thought, draw widely differing pictures of it. Some will describe it as a period of feverish agitation and unhealthy excitement, of irregular and abnormal growth and development, or of great degradation, in the Medical sense of the word; while others will glowingly depict it as a time of glorious progress, of superlatively vigorous and healthy growth, of grand and true development in the highest and fullest meaning of the term. Happily, we have here nothing to do with all this, except in so far as it may serve to point out what we may perhaps be permitted to call the political epidemic constitution of the year, and so may help, in some degree, to account for the wave of commotion and desire for change which has so widely and deeply affected us as a profession. Few men would be bold enough, we imagine, to prophesy what will be the full outcome of all the agitation among us, but it will probably largely alter, or reform, if that word be more pleasing, the constitution of our little Parliament, the Medical Council; and it will almost certainly effect a great revolution in the number and arrangement of our examining bodies, in the requirements of Professional education, and in the internal management of our Medical schools. As in the larger instances above alluded to, the movement in the direction of change and reform has drawn force and weight much less from the central authority than from the outside—*i.e.*, has come from the Profession at large much more than from the General Medical Council of Education.

The twelfth annual session of the General Medical Council began on July 1, and lasted ten days. The President, in his most admirable opening address to the Council, clearly and forcibly pointed out what seemed to be the most important and urgent work before it—the establishment of a joint examining board for each division of the United Kingdom. He remarked also that the Committee on Medical Education had arrived at a similar conclusion; and one of the first subjects for the consideration of the Council was a most important letter from, or at least written by command of, the Lord President of the Privy Council, in which his Lordship expressed his wish to assist the Medical Council to obtain an amended Medical Acts Bill, but stated that he did not feel that he could undertake to bring any Bill before Parliament, "as a measure recommended by the Government," unless it covered all the ground where amendment of the Medical Act is wanted. His Lordship, "considering that the Act had been in operation more than ten years," presumed that a fair judgment could be formed of its success and merits as a whole, and "would be glad to have the fullest possible explanations with the General Council on this larger aspect of the case." The Lord President further observed that he had been advised that the Act was seriously defective, "as not providing for a satisfactory and uniform minimum standard of admissibility to the Medical Register, and as not enabling the General Council to issue regulations in this respect;" and he recommended this subject to the particular consideration of the Council, "with a view to his being favoured with any recommendation which the Council may be disposed to make in regard of it." And, lastly, his Lordship invited the Council to consider whether it would be desirable to make any change in its own constitution as established by the Act of 1858.

The Council also received a communication from the Garioch and Northern Medical Association recommending alterations in the constitution of the Council so as to secure "the direct representation of the Profession therein," and referring to "the admitted evil of so many examining boards (nineteen in number) conferring diplomas by equally numerous and sometimes conflicting examinations." The Council was also requested to receive a deputation to present a memorial on the same subjects from some five thousand members of the Profession. Thus, at the very beginning of the session the Council was informed that these subjects were being specially considered by the Profession, and was advised of the wishes of at least a very large number of the Profession with regard to them; and a member of the Government requested the advice and guidance of the Council in the preparation of an Amended Medical Acts Bill, with a clear intimation as to the direction in which he thought some amendments needed. There seemed, therefore, good grounds for expecting that the Council would be inspirited into decided and vigorous action, such as would give us clear and solid hope of seeing a large and statesmanlike

Amended Medical Acts Bill introduced into Parliament next year as a Government measure. But the Council did not show itself equal to the opportunity. A committee on the amendment of the Medical Acts was appointed, and all the documents above mentioned, with some others, referred to it, and on the last day of the session its report was received and considered by the Council, but with what seemed to the Profession a very lame and impotent conclusion; for only some parts of the report were adopted, and those by no means unanimously, and then the Council agreed to send it to the Lord President with the information that it had been considered, but not, as a whole, adopted. The report itself, with the debate on it, was published in our number for July 17, and the perusal of the whole will have probably convinced all readers that the Lord President of the Privy Council would feel that he had got a singularly poor and weak answer to his letter, and that, should he still wish to frame an amended Medical Act, he must look for clear and definite aid and guidance anywhere rather than to the General Medical Council.

But though so little was done by the Medical Council during their session towards obtaining the reforms which seem most necessary, much has since been effected outside that body, and has been achieved in part, no doubt in consequence of the opinions expressed in the opening address of the President and by Committees of the Council. The College of Surgeons have decided on refusing their diploma to any one who either does not possess a licence in Medicine or does not pass an examination in Medicine instituted by the College. The College of Physicians have disinterred an old Act giving them power to examine and license in Surgery as well as in Medicine, and have obtained the recognition of their licence as qualifying in both subjects. And the Court of Examiners of the Society of Apothecaries have resolved that, after the summer session of 1870, all students shall be required to produce evidence of their having been examined at the class examinations instituted by their respective teachers in the various branches of Medical science, and that every student who presents himself for his final examination must show that he has acted as clinical clerk under one of the Physicians of a recognised Hospital during a term of six weeks at least.

Most important steps have also been taken towards effectively working out and carrying into practice the at present popular idea of one conjoint examining board for each division of the United Kingdom, or, to reproduce a convenient but somewhat slang term, "the unification of examinations." The College of Surgeons and the College of Physicians have both pronounced in its favour, and the latter have appointed a committee to confer with the Universities and corporations on the subject. The Syndicate of the University of Cambridge have also taken the subject into consideration, and have passed a resolution in its favour, and their resolution is worth reproducing here, as showing briefly and clearly what the foundation-idea is. They have resolved that if any scheme is brought forward for establishing conjoint examining boards for each division of the kingdom on a satisfactory footing, or for providing in any other satisfactory manner for a uniform system of examination throughout the United Kingdom, "which every person who desires a licence should be required to pass, and which should be independent of the several examinations which the Universities or other licensing bodies may think fit to continue for honorary distinctions and degrees, the Syndicate is prepared to recommend the Senate of the University to acquiesce in such scheme," and to co-operate with the Medical Council in carrying it into effect. The University of Oxford has come to a similar decision; and it is said that the University of London will take a like course. We may add to all this that the memorial, which we have mentioned as having been presented, signed by more than five thousand members of the Profession, to the Medical Council, has since been presented, with some ten thousand signatures, to the Lord President of the Privy Council; and that just lately the Executive Committee of the Medical Council have had an interview with his Lordship, with the object of pressing upon him the necessity of an Amended Medical Acts Bill. The committee had provided for his Lordship's information a *résumé* of the working of the Medical Act, and the deeds of the Medical Council during the eleven years of its existence. This ably drawn document will doubtless be useful, as pointing out the weak places in the Act of 1858, and the chief difficulties which the Council have had to encounter; and though it may be thought that the *couleur de rose* has been rather freely used in depicting the achievements and labours of the Council, we are not at all disposed to complain of that. It would be rather niggardly and hard to find fault with such a body for forming a somewhat high and enthusiastic idea of its own usefulness.

These facts are sufficient to prove the existence of the active and widely spread demand for reforms which we have mentioned as one of the most remarkable characters of the Medical year. With this movement we have no slight sympathy, as many of our articles during the year have shown, and we are glad to note the great amount of agreement that prevails as to the kinds of reform most urgently needed. But though we have given proofs enough that we are not of those who dread any and every change because it is change, we certainly are not of those who think that—

"All change is good—whatever is, is wrong."

And, while we hold that it is highly desirable to make some alteration in the constitution of the Medical Council, and we strongly advocate the principle of the one examination board system, we also hold that the kind and extent of the changes to be made, and the mode of making them, demand the utmost consideration and care. This most especially applies to the most important of all the demanded reforms—the establishment of a joint board or one faculty system. That this will shortly be somehow effected seems almost certain, and we earnestly desire and hope that it may turn out a great improvement as well as a great reform; but, to insure this, great judgment and skill must be exercised. The possible advantages of the system are, we believe, very great, but the difficulties in the way of securing all those advantages are by no means slight. One most important point to determine is—How shall the members of the joint board be appointed? Another: How many members shall there be? And, again, to mention only one more difficulty: In what way are the claims of the existing licensing boards to be met? We hold that they are entitled to the fullest and gravest consideration, and must be most honestly and fairly recognised and appreciated.

A full report of the session of the Medical Council was given in our pages at the time; we will here only notice that, to the great regret of the Profession, and of the Council itself, its President, Dr. Burrows, felt obliged, towards the end of the session, to resign the office he had filled with such admirable ability, judgment, and courtesy. The honour of succeeding him fell, by the unanimous choice of the Council, upon Dr. Paget, of Cambridge.

The time of the Houses of Parliament was too much taken up by the Bill for disestablishing and disendowing the Irish Church to allow of their bestowing much attention on the legislative wants and wishes of our Profession, but sufficient opportunities occurred of proving the value and importance of Medical representatives in the House of Commons. A Pharmacy Act Amendment Bill was passed, and, thanks to the ability and firmness of Dr. Brewer, member for Colchester, the mischievous and ill-considered 17th clause of the original Act was so amended as to completely remove medicines ordered by legally qualified Practitioners from the category of poisons as defined by the Act. The Medical Officers' Superannuation (Ireland) Bill was also passed—a first and valuable instalment of justice to Poor-law Medical officers.

The annual meeting of the British Medical Association was

held at Leeds, and was, even compared with the meeting at Oxford last year, a marked success, though a gloom was cast over it by the family affliction which, to the great regret of all, deprived the Association of the presence of its President, Dr. Chadwick, from immediately after his able address on the first evening till the close of the meeting. The addresses in Medicine, Surgery, and Midwifery were given by Sir William Jenner, Mr. Nunneley, and Dr. Beatty, and were well worthy both of the authors and their audience. Among the many able and instructive papers read during the meeting was a very excellent one by Captain Galton on the construction of Hospitals, and it excited a discussion on "Hospitalism," which was carried on in the various sections till the close of the meeting. A paper warfare on the same subject has been skilfully and actively carried on in the Medical journals throughout the year, and has shown that able and acute observers hold such different opinions as to whether Hospitals are necessarily unhealthy, and as to what makes or may make them unhealthy, that we fear the Profession do not as yet feel much enlightened on the matter. It may perhaps, however, be held as indubitable that the concrete or aggregation system of Hospital construction—the "palatial" system—must for the future give way to a separated—isolated—or "pavilion" system.

The British Association for the Advancement of Science held a successful annual meeting at Exeter. The papers on Medicine were not very numerous, but the position of Medicine as a science and art was worthily and ably upheld. Perhaps the most interesting event of the meeting to us was the introduction of chloral, and the report on it by Dr. Richardson. Numerous notices and reports on the properties and uses of this medicine, from English and foreign sources, have appeared in our columns since the Exeter meeting, and though its worth is not yet by any means determined, it seems most probable that it will prove to be a valuable addition to our weapons of warfare against pain and disease.

The Social Science Congress was held at Bristol. Dr. Symonds presided in the Health Department and delivered an admirable address, besides giving an able paper on drunkenness. Dr. Budd contributed a valuable paper "On the Prevention of Infectious Diseases," and there were instructive and interesting papers and discussions on infanticide, Hospital management, and other important subjects. The ladies took an active and able part in the handling of some of the matters dealt with.

We have already mentioned some of the most important actions of the Colleges of Physicians and of Surgeons during the year, and there is not much to be added about them.

The annual list of new Fellows of the College of Physicians came out as usual in July, and though some of the names in it were greeted with general applause, it cannot be said that, as a whole, it excited less dissatisfaction than usual.

It will be remembered that the friends of the late Dr. Baly founded a medal to be awarded from time to time, in memory of his talent, to distinguished physiologists, and the responsibility of making the award was entrusted to the Council of the College of Physicians. This year it was awarded for the first time, and general surprise was felt when it became known that the recipient was Professor Owen. No one will dispute Professor Owen's pre-eminence, throughout Europe, in natural history, in anatomy and palæontology, but we imagine that the Baly medal was intended as a mark of honour for those who had distinguished themselves in the study of human physiology, and we have understood that it was meant that it should be given, every second year, to the physiologist who had most distinguished himself "in the two years particularly" preceding the award, and it seems difficult to make this description apply to Professor Owen.

At the election into the Council of the College of Surgeons Mr. Solly was re-elected, and enjoyed the distinction of being placed at the head of the poll, but the two other vacancies were filled by new men, Messrs. Erichsen and Gay. Mr. Solly is especially to be congratulated on his success, as without it he would miss the honour of being President of the College, for which he stands, we believe, next on the list; and Mr. Gay's success was especially gratifying because he has not the prestige and support derived from being attached to any Medical School or large Hospital.

Early in the year Mr. Erasmus Wilson made the Council of the College the munificent offer of a donation of £5000, and a valuable collection of models of diseases of the skin, on condition of their founding a Professorship of Dermatology, and the College wisely accepted the offer, and appointed Mr. Wilson as their first Professor.

The various Medical societies have been active and flourishing, doing good work, and doing it well; but the most interesting and noteworthy event of the year with regard to them is the proposal made by the Royal Medical and Chirurgical Society for the amalgamation of the Royal Medical and Chirurgical, Pathological, Epidemiological, Obstetrical, and Clinical Societies, and the Medico-Psychological Association, into one society, to be called "The Royal Society of Medicine." The scheme prepared, and, after very full discussion, accepted by the Royal Medical and Chirurgical Society, has been considered, and accepted as a basis for amalgamation, by the other bodies above mentioned, and a united committee, consisting of delegates from each society concerned, has been appointed to hammer the scheme into a satisfactory working state, and has already held two or three meetings. We heartily hope the idea may be successfully carried out, and think that the Fellows of the parent society, the Royal Medical and Chirurgical, deserve great praise for their readiness to give up their time-honoured name, and merge their separate existence into that of a new society for what they hope and believe, and we think with good reason, will be a great stimulus and help to the advancement of the science and art of Medicine.

The changes in the *personnel* of the various metropolitan Hospitals and schools have been rather numerous, but we noticed all or most of them at page 327 of our second volume, and need not repeat them here. We may add, however, that, since that notice, Dr. Scott Alison has resigned his office of Physician to the Brompton Hospital, and has been succeeded in his post by Dr. Symes Thompson, who was the senior Assistant-Physician.

University College and King's College have each established a chair of hygiene, and by the former Dr. Corfield, Fellow of Pembroke College, Oxford, a highly promising alumnus of University College Medical School we believe, has been appointed the first professor, and by the latter Dr. Guy, a well-known master in the subjects he will have to teach from his new chair.

In May the Middlesex Hospital Home for Nursing was opened by her Royal Highness the Princess Teck. It contains accommodation for about sixty nurses, each being provided with a separate and comfortably furnished apartment. There are also a large refectory, kitchen, bath-rooms, etc., and four rooms to be used as wards for sick nurses. It is hoped that the comfort and completeness of the institution may help to induce ladies, and a superior class of women generally, to come forward and undertake the important and most honourable duties of nursing.

The Atkinson-Morley Convalescent Hospital, beautifully situated near Wimbledon, has been completed. It will contain, we believe, about one hundred patients. St. George's Hospital must be considered as highly fortunate in possessing such an *annexe* for its convalescent patients.

In June an important addition was made to the Medical charities of London by the opening of the Evelina Hospital for Sick Children, which was built and fitted up by Baron Ferdinand de Rothschild in memory of his late wife. It is

placed in the midst of a dense and needy population, has been admirably planned and constructed, and has a distinguished and able staff. When fully occupied it will contain, we believe, 100 beds, but at present wards for 30 or 40 beds only have been opened. The founder of the Hospital supplies the whole funds for the efficient working of the charity, and it is intended, we understand, that it shall be permanently endowed. It is a "general" Hospital, or a Hospital for Children in general, only a portion of the beds being appropriated for those of the founder's own people and nation. It would be an impertinence to add any words in praise of such a munificent and liberal act.

A great outcry has been raised against the management, Medical and general, of the grandest of our old endowed Hospitals, that of St. Bartholomew's; and it is undeniable that there is not a little to justify the discontent that has been expressed. The management, or rather mismanagement, and abuse of the out-patients' department appear to be such as to deserve severe criticism and animadversion, while the whole internal economy and arrangements of the institution would probably be much benefited by more responsible and public supervision. It is a most wealthy and noble charity, but while its scientific and social appliances and arrangements appear to be in some respects rather behind the age, its expenditure is extremely large. Guy's Hospital, with an average of about 500 beds always occupied, costs, we believe, about £30,000 a year, while St. Bartholomew's, with an average of only about 50 more beds, shows an expenditure of £40,000. No one will think of accusing any of its officers of any wilful waste or misuse of its funds, but it would probably be much better that the head of an executive of such an important and wealthy institution should be a salaried officer, not a gratuitous worker, and therefore, by custom, less subject to supervision and critical remark. St. Bartholomew's is the oldest, grandest, and most famous of all our Medical institutions, and ought to be perfect and complete as a Hospital and as a Medical School; its managers ought to be able to face the world "*sans peur et sans reproche*," and it is to be hoped that the present agitation, somewhat excessive and unjust though it may be, will help to make the noble old charity all that can be desired.

If Ireland does not absorb all the time and energies of the British Parliament next year, we shall probably have some fresh attempt at legislating on vaccination. The present Compulsory Vaccination Bill does not seem to work well, and certainly does not work smoothly. We hold that no parent has a right to refuse to his children the degree of protection against small-pox which vaccination most undoubtedly affords, and no one has a right to run the risk of making a centre from which small-pox may spread; but the present generation know almost nothing of the dangers, loathsome characters, and disfiguring powers of small-pox, while the ignorant and prejudiced take every opportunity of magnifying the possible objections to, and of inventing fables against, vaccination, and the true Briton has a holy and active horror of doing anything "on compulsion;" consequently much agitation, in which the half-educated and even the fairly educated join, has arisen against Jenner's invaluable boon to humanity, and cases are constantly occurring of legal proceedings for refusal to permit infants to be vaccinated. No doubt every possible security ought to be provided to insure that vaccination shall be performed with care, judgment, and skill, and vaccinators should have considerable latitude in choosing the time for operating, and in dealing with prejudice and ignorance; and if any amended vaccination bill can insure all this, we shall gladly welcome it.

Our editorial labours have been gladdened now and then through the year by our having to record some dignity, honour, or pleasant public reward won by some Professional brother. The promotion of the Army Medical Director-General from the Companionship to be a Knight Commander of the Bath gave general satisfaction, Sir Thomas Logan having already won popularity and esteem from the department over which he presided. Inspector-General of Hospitals and Fleets George Burn, M.D., Inspector-General of Hospitals G. S. Beatson, M.D., Deputy-Inspector-General of Hospitals H. H. Massy, M.D., and Staff-Surgeon-Major G. Saunders have been made Military Companions, and Inspector-General of Hospitals and Fleets J. G. Stewart, M.D., a Civil Companion of the Bath. We congratulate these gentlemen on their well-deserved honours, but we should greatly have liked to have seen a little more liberality, and, we may add, a little more justice, shown by an extension of the list. Especially, we should have been glad to have seen the name of the late Naval Medical Director-General included in it. Dr. Bryson was a faithful and hard-working public servant, and received but scant honour and shabby treatment from the Government. It is now, alas! too late for any attempt to repair any injustice done him, for we have just lately had, to our regret, to record his death. He retired from the office of Director-General of the Medical Department of the Navy in April, 1869, and has been succeeded by Dr. Armstrong, C.B., a very able, more popular, and, we will hope, a more fortunate officer. Dr. J. F. Arthur, of the Madras Army, has been granted the distinction of the Companionship of the Star of India; Dr. Hooker, of Kew, has received the well-merited honour of the Companionship of the Bath; and her Majesty has gratified the Profession by conferring the honour of Knighthood on the highly esteemed and respected President of the Royal College of Physicians, Dr. Alderson. Considerable judgment and discrimination have been shown in the appointment of Dr. Wilson Fox, of University College Hospital, as Physician-Extraordinary to the Queen; of Dr. Laycock as Physician-in-Ordinary, and Mr. Walker as Oculist-in-Ordinary, to the Queen in Scotland; and of Dr. Geo. H. Porter as Surgeon-in-Ordinary to her Majesty in Ireland. The people of Bolton have done themselves honour by determining to erect a statue of Dr. Chadwick as a mark of gratitude for the benefits conferred on them by himself and his wife; and out of many gratifying instances of testimonials presented to Medical men we may note that the late Dr. W. Elliot, of Stratford, received, on his retiring from practice, a present of £1287 and a carriage and horse as a token of the respect and affection of his patients. The diploma of the Honorary Fellowship of the Obstetrical Society of Leipzig has been conferred, in most gratifying terms, on our valued and eminent contributor, Mr. Spencer Wells; and the Medical staff of the Privy Council has been strengthened by the appointment of Dr. Buchanan and Mr. J. Netten Radcliffe as Inspectors under its Medical department. And, lastly, we must not omit to notice that Sir Dominic Corrigan has received a highly flattering and well-deserved honour from the erection of his statue in the hall of the College of Physicians of Ireland. We had nearly forgotten to mention, and it would have been a grave omission, that plans have been formed, and are being warmly supported, for establishing scholarships, or some like memorials, in acknowledgment of the eminent labours and services of the late Dr. Marshall Hall and the, happily, still living Dr. Sharpey.

To turn from this imperfect list of honours and rewards to a sadder subject—more sad at least for those of us who remain still to carry on the battle of life—we have had week by week to record the names, at the least, and often to give brief obituaries, of those who have left us to join "the many." Too often have we had to mention the deaths of very young men, struck down on the very threshhold of their Professional career, as Mr. T. H. Morris, of Spalding, who was taken at the age of 25; Mr. E. Howard Verdon, who fell a victim to typhus fever at the age of 26; Dr. W. S. Aitkin, destroyed by the same pestilence; and, alas! Mr. Alexander Bruce, who, after a short career of singularly brilliant promise and rich performance, also succumbed to that malady at the age of 27. Fever, "caught in the performance of Professional duty," has also taken from us

men of older standing and more proved worth in the conflict, as Dr. Stephen H. Games, and Mr. J. S. Smyth, who died of typhus, and Dr. W. H. Colborne, who, with Messrs. P. Awdry and James Hayward, died of typhoid. Some have fallen, deeply and widely sorrowed for, in the full assurance of Professional success, as Dr. H. G. Wright, of London, and Maurice H. Collis, M.D., of Dublin; or, after a bright and promising beginning, have been forced by ill-health, or by sore trial and affliction, to try other climes than ours, and have there laid them down to rest, as Mr. T. Callaway, Mr. Alexander Edwards, and Dr. H. E. Eastlake. Many again, though they have died in harness, still manfully and successfully fighting to rescue from disease and death their threatened prey, have not fallen till they had harvested of the labours of their youth, and were nearing more or less closely the threescore-and-ten years named by the Psalmist as the ordinary limit of human life; of these were Sir J. F. Olliffe, M.D., Mr. T. Orton, Mr. H. Blaker, Drs. Joseph Bullar and W. Bullar, Dr. James Begbie, Dr. J. Johnstone, of Birmingham, Dr. W. P. Brodribb, Dr. Yearsley, Mr. Richard Griffin, and Mr. Headland. And not a few had lived on, honoured and respected, with "troops of friends," far into ripe old age; among whom we may mention Mr. Joseph Hodgson, who died at the age of 81, "James of Exeter," at 88, Mr. C. Wing at 76, Dr. Cooksworthy, of Plymouth, at 78, Dr. Peter Mark Roget at 90, Mr. Lowe Wheeler and Mr. G. Wakefield Macmurdo at 70, Sir James Prior at 79, Mr. James Haviland at 81, and the Rev. W. Clark, M.D., at 81. Here we must content ourselves with this bald list of names, but in our columns have appeared from time to time notices of the lives, labours, and successes of these and other of our brethren over whose deaths we have grieved during this passing year. And we have had also to record the loss of several of the most eminent and honoured of our brethren in other lands, as Professors Purkinje, Heyfelder, and Grisolle, Dr. Cerise, M. Paul Gnersant, and Dr. C. D. Meigs.

For ourselves, we have anxiously striven to make our readers fully cognisant of everything of importance or general interest in the Medical world; to leave them in ignorance of no advance in the science and of no improvement in the art of Medicine; to point out in what directions thinkers and workers are most active, and what special fields of work seem to give most promise of harvest; to show where true light seems to be breaking in upon the dark places of Medical knowledge, and to warn against mistaking the *ignes fatui* of hasty generalisation, presumption, and charlatanism; and, further, going outside the Medical world, to inform our readers of, and, if necessary, to comment on, all events in the world of general science, or in public life, which may specially interest them, or by which they may be especially affected. To do these things nearly as fully as we wish to do them, and to make our journal all that we desire it to be, tasks our powers and energy to the utmost, and demands more than all the time and space we can command; still, thanks in great measure to our valued co-workers and contributors, we are able to feel no little satisfaction and some pride in looking through our volumes for this year. We have had the gratification of continuing the very able courses of lectures "On Diseases of the Nervous System," by Dr. Wilks; "On Obstetrical Operations," by Dr. R. Barnes; and "On the Germinal or Living Matter of Living Bodies," by Dr. Lionel Beale. We have begun a course of "Lectures on Clinical Surgery," by Mr. T. Bryant, and a course of "Clinical Lectures" by Dr. Hermann Lebert, the celebrated Professor of Clinical Medicine in the University of Breslau. We have been able to continue Dr. B. W. Richardson's "Lectures on Experimental and Practical Medicine." We have given abstracts of the Lettsomian Lectures by Mr. W. Adams, of Gresham Lectures by Dr. Symes Thompson, and of lectures at the Royal Colleges of Physicians and of Surgeons; and important lectures of many others of our most eminent workers, such as Dr. George Johnson's lectures "On the Physiology of Coma and Anæsthesia," Mr. Jonathan Hutchinson's lecture "On Erythema Nodosum and on the Doctrine of Abortive Exanthems," Dr. Letheby's "On the Method of estimating Nitrogenous Matters in Potable Waters," Dr. B. Ball's lectures "On Diseases of the Joints connected with Progressive Locomotor Ataxy," a clinical lecture by Professor Richet "On Excision of the Knee-joint," and lectures by Dr. Sturges, Professor J. Fayrer, and Professor Stokes. Our columns have been enriched by numerous able and valuable "Original Communications" on subjects of importance and interest, but we can only find space to mention a few them here—as papers on "The Pneumothorax occurring in Phthisis," and on other subjects, by Dr. Douglas Powell; "Notes of Interesting Surgical Cases," by Professor J. Fayrer; "On the Early Progress of Army Sanitation in India," by Dr. C. A. Gordon; "On Craniotomy and Cæsarian Section," by Dr. T. Radford; "Speculations concerning Herpes Zoster," by Dr. Broadbent; "On Loose Cartilages in the Knee-joint," by Mr. A. Poland; "A Contribution to the Clinical History of Chorea," by Dr. James Russell; "On Lumbar Colotomy," and other subjects, by Mr. C. F. Maunder; "On the Excretion of Urea in Exanthematous Typhus, in its relation to the Fever," by Professor S. Rosenstein, of Gröningen; "Notes on the Physiology and Pathology of the Nervous System," by Dr. Hughlings-Jackson; "A Case of Paralysis of the Hypoglossal Nerve, followed by Sloughing of the Tongue," by Dr. E. Ballard; "On the Comparative Mortality after Resection of the Hip-joint in France and in England," by Dr. R. R. Good; "On Impure Water as a Cause of Excessive Mortality from Cholera in Holland," by Dr. A. M. Ballot; "On Aphasia," by Dr. F. Bateman; "On the Behaviour of the White Blood-cells in Inflammation of the Kidneys and Lungs," by Professor Axel Key; "On Low Fever in Spain," and "On the Origin of Syphilis," by Mr. George Gaskoin; "Human Hair in the Stomach," by Dr. T. Inman; "Norwegian Notes," by Mr. Jonathan Hutchinson; "On the Condition of the Seminal Secretion in Disease," by M. Liégeois; "On Hydrate of Chloral and its Use in Practice," by Mr. T. Spencer Wells and Dr. Bence Jones; "Observations on the Difficulty of Diagnosing, in some cases, Pyæmia from Rheumatic Fever," by Dr. H. G. Sutton; "On the History and Practice of Vaccination," by Dr. H. Blanc; "Leprosy in Norway," by Dr. D. H. Stirling; "On the Alleged Salubrity of Small Hospitals," by Dr. J. M. Duncan; "Remarks suggested by a Case of Encephalic Hæmorrhage," by Dr. Clifford Allbutt; "On the Theory and Treatment of Cholera in India," by Dr. George Johnson; "On Prurigo," by Mr. Erasmus Wilson; and papers by Mr. C. L. Bradley, Dr. T. Weir Mitchell, Mr. J. D. Hill, Drs. R. Beveridge, J. Brakenridge, D. Mackintosh, H. Lawson, and J. H. Symonds, and Messrs. T. Johnstone, B. Wills Richardson, H. Hancock, J. H. Salter, Lawson Tait, W. R. Swain, Haynes Walton, Professor Billroth, Professor Wurtz, and other well-known teachers and Practitioners.

The "Hospital Reports" have reflected the practice and teaching of the most eminent and the most active and "inquiring" of our Hospital Physicians and Surgeons, and have contained accounts of rare or in any way especially interesting cases in the London and provincial Hospitals. As far as was possible notices and reviews have been given of the most noteworthy books and essays which have been published at home and abroad, and we have endeavoured to find space for abstracts of the proceedings of the various Medical societies, but these bodies are so numerous that to give even very short notices of all their meetings would require the issue of a weekly or fortnightly supplement to the journal during the active season. We have happily been able to continue the interesting and admirably written *résumé* of, and commentary on, passing events called "Topics of the Day," which,

with other "notes" from at home and abroad, have supplied our clients with a very pleasant, useful, and instructive kind of "light reading." From time to time our pages have also contained valuable and ably written short essays or notices on a variety of interesting and important subjects, such as "The Principal Applications of the Graphical Method to Biology," the "Progress of the Population in France," "The London University Examinations," "Ranke's Physiology of Man," "The Blood-corpuscles and their Physical Properties," "The Laws of Beauty and Proportions of the Human Figure," "The Air we Breathe," "The Cholagogue Action of Mercury," "Dr. Burdon Sanderson on the Inoculation of Tubercle," and so on.

In our editorial articles we have commented, advised, encouraged, or warned whenever the honour and interests of the Profession were especially concerned; and have given as "editorials" notices and commentaries on various subjects and theories of the day. Among them we will mention articles on "Professor Owen's Conclusions in the Science of Life," "Professor Huxley on Physical Basis of Life," "The Water Discussion," "National Registration of Disease," "Ventilation and Infant Mortality," "Mill on the Subjection of Women," "Thomas Markby on Medical Women," "Demoniacal Possession and Miracles in the Nineteenth Century," "Life Assurance," "Laws relating to Drunkards," "Yellow Fever in Cuba," "The Origin of Syphilis," and many other subjects, with further some "comments" on articles of diet, as "Liebig's Extract of Meat," "Eggs," "Hambro' Sherry," and so on.

We most gratefully acknowledge the large amount of help and support we have received from the Profession in our endeavours to merit the confidence they have placed in us, and to keep the *Medical Times and Gazette* worthy of the high position it has so long enjoyed as a Medical journal. We hope that our efforts in the future will deserve and meet with the same rewards; and, in conclusion, we heartily wish our brethren, at home and abroad, a merry Christmas and a happy new year, "and many of them."

PERIODICAL EXAMINATIONS OF SOLDIERS FOR VENEREAL DISEASES.

An "Army Surgeon" addresses us on this subject with reference to an article in the *Medical Mirror* of the 1st inst., which strongly advocates the reintroduction of the system of periodical inspections of soldiers for venereal diseases. Our correspondent urges that, notwithstanding a slight increase in this class of disease in troops serving at home during 1867, the statistical returns of the army show that since the abolition of the custom of personal inspections the annual ratio of admissions for venereal diseases per 1000 has steadily decreased from 369 to 291, the ratio of men constantly sick from the same cause has decreased from 23·69 to 17·13 per 1000, and the loss of service of the whole army at home, from 8·6 days in 1860, was, in 1867, only 6·2 days. He therefore argues that the experiment of doing away with these objectionable inspections has stood the test of time. He further attributes the decrease in venereal diseases in great measure to the fact that since the inspections were discontinued the responsibility of a soldier's having syphilis was transferred from the Surgeon to the soldier himself, and that the prospect of punishment for concealment of disease has been, and would therefore continue to be, a sufficiently powerful motive to induce the soldier to look after himself, instead of trusting to the necessarily hurried and superficial inspection by the Surgeon, his success in eluding which was often considered to be a good joke against the Doctor for barrack-room circulation among his comrades.

Our correspondent does not object to the occasional inspection of soldiers under certain circumstances, such as the arrival of a regiment from abroad at a station where the Contagious Diseases Act is in force, or from a home station not under such regulation, or after a march from one protected station to another through unprotected towns. In the case of soldiers rejoining from furlough, at a station under the Act, the inspection is not only advisable, but necessary, and he states it to be the rule in all well-regulated regiments; an unusual prevalence of venereal diseases also may occasionally render inspection necessary.

With these exceptions he strongly objects to the inspection of soldiers for the detection of venereal diseases as having been proved by the experience of the last ten years to be unnecessary.(a) He also maintains that by having given the soldier a false sense of security, in the idea that if he were not sufficiently diseased to be detected by the Surgeon on inspection, he must be sufficiently well to indulge his sensual appetites, the tendency of the system of personal inspections was to increase the spread of disease.

Our correspondent further asserts that the abolition of these inspections in 1858 was one of the measures of improvement in the terms on which Medical officers and recruits were expected to enter the army, both of better classes and in greater numbers, and that their reintroduction would be a distinct breach of contract with those who entered the service since that time. The great majority of Assistant-Surgeons in the Army belong to that class, and on them would, in most instances, devolve the degrading duty of making the periodical inspections. Even Surgeon-Major Wyatt, who, from the importance which he attaches to personal inspections, may well be termed the apostle of the system, stated in his evidence before the committee of the House of Commons that he delegates the disagreeable duty to one of his Assistant-Surgeons; and, if *he* does so, can more be expected of other regimental Surgeons, the vast majority of whom believe the inspections to be unnecessary? We are inclined to agree with our correspondent that an Assistant-Surgeon who, under the circumstances, might decline to make the required inspection, would be maintained in his right to do so by the opinion of the Profession and the general public.

If inspections become again the rule in the army, the only way to insure to them any degree of efficiency would be, as "Army Surgeon" asserts, to make them thoroughly and minutely—they should include not only the organs of generation, but the whole surface of the body. This, however, would require such an expenditure of time on the part of the Medical officer, and of consequent waiting on the part of the men, as would render the maintenance of discipline and respectful demeanour among the latter a matter for the consideration of the military authorities; and the requisite attributes for this purpose not being vested in the Medical officers, the necessary parade should be under the command of a combatant commissioned officer—the officer of the day, for instance, or the adjutant of the regiment. When all this has been done, what security have we attained against the introduction of disease among women from other and far more numerous sources, amongst whom no means whatever are in force for the repression of venereal diseases? The recruiting returns of the army show that 16 per 1000 recruits are rejected for venereal diseases in one form or other. We may from this fact form an estimate of the prevalence of such diseases among the class from which recruits come. There is no reason whatever to think that, even supposing venereal diseases to have been thoroughly eradicated from the army and navy, a sufficient stock of the old leaven would not be found among the civil male population to keep up the disease in all its loathsomeness among public women.

We have given "Army Surgeon" a fair amount of space to

(a) It is also worthy of notice that at Aldershot, since the introduction of the Contagious Diseases Act in 1867, the percentage of prostitutes found diseased on examination has diminished from 70 to 10. In the face of such a fact it can hardly be maintained that there has been much concealed disease among the soldiers.

express his views on this matter in the hope that they may have some influence in averting the proposed reintroduction of periodical inspections of soldiers. There certainly appears to be some inconsistency in the Legislature having last year abolished flogging in the army in order to maintain the self-respect of the soldier by sparing the back of the one blackguard in the 1000, while during this year a committee of the House of Commons recommends the reintroduction of personal inspections, which involve all soldiers and Medical officers in mutual and unnecessary degradation.]

THE WEEK.

TOPICS OF THE DAY.

A RECENT interview between the Executive Committee of the Medical Council and Earl De Grey and Ripon on the subject of an amended Medical Act did not afford much promise of Government aid during the coming session. In fact, it is pretty well known that the hands of Government are likely to be more than full. Lord De Grey and Ripon intimated that the Government would prefer at present leaving matters of reform to the spontaneous efforts of colleges and examining bodies. In the meanwhile it is understood that the committee appointed by the Royal College of Physicians are steadily working in the direction of a conjoint board. How far their efforts are likely to be successful it would be premature to guess. But we hear of meetings between delegates from the College of Physicians and the leading officials of the Royal College of Surgeons and the Society of Apothecaries. At the same time, it is well known that there are difficulties in the way which can only be overcome by great skill and forbearance. We have already pointed out the dangers of failure which are inherent to any scheme of joint examination, and it is only by giving full representation to the different elements of the Profession in the board of examiners that it can be hoped they will be avoided.

The drama of the Welsh fasting girl, which was regarded in the first instance by all reasonable persons as a farce, has ended tragically. Four nurses from Guy's Hospital who were sent to watch her, said that she literally fasted for eight days, at the end of which time she died. The watching began on December 9, and was terminated by the death of the girl at 3 p.m. on December 17. On December 11 she is reported to have been not looking so well, but up to the 14th she is said to have amused herself with reading and to have appeared cheerful. She slept at intervals; her cheeks appeared flushed. On December 11 the nurses observed stains of excrement on the girl's dress. On the 13th she is reported to have passed a large quantity of urine, and on the 14th and 15th a smaller quantity. For three days before her death her extremities were cold, and during the last two days she was restless, throwing off the bed clothes, and tossing her arms about. She asked for no food, and made no confession of deceit. No attempt was made to force food upon her, but it seems she was offered it by her uncle on the day of her death. "She made no reply, but appeared to go off into a fit." On the same day, when the child was sinking, her father refused to allow Mr. Davies, the Surgeon who attended her, to give her food, but afterwards said that he might do so. Mr. Davies did not, however, "as it was too late." An inquiry is being held by the local coroner, and a post-mortem examination has been made by Messrs. Thomas and Phillips. At the time of our going to press the inquest is proceeding, but we extract the following report of Mr. Thomas's evidence given at the first day's sitting from the *Western Mail* of December 22:—

"Mr. James Thomas, Surgeon, Newcastle-Emlyn, was the next witness, and said:—On Monday, in conjunction with Mr. Phillips, in the presence of Dr. Lewis and other gentlemen, I examined the body of Sarah Jacobs, said to be about 12 years and six months of age. It measured about 54 inches, was plump and well formed, and showed indications of puberty. I opened the head and found the membranes of the brain considerably injected with blood, which in all probability happened a few hours before death. The substance was not very vascular, but perfectly healthy and of proper consistence, and there was not the slightest difference between the sides of the brain. An incision was then made from the top of the chest down to the lower part of the body, which displayed a fine layer of fat, from half an inch to an inch thick, there being fat all through the incision. The chest—lungs, heart, and great vessels—were perfectly sound and healthy, containing very little blood. I then came to the most important part of the inquiry—that of the alimentary canal, and my first observation was that there was not the slightest obstruction from the mouth to the termination of the gut, which included about 33 feet. The stomach was opened, and it contained about three teaspoonfuls of semi-gelatinous fluid, as if it had been mixed with a little bile, having a slight acid reaction with litmus paper. The whole of the small and large intestines were then laid open, and the small ones were empty, but in the colon and rectum there was about half a pound of excrement in a hard state (which was produced for the jury to examine, if necessary); the liver was healthy, with the gall-bladder considerably distended with bile, the kidneys and spleen perfectly sound, and the urinary bladder perfectly healthy—in fact, as far as eyes could see, no malformation or disease, judging from the healthy appearance of the organs. My theory is that death resulted from want of nutriment and sustenance."

It would be a departure from our custom to comment at length on this case until the public inquiry has terminated. All we can say at present is that it is impossible not to regard it with indignation. The poor hysterical child who is dead was not the chief person to blame. The facts of her having breathed for two years and passed urine prove undeniably that she must have taken food. That she denied the fact is only a common symptom of hysterical disease, and that she found persons in her father's house to humour her and assist her in the deceit is not surprising when it is remembered that she attracted sightseers who paid or made her presents. Those who are most to blame are the educated gentry and Professional persons in the neighbourhood, who, instead of scouting the idea of anything but hysteria and fraud in the case, lent their aid, by talking and writing in a half-credulous fashion, in spreading the girl's reputation as a living wonder. If a Physician had in the first instance told the parents that simulating fasting was a well-known phase of hysteria, and that the proper treatment was to introduce a tube into the stomach or rectum, and to feed her thereby, and had insisted on seeing his prescription carried into effect, or, in case of opposition, had appealed for power to a magistrate, the poor girl's life might have been saved. Instead of this we have had silly people kept on the *qui vive* for two years by sensational paragraphs in Medical and other papers—then "a committee formed to investigate the case," and nurses sent down from a London Hospital to watch her, with what result has been seen. The whole thing is as great a national disgrace as it would be to try a woman for witchcraft by the ordeal of drowning.

Before a final opinion is formed as to the truth of the charges brought against the St. Pancras Guardians and the real condition of St. Pancras Workhouse Infirmary, we think, in fairness, an able report by Dr. T. Stevenson, the Medical Officer of Health for the parish and a Lecturer at Guy's Hospital and Examiner in Forensic Medicine in the University of London, on the sanitary condition of the Infirmary should be read. Dr. Stevenson paid several visits to the Infirmary by the request of a special committee of vestrymen. His visits were made both during the night and day, and were on each occasion unexpected by the authorities of the workhouse. He shows that in most of the wards means of ventilation were provided by apertures in the windows, provided with hinged lids, which may be shut or opened at pleasure; and by zinc gratings in the ceilings communicating with air shafts for the escape of foul air. The air shafts communicate with the ash-pit of a double furnace, by which a draught is, or may be, constantly kept up. The sources from which

the wards obtain air are three—by means of doors from clean airy staircases; from the external world by windows and ventilating apertures; and from the water-closets and scullcries. This last source depends on holes made in the doors of the scullcries and waterclosets for the purpose of ventilating them, and, as the closets are provided with external windows, which are open, air is constantly blown through them into the ward. This construction, however, is the result of the recommendation of a Medical Poor-law Inspector, and is not chargeable on the present board of guardians. We cannot follow Dr. Stevenson through the details of his report. He gives a short description of each ward, and of the condition in which he found it. In some he found the ventilation only too great for the comfort of the patients, in some he found it defective, but he found all the wards neat and clean; and of the odours he notices some were no worse than those of stale tobacco, dinner, and sulphur ointment. The worst smells he noted were those proceeding from waterclosets with perforated doors. In summing up his report he says emphatically, "On no occasion were the wards 'beastly' or 'highly offensive.'" The guardians, openly accuse Dr. Ellis, the resident Medical officer, of having purposely ventilated the wards through the waterclosets by closing the ward windows on the occasion of the visits of gentlemen who were invited to inspect, and they produce statistics to show that there has been a decrease rather than an increase of mortality in the Infirmary under the present *régime*. The charges against Dr. Ellis will be inquired into by a Poor-law Commissioner.

Deaths from relapsing fever have occurred in the London Fever Hospital, in Bethnal-green, Westminster, Islington, and Clapham. The Metropolitan Asylums Board have determined to erect another temporary Fever Hospital at Hampstead capable of holding 160 patients, one being already erected and occupied behind the London Fever Hospital. Scarlet fever seems at last to be on the decrease. The week before last the deaths were thirty-six less than the number registered in the previous week; last week they were twenty-three less than in the week before it.

A nurse in the Children's Hospital, Ormond-street, has poisoned herself by drinking off some belladonna liniment instead of brandy. After taking it she became giddy and wanted to go for advice to the House-Surgeon, but her fellow nurse thought she was intoxicated and advised her not to go. She soon became insensible, and, although actively treated, died. It appears that the bottle was labelled.

The flint-implement makers—whether men or "the missing link"—appear to have been ubiquitous. We recently heard of these weapons having been found in the Cape Colony, where none of the existing races use them, and now Messrs. Hamy and Lenormant have written to the Academy of Sciences announcing that a large quantity of wrought flints, of well-known types, have been discovered in Egypt. These gentlemen suppose that there was "a factory of the Neolithic period" on a plateau near the valley of Biban-el-Molouk.

THE MAIN DRAINAGE SCHEME AND THE HEALTH OF BARKING.

It is interesting to find that the report recently published by Mr. Rawlinson, the eminent engineer appointed by the Board of Works to inquire into the alleged pollution of the Barking Creek by sewage contamination from the Main Drainage Outfall Works, coincides in almost every particular with that of our special commissioner whom we sent down five months ago for the same purpose. It appears that the stenches complained of by the inhabitants arise principally from the defective drainage of the town, the deficient water supply, and the consequent contamination of the soil with sewage from their own dwellings; or, as our commissioner tersely summed up his very complete report, by stating that, in his opinion, "the memorialists' Barking is worse than their biting."

GENERAL CORRESPONDENCE.

M. LIÉGEOIS AND MR. CURLING.

LETTER FROM M. LIÉGEOIS.

[To the Editor of the Medical Times and Gazette.]

SIR,—Thanks to your Paris Surgical correspondent, my *mémoire* "on the condition of semen in disease," read before the Imperial Society of Surgery, has found a place in your estimable journal.

In the historical sketch of this *mémoire*, I had thought to have rendered justice to all; but I learn since, through your correspondent, that some of Mr. Curling's researches on the same subject have entirely escaped me. I consider it my duty, therefore, and a pleasure at the same time, to repair this fault, and, as Mr. Curling very justly supposes, this forgetfulness was quite involuntary on my part.

In fact, I knew nothing of Mr. Curling's paper, "Observations on Sterility in Man," published in the *British and Foreign Medico-Chirurgical Review* (April, 1864). Having quite recently read the article, I am happy to have furnished another proof in support of Mr. Curling's views on the same question.

I was also ignorant of the fact that Mr. Curling had made investigations on the condition of semen in old people. However, I must observe that the first edition of Mr. Curling's book on the Testis, in which the author treats this subject, bears date 1843. The translation of Wagner's work by A. Hubenets (*Histoire de la génération et de développement*), in which observations are cited of men aged 60 and 70 with zoosperma, dates back to 1841. The priority as to the demonstration of spermatoza in old people seems, therefore, to belong to Wagner.

In terminating I wish to say that Mr. Curling's letter is by no means clad in the form of a demand, but to which, in the interest of scientific truth, I attach great importance.

I am, &c. LIÉGEOIS,

Paris, December 18. Surgeon to the Midi Hospital.

MEDICAL CHARGES.

LETTER FROM DR. FREDERICK J. BROWN.

[To the Editor of the Medical Times and Gazette.]

SIR,—Since one of your correspondents invites discussion on the question of Medical charges, I ask permission to make a few remarks. I desire to enunciate three principles:—

1. Remuneration is a commercial action, and its rate is dependent on "supply and demand." In trade the maxim is openly acknowledged, but in professions it is concealed. If a Surgeon be not satisfied with the honorarium given him, he will not attend a second time, thus necessitating patients to give according to expectation; and this is a commercial action as much as a specified charge.

2. Medical charges are in direct proportion with social status, in consequence of deference to rank. Time is expended in social amenities and in attendance for satisfaction of patients, rather than for Professional reasons.

3. The charges to the poor that preserve their independence, ought to be in just proportion to the amount paid by contract with clubs and provident dispensaries.

It is necessary to the well-being of the community that all classes should have the option of private individual Medical attendance, and of that by contract (whether public or private).

The disproportion that now exists between the two systems of attendance is unjust. A balance ought to be struck between prepayment and the chance of little or no illness in the one case, and part payment (with the chances of no payment) and actual illness in the other case.

The ready-money system would obviate losses by debt, but this system is only partially practicable, even when the man is in work, for nursing and extra nutriment for the sick member of the family augment the weekly expenses of the poor man.

It appears to me that a small charge for advice and medicine (irrespective of number of visits), not exceeding 5 per cent. of income for the year, is the best mode of charging for attendance on the poor.

If it be necessary to specify visits, or if there be very little attendance in a given case, I advise that one shilling be charged to labourers, and one shilling and sixpence to artisans inclusive of medicine. A kind-hearted Surgeon will make his bill suitable to the means of his patient, whatever may be the

attendance, and on no account will he "distrain," lest Medical attendance be regarded as a curse instead of a blessing.

I am, &c. FREDERICK J. BROWN.

Rochester, December 16, 1869.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, DECEMBER 14, 1869.

GEORGE BURROWS, M.D., F.R.S., President, in the chair.

MR. G. D. POLLOCK read a paper on

AMPUTATION AT THE KNEE-JOINT.

The author commenced by drawing attention to the circumstance that amputation at the knee-joint had not been very favourably entertained until within the last thirty years, and that only very lately had it been much advocated. Having himself performed the operation in several cases with satisfactory results, he desired to bring his experience before the Society.

After referring to the practice of Mr. Syme and of Mr. Samuel Lane, the author proceeded to say that, in the consideration of amputation through the joint, two conditions must be borne in mind—first, if there be disease of the joint and ulceration of the cartilages after the leg is taken off, the articular surfaces of the condyles and patella should be removed; secondly, if no disease of the joint exist, but amputation be requisite on some other account, then the articular cartilage should be left intact.

The author related the particulars and results of eight cases in his own practice, and quoted communications received from other English Surgeons. From various sources he had been able to collect 48 cases operated upon in England. These showed a gross result of 36 recoveries and 12 deaths. A collection of American cases showed 32 recoveries and 13 deaths, thus giving a total mortality of 26·88 per cent.

After some further account of American experience in the matter, the author proceeded to describe the improvement suggested by Mr. Carden, of Worcester, of making the flap of skin taken from the front of the leg. He himself approved of the suggestion. The anterior flap should be long enough and broad enough to cover the whole of the exposed end of the femur. It should be so broad at its base as to be at least two-thirds of the circumference of the joint, the posterior flap at its base forming the other third. The author lays stress upon the anterior flap being of sufficient length (at least five inches below the lowest point of the patella), and is inclined to leave the patella in the flap when the joint is healthy. When it is diseased, he recommends the removal of the articular surface alone. The comparison between the stump usually obtained after amputation through the thigh, and that obtained after amputation through the knee-joint, is very much in favour of the latter, which is never conical or retracted, and is superior in strength and fitness for locomotion, in comfort and freedom from pain, and in capability to bear weight and endure exertion. It is also more easy to adapt a good serviceable artificial leg to such a stump. In conclusion, the author thought the facts he had brought forward, although not enough to lead to positive conclusions, were enough to commend the operation to the favourable consideration of the Society.

Mr. HOLTHOUSE said Mr. Pollock had not alluded to a case which had been under his care. It was not a favourable one. The patient was a brewer's drayman, who had compound fracture. Some operation was required, and he determined on amputation at the knee-joint, as the risk was less than in amputating the thigh. He made a long anterior flap. The patient died not long after the operation. He had had no opportunity of performing the operation since. He agreed as to the impropriety of removing the cartilage.

Mr. BRUDENELL CARTER stated that Mr. Fenn, of Derby, had long performed the operation, and had induced him to do so also. He had amputated at the knee some three or four times, generally in bad smashes, where union failed. He said nothing as to his success, as he had kept no notes of the cases. The stumps were good, and the wounds healed quickly.

Mr. JAMES LANE said they had got some way towards settling the question; hitherto their grounds had been insufficient. Safety was not the only advantage; the stumps were better and bore weight better, especially as, with amputations through the thigh, the bearings of the leg had to be taken from the pelvis. A long flap was an essential point, and it should be taken from the hardened skin, just as the flap for amputation at the ankle should be taken from the heel. The cartilages of the patella should not be moved, their presence being of great advantage with regard to pyæmia, the cartilages being non-absorbent. He hoped that other and similar operations, as through the wrist and ankle, would be established. He concurred in making the flap long, and it should be broad at the lower part, otherwise the condyles would be exposed. He had seen suppuration extend up the thigh in front, most likely in the synovial pouch. Free incisions were required, but there was no ultimate bad result. The flaps do not adhere to the condyles, and the patella is generally movable. The patient does not rest the limb on the patella, which is drawn up in front, but on the broad condyles of the femur.

Mr. HOLMES said the operation had one other advantage in giving the patient greater length of limb, better leverage, and better attachment of the extensors; hence he can walk better. This was strongly dwelt on by an Italian Surgeon who had proposed, when any of the bones had to be cut, to do so above the condyles, and then apply the patella as in Pirogoff's operation. He had performed the operation, but the patient was not yet quite well. As to the stump after amputation at the knee, he had examined it in a child who had been operated on and afterwards died of a lung affection. In it the patella was quite movable, and the cartilage unaffected. The mortality with it was less. His own cases had been bad, half of them having died from disease previously active.

Mr. BARWELL asked the ratio of cases where there was abscess in front, as it was desirable to avoid openings after amputation. Saving the nucles was also important.

Mr. BIRKETT would have done the operation oftener had he not been deterred by the mechanicians, who said it was almost impossible to fit the stump. In one case, alluded to by Mr. Pollock, a sudden and extraordinary blanching of the flap occurred during the operation, and the part subsequently sloughed. The patient died of pyæmia. In another case the operation had not been quite satisfactory, as the posterior flap was too short, and prolonged cicatrisation followed. He thought the best incisions would be shorter laterally, almost like the old circular operation.

Mr. COOPER FORSTER had done the operation twice, but it was difficult to get suitable cases. If one could get a portion of the tibia, that was better still, though amputation at the knee-joint was good. He had done the old-fashioned circular operation, and had been well pleased with the result. There was not more than three-quarters of an inch of cicatrix. One naturally preferred severing ligaments to the carpenter-like plan of sawing bones.

Mr. THOMAS SMITH had done the operation four times. One patient died of malignant disease; three recovered with excellent stumps. As to an artificial limb, makers had been so long accustomed to bad stumps that they could not make for good ones. The wound in this operation was mostly of integument and ligaments; only two heads of the gastrocnemius were cut, and only three vessels, the two sural and the popliteal. There was less shock with it than with amputation of the thigh. He wished cases of amputation at the knee-joint purely had been separated from Carden's operation. In the latter the cutting of the bone imported an element of danger. The operation was safer than through the thigh, but more dangerous than through the leg.

Mr. CALLENDER said that, according to Sir James Simpson's statistics and his own, the death-rate given to-night was rather too low; it was about 28 per cent. Amputation through the knee was safer, because further from the trunk. It was true the integument alone was chiefly cut, but the great tendons had some influence, especially with regard to the suppuration which follows and sometimes goes along them.

In reply, Mr. POLLOCK said the suppuration generally extended into the front rather than behind the stump, usually in the space between the condyles. The cartilage, when exposed, became covered with granulations. Since the paper was written he had done his ninth case, which had gone well so far. He preferred the flap to the circular operation.

DR. RASPAIL.—The late Paris election added one pun to the literature of wit. "Pour qui votez-vous?" asked an elector of another. "Pour Raspail," was the reply. Now Raspail invented a preparation of camphor as a panacea. So the second elector rejoined, "Pour Raspail? Qu'en ferez-vous?" (*Camphrez-vous?*)

OBITUARY.

WILLIAM BAGG.

It is with much regret that we have to record the death of a gentleman who, although not a member of the Medical Profession, was for many years identified so closely with Medicine that his name will be remembered by many as a "household word;" we allude to the eminent anatomical and physiological as well as Surgical artist, William Bagg. Mr. Bagg held a high reputation among authors and publishers for the care and accuracy of his drawings, and we are able to bear witness to the demand incessantly made by him upon those for whom he was engaged for opportunities of having before him the actual objects which he was required to delineate, or the means of drawing them from nature for himself. The very last time we saw him at his work, not many weeks ago, he was sauntering through the halls of the Museum of the College of Surgeons, returning from the execution of a sketch for Mr. Holmes. Besides being a clever artist on wood, stone, steel, and copper, as well as at the easel, he possessed great mechanical ingenuity, and has left more than one work behind him displayiug his capabilities as a cunning artificer in wood and metals; he was an adroit and elegant swordsman, a certain shot with a rifle—a piece of his own construction, and a devotee in his leisure moments to the "gentle craft."

His earliest Medical work was his illustration by wood engravings of Quain's "Anatomy," which was shortly followed by Liston's "Practical Surgery." He was an especial favourite with Liston on account of his mechanical ability, and occasionally ventured to suggest improved methods of operation, greatly to the amusement of that distinguished Surgeon; but of Liston, and indeed of all who employed him, he possessed the entire confidence, and a subject once handed over to Bagg was regarded as tolerably certain of accomplishment in the best method that human intellect could devise. After these his first works he illustrated the "Anatomist's Vade-mecum;" he drew on stone the portraits of diseases of the skin of Wilson, and engraved many plates on copper and steel for the same author. The illustrations of Ramsbotham's "Midwifery," Carpenter's "Physiology," and Sir William Fergusson's "Surgery," are other examples of his labours, of which a detailed list would run to a considerable length. At his death he left behind him, still unfinished, many drawings for Holmes's "Surgery," upon which he was engaged at the time of his last illness.

The immediate cause of his death was peritonitis, resulting apparently from chronic ulceration, and possibly perforation, of the cæcum or colon. For upwards of twelve months he had suffered from slight dysentery, with faintness in the morning and loss of appetite; but the symptoms were so slight that he made no complaint with regard to them, and he went to the seaside in the autumn with the expectation of recovering his strength. Five weeks before his death, he had been suffering with lumbago, and three weeks later was suddenly seized with abdominal pain, for which he took a dose of castor oil. The oil acted freely, but its operation was succeeded by sickness, and during the efforts of vomiting he experienced an intense pain in the right iliac region. His own impression was that the pain was attributable to strangulated hernia, and he sent for Sir Henry Thompson, who returned the bowel without resistance. The pain, however, continued in a subdued form, and was accompanied with inflation of the bowels, a red dry tongue, and pulse ranging between 110 and 130, and these symptoms continued until his death from exhaustion, which happened a fortnight after his sudden attack. Besides Sir Henry Thompson, who watched him through the Surgical period of his case, he was attended by Dr. Murchison, Dr. Royston, Mr. Erasmus Wilson, and Mr. Foster.

Although Mr. Bagg had nearly completed his sixty-sixth year, he was young for his age, and still fresh in his capability for application and labour. He breathed his last on December 20.

John William Hayes, of Old-street, was on Tuesday last brought before the magistrate at the Clerkenwell Police-court, charged with unlawfully pretending to be a Surgeon. The prisoner treated an infant who died, and he gave a certificate of death in the name of a regular Practitioner. He was fined £10, and £3 3s. costs, or two months' imprisonment.

NEW INVENTIONS.

HALFORD'S WHEATEN BISCUITS.

(14, *Down-street, Piccadilly.*)

We have already expressed our commendation of the use of whole wheaten meal as a part of the diet of most persons. It has two good qualities. In the first place it acts as a mechanical stimulant to the intestines, and causes them to move with regularity, and thus it takes the place of the aperient pills, the mineral waters, and many other contrivances which the dwellers in towns and persons leading a sedentary life are otherwise compelled to resort to. In the next place it supplies the earthy phosphates which give firmness to the bones. This may be supposed, in conjunction with other hygienic treatment, to conduce to sweetness of breath, straightness of legs and soundness of teeth — qualities which every parent desires to see enjoyed by his children. But wheaten meal is not a pleasant food in all forms, and, even in the shape of brown bread, is apt to be cloying and indigestible. In the biscuits before us, the whole wheaten meal is compacted into a mass like short piecrust, which readily breaks down in the mouth, and mixes with the other articles of aliment. These, we believe, if discreetly used, will supersede many a box of family pills, besides being uncommonly relishing with a bit of Stilton. Mr. Halford, who has undertaken the manufacture, is, we believe, of a family that has contributed more than one well-known member to the Medical Profession.

VOUVRAY, A SPARKLING WINE FROM THE TOURAINE.

(*Arthur H. Browning, Agent, Lewes.*)

Our readers are well enough aware that as all red French wine is not "claret," nor yet all German wine "hock," so not all the sparkling wines handed round at feasts are "champagnes," though they be dignified by that name. They know, further, that a good honest wine that is not ashamed of its own name, nor afraid to stand on its own merits, is better than a spurious article bedizened with a title which it has no right to. Such a wine is the Vouvray, an avowed product of the West of France, which is capable of satisfying most people who want the wholesome and agreeable stimulation of a sparkling wine, and who are not so foolish as to despise a thing because it is not outrageously dear. There is no doubt that, for exhilaration under temporary depression, a sparkling wine is as effective and wholesome as it is agreeable—during convalescence from fevers, for instance, and when the appetite of aged and feeble persons is failing. The sagacious Medical Practitioner who attends persons of moderate means will be glad to recommend them a wine that will suit the stomach as well as the pocket. The agent receives the wine *viâ* Dieppe and Littlehampton, and is conveniently situated for trade throughout Sussex.

SPARKLING WINE FROM MAINE-ET-LOIRE.

We feel bound to notice an admirable specimen of sparkling wine which we received long enough ago to enable us to report that it has good keeping qualities. It is a good, clean, palatable, unpretending wine, which will take the place of cheap champagne. Any one who desires the economic advantage of buying first-hand, may address M. Ackerman Laurance, à St. Florent-sur-Thouet, Maine-et-Loire, France, and may reckon on having a sound sparkling wine at very moderate cost.

AULDANA WINE.

Whilst writing these casual notes on wine, we must call our readers' attention to the Auldana from South Australia, both red and white—the former smooth, full-bodied, and eminently nutritive.

A Hint to Widow Ladies.—A widow lady, writing to the Secretary of the Benevolent Fund of the French Medical Association, suggests that as one of its chief objects is to give succour to poor widows of Medical men, widows in moderate or in easy circumstances would do well to come forward to its aid with even small annual subscriptions. She states that she is quite ready to subscribe herself, and does not doubt that many others only want to have their attention drawn to the matter to induce them to follow her example.

NEW BOOKS, WITH SHORT CRITIQUES.

A Treatise on Asiatic Cholera. By C. Macnamara, Surgeon to the Calcutta Ophthalmic Hospital. London: John Churchill and Sons, New Burlington-street; Calcutta: Thacker, Spink, and Co.; Bombay: Thacker, Vining, and Co. 1870. 8vo. Pp. 557.

*** Mr. Macnamara, after fifteen years' consecutive labour in the endemic area of cholera, has given a history of that disease from the earliest ages down to the present day in a style of scholarly and philosophic research which places the work now before us in the foremost rank of contributions to the literature of cholera. At the present moment the author's opinion as to the probable influence of the Suez canal as a means of transit for cholera from India to Europe is of considerable interest and importance. He expects that without the greatest caution small vessels passing through the canal from India will inevitably be constantly importing the disease into Europe, as they have done into Persia and along the Persian Gulf. Should this be the result of the labours of M. de Lesseps, his claims on the gratitude of mankind will be considerably diminished. In a work containing such a large amount of information an index is of great assistance, and we hope to see one supplied to Mr. Macnamara's book when it appears in a second edition.

The Physician's and Surgeon's Visiting Lists, Diary Almanac, and Book of Engagements for 1870, upon a plan furnished to the publishers by Francis Seymour Haden, Esq. Twenty-fourth year. London: John Smith and Co., Medical Stationers, 52, Long-acre.

*** We welcome another annual issue of this established favourite. It is adapted to the wants of every member of every branch of the Profession, general and special, and furnishes the most useful index to work already done, and to work that is still to do. The tables are useful, especially that for calculating gestation; but, of course, a convenient and portable book must not be expected to be a cyclopædia of general information.

A Manual of Diet for the Invalid and Dyspeptic, with a Few Hints on Nursing. By Duncan Turner, L.R.C.P., Medical Officer of St. Peter's District, Islington. London: Churchill. 1869.

*** A very useful little book, written in good taste. Its value is enhanced by a collection of excellent receipts for sick cookery. We would suggest, however, that in any future edition the author should omit his remarks on the medicinal treatment of dyspepsia, as the work is intended for popular use. Suppose a patient should employ the wrong prescription!

MEDICAL NEWS.

Royal College of Physicians of London.—At an extraordinary meeting on Wednesday, the 22nd inst., the following gentlemen, having conformed to the bylaws and regulations and passed the required examinations, had licences granted to them to practise Physic, including therein the practice of Medicine, Surgery, and Midwifery:—

Abbott, George, Guy's Hospital, S.E.
Austen, Josiah, Surgeon R.N., Vale House, Ramsgate.
Crook, John Evelyn, M.D., Northfleet, Kent.
Dilly, Joseph Hardiug, Kingston-Bagpuize, Abingdon.
Hardey, Edward Peirce, 35, Westbourne-grove, W.
Harris, Robert, 1, Darnley-road, Hackney, N.E.
Harrison, Henry Frank Egbert, St. Mary's Hospital, W.
Inman, Robert Matthews, Redbourn, St. Alban's.
Knight, Thomas, M.B., Brill, Bucks.
Litchfield, Henry Robert Campbell, Augusta-villa, Twickenham, S.W.
Miller, Frederick Montague, Claremont-villa, Stoke Newington-road, N.
Robertson, Frederick Marrant, Guy's Hospital, S.E.
Rudge, Charles King, 2, Redland-vale, near Bristol.
Sainter, James Dow, Staff Assistant-Surgeon Army, 2, Ladbroke-road, Notting-hill-gate, W.
Sloman, Samuel George, St. Bartholomew's Hospital, E.C.

Apothecaries' Hall.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, December 16, 1869:—

Barnes, Edgar George, Hammersmith.
Drew, George Frederick Augustus, Plymouth.
Ling, John Milford, Saxmundham.
Napper, Albert Arthur, Cranleigh, Guildford.
Palmer, Frederick Stephen, Brixton.
Pearse, Francis James, St. George's-square, S.W.
Sheard, William, Alford, Lincolnshire.

The following gentlemen also, on the same day, passed their First Professional Examination:—

Clark, Frederick, St. Thomas's Hospital.
Willcocks, Isaac, St. Bartholomew's Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Hosford, Thomas S., late House-Surgeon to the London Hospital.—House-Surgeon to the Training Hospital, Tottenham.

Symons, Henry Edwaan, M.R.C.S.E.—House-Surgeon to St. Bartholomew's Hospital.

MILITARY APPOINTMENTS.

War Office.—The following appointments have been made:—Assistant-Surgeon Joseph Marmaduke Taylor, from the Royal Artillery, to be Assistant-Surgeon, *vice* John Astley Bloxam, resigned; December 22. 2nd Dragoons: Surgeon Peter Nevill Jackson, from 31st Foot, to be Surgeon, *vice* Surgeon-Major John Mullins, who retires upon half-pay; December 22. 31st Foot: Staff-Surgeon Thomas John Tucker to be Surgeon, *vice* Peter Nevill Jackson, appointed to the 2nd Dragoons; December 22. 92nd Foot: Staff Assistant-Surgeon Frederick Lyons, M.D., to be Assistant-Surgeon, *vice* Samuel Black Roe, M.B., promoted on the Staff; December 22. Medical Department: Assistant-Surgeon Samuel Black Roe, M.B., from 92nd Foot, to be Staff-Surgeon, *vice* Thomas John Tucker, appointed to 31st Foot; December 22.

Brevet.—Surgeon-Major John Mullins, half-pay, late 2nd Dragoons, to have the honorary rank of Deputy Inspector-General of Hospitals; December 22.

Commissions Signed by Lords Lieutenant.—County of Carmarthen.—1st Administrative Battalion of Carmarthenshire Rifle Volunteers: David Rees Watkins, Gent., to be Surgeon; December 17. 5th Carmarthenshire Rifle Volunteer Corps: Honorary Assistant-Surgeon Benjamin Thomas to be Assistant-Surgeon; December 17.

BIRTHS.

Bucknill.—On December 13, at Holly House, Rawtenstall, Lancashire, the wife of Dr. E. Bucknill, of a daughter.

Cuaaey.—On Dec. 15, at Lismore, county Waterford, Ireland, the wife of Dr. Currey, of a son.

Griffith.—On the 18th inst., at Portmadoe, North Wales, the wife of Samuel Griffith, M.D., of a son, stillborn.

Roainson.—On December 17, at Kinsale, Ireland, the wife of Frederick Robinson, M.D., Scots Fusilier Guards, of a son.

Woodhouse.—On December 19, at Ranelagh Lodge, Fulham, the wife of Thomas James Woodhouse, M.D. Lond., F.R.C.S., of a son.

MARRIAGES.

Allin—Robinson.—On December 9, at Hazelwood, near Kingsbridge, Devon, John Wesley Allin, M.R.C.S., only son of the Rev. J. Allin, of Bridgend, Wales, to Hannah Peek Robinson, eldest daughter of the late Charles Robinson, Esq., Auckland, N.Z.

Duke—Knocker.—On December 15, at All Saints' Church, Hull, Edwin Duke, M.R.C.S., L.R.C.P., of Dover, to Caroline Wollaston, daughter of the late J. B. Knocker, Commander R.N.

Hart—Gates.—On December 1, at New Shoreham, Sussex, Eugene John Hart, M.R.C.S., third son of the late Edward Hart, Esq., to Clara Jane, eldest daughter of Thomas Gates, Esq., of New Shoreham.

Millea—Cream.—On December 21, at St. Mark's, Surbiton, Walter William Miller, M.D., of Eye, Suffolk, to Emily, widow of the late Charles Cream, Esq., of Eye.

Woodhouse—Batson.—On November 6, at Dinapore, Lieutenant H. O. Woodhouse, 105th Light Infantry, son of the late Lieutenant-Colonel R. R. Woodhouse, Bombay Army, to Lydia Charlotte Batson, youngest daughter of the late Stanlake Henry Batson, M.D., Surgeon-Major, retired, Bengal Medical Service.

DEATHS.

Cathrow, George, Surgeon, late of 42, Weymouth-street, Portland-place, at Stoke Lodge, Bucks, on Dec. 15, in his 83rd year.

Chapman, George, Surgeon, at Lingfield, Surrey, on the 14th inst., in his 80th year.

Formay, Charlotte, widow of the late Richard Formby, M.D., at Shorrocks-hill, Formby-point, Liverpool, on December 17, aged 82.

Moore, George, M.R.C.S., etc., late a Resident Surgeon of the General Dispensary, Birmingham, on board the *Newcastle*, on his voyage to India, on Oct. 3, aged 24.

Rushea, Ann Gowea, wife of James G. Rusher, Surgeon, at Pershore, Worcestershire, on Dec. 14.

Searle, George Clive, eldest son of George Clive Searle, Surgeon, Milner-square, Islington, on board the *Renown*, on his voyage to the Cape, on October 26, aged 27.

Smith, Nathaniel, F.R.C.S., late of Clifton, at Weston-super-Mare, on December 20, in his 88th year.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

Borough of Ipswich Lunatic Asylum.—Resident Medical Superintendent. Applications and testimonials to the Town Clerk's office, Ipswich, addressed to "The Lunatic Asylum Committee," on or before January 15, 1870. The Asylum will be ready for occupation in April or May.

British Lying-in Hospital, Endell-street, Long-acre.—Honorary Physician. Applications and testimonials to the Secretary, at the Hospital.

Charing-cross Hospital (West Strand).—Registrar. Must be qualified and registered. Applications and testimonials to H. Woolcott, Esq., Secretary, on or before January 19, 1870.

Chesterfield and North Derbyshire Hospital and Dispensary.—House-Surgeon and Dispenser; must be legally qualified. Applications and testimonials to the Secretary, Mr. J. W. Fearn, Newhould-road, Chesterfield, on or before January 4, 1870.

Dorking Union.—Medical Officer for the Upper District. Candidates must have the qualifications prescribed by the general orders of the Poor-law Board. Applications and testimonials to Mr. M. Smallpiece, Clerk, Guildford, on or before January 5, 1870. Election on the 6th.

Down District Lunatic Asylum, Downpatrick.—Resident Medical Assistant; must be qualified and be unmarried. Applications and testimonials to the Resident Physician on or before December 30. Election on January 1, 1870.

German Hospital, Dalston.—Honorary Medical Officers, an Honorary Physician, and an Honorary Assistant-Surgeon. They must both be natives of Germany, or prove themselves fully conversant with the German language. Candidates must produce a diploma from a British or foreign university. Applications and testimonials to the Honorary Secretary on or before January 3, 1870.

Gloucester County Asylum.—Junior Medical Assistant. Must possess one qualification, and be registered. Applications and testimonials to Mr. E. Toller, at the Asylum. The duties will commence about the middle of January.

Hospital for Women, Soho-square.—House-Physician. Must be M. or L.R.C.P., or a graduate in Medicine of some University. Applications and testimonials to the Medical Committee on or before the 31st inst.

Middlesex Hospital.—Surgical Registrar. Must be M. or F.R.C.S.E., not engaged in general practice. Applications and testimonials to the Secretary, on or before January 8, 1870.

St. Mary's Hospital and Dispensary for Women and Children, Manchester.—Resident Medical and Surgical officer; must have both Medical and Surgical qualifications and be registered. Applications and testimonials to the Secretary, 41, John Dalton-street, Manchester, on or before the 31st inst.

Sunderland Infirmary and Dispensary.—Junior House-Surgeon; must possess both Medical and Surgical qualifications and be registered. Applications and testimonials to the Secretary on or before January 26, 1870. Election on February 3.

University of London.—Assistant-Registrar. Applications and testimonials to W. B. Carpenter, Esq., 17, Savile-row, W., on or before March 1, 1870. The duties will commence on May 1, 1870.

Westminster Hospital.—Resident House-Physician; must be qualified to practise under the Medical Registration Act of 1858. Applications and testimonials to the Secretary on or before the 23rd inst. Election on January 4, 1870.

POOR-LAW MEDICAL SERVICE.

APPOINTMENTS.

Atherstone Union.—William McBeath, M.D. Ireland, M.C. Ireland, to the Polesworth District.

Bourn Union.—Benjamin L. Powne, M.R.C.S.E., L.S.A., to the Billingborough District.

Isle of Thanet Union.—Robert Hicks, M.R.C.S.E., L.S.A., to the Ramsgate District.

North Witchford Union.—Thomas O'Connor, M.R.C.S.E., L.S.A., to the Third District.

Royal College of Surgeons.—The Jacksonian Committee of the present collegiate year, like that of the last, are likely to enjoy a sinecure, seeing that up to the moment of going to press not a single essay had been sent in for the Jacksonian Prize of twenty guineas, on "Aneurism by Anastomosis, the various Forms of this Disease, and the different Methods of Treatment." No award for this prize has taken place since 1867, and, as the pecuniary value for the next and succeeding years will be reduced from £21 to between £9 and £10 (the amount of the dividend received from the trust), it is not likely the number of competitors will be increased by Christmas, 1870, when the subject of the essay will be "Hæmorrhagic Diathesis, and Spontaneous and Accidental Hæmorrhage," a subject of much interest. The Collegial Triennial Prize is open until Christmas, 1870, and consists of the John Hunter Medal, executed in gold to the value of fifty guineas, or, at the option of the successful author of the dissertation, of the said medal executed in bronze with an honorarium of £50. The subject for the prize is "The Anatomy and Physiology of the Organs of Taste and Smell in the Mammalia," to be illustrated by preparations and drawings. No award for this prize has taken place since 1858.

Apothecaries' Hall, Ireland.—The subject for the next annual prize, to be competed for May 2, is "The Metals in the British Pharmacopœia, their Chemistry, Pharmacy, and Toxicology."

British and German Spirits disguised as Spanish Sherry.—"Brandy is scarce and dear, and for common wines I hear Berlin spirit is being imported; and, knowing the prejudice which exists in England among wine merchants against Cadiz wines so fortified, and seeing that the operation can be performed on your side at a great saving of expense, I do not fancy the import will be large or the speculation a lucrative one."—*Wine Trade Review.*

The new North Staffordshire Infirmary has been formally opened by the Duchess of Sutherland.

Dr. Lankester held an inquest on Wednesday, on an old woman who died in St. Pancras Workhouse on Monday in consequence of having administered to her a dose of calomel which was intended for a young patient. The deceased was suffering from carbuncle. The jury returned a verdict of death from misadventure.

Bad Weather in Iceland.—We have had a very cold summer, as the Greenland ice lay outside in the north and east from the end of March to August 20—a very unwelcome guest at this time of the year. I have noted the storms as usual. Of these, during the period, the storm about the middle of September was the most violent I can remember to have occurred here. Its duration was almost unexampled; for it may be said that it blew continuously at sea, outside from the coast, from the 10th to the 22nd of the month, although there were occasional lulls here at Stykkisholm. A ship which lay in the harbour was obliged to cut away her masts—a circumstance which is unexampled here. The great cold had a very bad effect on the growth of grass, especially on the east and north coasts, and all kitchen vegetables have miscarried this season. With one or two exceptions, this unwelcome visitor has annually shown itself here since 1859.—*A. O. Thorlacius, Esq., Stykkisholm, Iceland.*

Anthropological Society of London.—At the ordinary meeting held on the 14th inst., Dr. Charnock, V.P., in the chair, Mr. Wake read a paper on "The Race Affinities of the Madecasses." The agreement of the Hovas with the other inhabitants of Madagascar in language and customs forbids us to refer the former to Malayan origin. Moreover, the division into dark and light tribes is found in the Malayan Archipelago, and also in South Africa. Comparison of physical and mental characters, and of customs and superstitions, shows that the dark Madecasses, the Kafirs, and the Papuans, all belong to the same race. By a similar comparison, an analogous affinity between the Hovas, the Hottentots, and the Malays (as representative of whom the paper took the Siamese), can be established. The South African relationship of the Madecasses is supported by the verbal and grammatical affinity of the Malagasy to the Kafir and Hottentot dialects, which are shown to be related between themselves, and also to the Polynesian dialects. The arrangement of peoples on the African area is opposed to the idea of a continental origin of the Madecasses, while their numerous African affinities prevent their being traced to a Malayan source. The Madecasses are more really *autochthonous* than any other race, except the aborigines of Australia, and probably Madagascar was connected with both the African Continent and the Malay Archipelago, when it was first inhabited by man. The inhabitants of Madagascar possess the domestic ox, sheep, and fowl, and are skilled in the smelting and working of iron, and this island was probably the seat of man's primitive civilisation.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

*** We have received no response whatever to our queries regarding the "National Infirmary for Diseases of the Heart." We again ask where a balance-sheet of the receipts and expenditure is to be seen, and who are responsible for this expenditure. The last annual report boasts of the conveniences of the wards. How many patients have been treated in these wards during the past year?

Dr. A. M. Ballo?'s curious and interesting paper on buttermilk as food for infants shall appear as soon as possible.

A Scientific Practitioner.—Next week.

Mr. Haynes Walton's short clinical lectures on the Diagnosis and Treatment of Eye Disease, delivered in the out-patient room at St. Mary's Hospital, will appear immediately.

Dr. Camphell on Gallstones, Dr. Macpherson on the Fatality of Cholera in India, Professor Fayrer on Ligature of the External Iliac Artery, and Dr. Russell on the Treatment of Chorea with Chloral, are in the printers' hands, and shall appear as soon as possible.

Duplay's Rhinoscope may be procured of Mr. Hawksley, instrument maker, Blenheim-street, London, W.

A General Practitioner.—You will find Letts's Medical Diary and Letts's Ledger most useful. By using them half the trouble of bookkeeping is removed. The diary also contains capital tables for calculating midwifery and vaccination engagements. The editor has bestowed great pains on it to make it a complete *vade-mecum* for the busy Practitioner.

How to Age Spirits.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The following advertisement appeared a few months back in the papers circulated in the wine trade :—

"Improved Prune Wine
" For Fining, Maturing, and Colouring Wines and Spirits.
" *Testimonials.*
"Distillery, Melbourne, 1867.

" Gentlemen,—I have experimented with the 'prune wine' on two samples of whisky with very satisfactory results. In one instance the spirits were fresh from the still, and the improvement was very marked. The *acrid fiery taste entirely disappeared*, the flavour became mellow and pleasant, and I should have no difficulty in placing spirits so treated at *once* on the market . . . . as the advantage of converting *raw spirits* into a *merchantable commodity is obvious enough.*"

Would any of your readers give their opinion as to the effect of this article upon new spirits so far as the consumer is concerned? Does it destroy or merely cover the fusel oil contained in new spirit? The marvellously low figure at which we see old spirits advertised favours the impression that such agency has been employed—whether for the good of the drinking public your readers will perhaps state. I am, &c.

One who has hitherto allowed Spirits to acquire Age.

Brecon, December 17.

John Hunter.—In the notice last week respecting the death of our great physiologist, through the printer's error, it is made to appear as taking place at Guy's instead of St. George's Hospital.

M.D., Southampton.—We understand that the remains of the late Mr. Peabody were embalmed by Dr. Pavy.

Wine and Alcohol.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In your last issue appears an article stating large quantities of raw spirits are exported from this country to Spain; and you challenge advocates of a reduction of duty on foreign strong wines to state how the Spaniards use this spirit. Your informant seems unaware of the enormous exportation of common wines from the southern ports of Spain to South America. The quantity of Spanish wine exported to the River Plate, Brazil, etc., exceeds 100,000 pipes per annum; supposing that 5 or 6 per cent. of alcohol be added, the quantity of spirit required would be 5000 to 6000 pipes, or, in round numbers, 600,000 gallons. Your inquiry is thus answered.

Allow me to repeat what I quoted in my last letter (published in page 701 of your issue last Saturday)—that spirits added to the must during fermentation combine so thoroughly with it as to become part of the wine, and therefore digestible. I do not maintain that all spirits used in Spain are thus employed, but by far the largest proportion is. Wines, such as low-class sherries, which may receive extra additions of alcohol after the vintage, are generally common, and fetch but low prices in this country.

Your remarks touching age in alcoholised wines are very just; but a well-fermented wine with small and judicious additions of spirit becomes speedily drinkable, almost as soon as natural French wines, and surely your Medical contributors cannot object to the desirableness of affording an opportunity to the less wealthy classes of Great Britain of obtaining such wines as described at moderate cost. It should be borne in mind the present import of 2s. 6d. per gallon represents an *ad valorem* duty of 100 per cent. on the first cost of good wholesome Tarragona wines, the consumption of which would not have increased to about 20,000 pipes if the wine was not really nutritious and of honest quality; unfortunately, it will not keep its soft flavour, its chief recommendation to the public, unless fortified to a moderate extent. I am, &c. F.

32, Mark-lane, City, December 17.

*** F. clearly admits all that we allege as to the nature and composition of common sherry. We ask again why the gin drinker should be taxed and the sherry drinker escape?

J. J.—If the attendance on the servant was at the specific request of the master, and this can be proved, the charges can be recovered against the master by an action-at-law. It is necessary, however, that the "contract" should be clearly proved. A master is not liable for Medical attendance on his servant merely because he "sends for the Doctor."

Causes of Prostitution.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I have read your article on prostitution (*Medical Times and Gazette*, December 11, 1869) with the interest which the subject and method of treating deserve. Allow me to make a few remarks on your conclusion; I mean on the following lines :—

"Is it too much to ask that the leaders of female society in the metropolis should make a beginning in this direction? that they should refuse admission into their *salons* of the notorious profligate or seducer, just as they would to the same man if he intruded his presence when debased by indulgence in the bottle? that they should extend their disgust to the drunkard, to the man whom they know to be living a sexually immoral life? Till this is done, till the axe is laid to the root of the tree, we have little hope of destroying the vicious trunk by the mere lopping off of its branches."

An exaggerated tolerance towards "débauchés" may be one of the causes which induce the evil. I think, however, there are more important causes which deserve mentioning.

First I mean the fact that, in many people, the sexual passions are too highly developed and too early awakened. With regard to this, some changes in our manner of living, our diet, choice of books, etc., and in education of children, may be necessary.

Another cause is the exorbitant luxury of women, which causes that relatively a small number of men are able to allow themselves the luxury of marriage. Here it seems that the imperfect education of women is to be accused.

Another important cause of prostitution are the defectuosities of the laws on marriage in most countries. On this subject I have read a very interesting little publication of M. Paul Lacombe (Librairie des Auteurs, Paris). It may be useful to direct your attention and that of your readers to this valuable publication. I am, &c. F. A. Hartsen.

Pau, December 13.

Chloral as a Solvent of Gall-stone.

(*From a Correspondent.*)

This anæsthetic agent, introduced recently by Liebreich, of Berlin, may be given, in doses of from twenty to forty-five drops, every six or eight hours as a solvent of cholesterine contained in the gall-bladder. When chloral, absorbed into the circulation, comes in contact with the alkalies of the blood, the terchloride of formyl, which it contains in a nascent state, is instantly released, and this pure chloroform, carried by the portal veins directly to the acini of the liver, thus mingles with the recently secreted bile, and passes through the hepatic duct into the gall-bladder. It would be desirable to use a purer chloral than that generally to be found in the shops. If gall-stones are wrapped in folds of the intestinal mucous membrane, as sometimes happens, it would be better to give pure Edinburgh chloroform in doses of from twenty to forty drops.

The Privileges of Assistants.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Would you kindly tell me the etiquette of the following case? I wish to suppress names, so will call the persons interested A. and B., A. being the assistant, B. the principal. A. has been with B. upwards of two years, and consequently many people like A. very much, some few stupid ones even preferring him to B. Amongst that number is a Mrs. G., who was expecting her confinement; she engaged A. to attend her. He called this morning about 11 a.m., found her in labour, told her that he would be back shortly, and went to see a few patients in the town. On A. reaching home he found that he had been sent for, and that B. had gone. He, A., went immediately, expecting that B., knowing the patient preferred him, would say, I will leave the case in your hands, Mr.—— But on the contrary A. was told that he need not wait, that he, B., would attend to it. What I want to know is whether "might is right" in such a case, or, if not, what would be etiquette. I am afraid there are a great many assistants treated in the same way as myself, who would be glad to know what is right and proper. Hoping for an answer in your next, I am, &c. A.

*** Without any doubt B. had a perfect right to do as he chose; and A., as his assistant, has no choice but to submit. As a matter of courtesy, or good feeling, or private arrangement, B. might have allowed A. to attend this confinement; but courtesy and good feeling are mutual and insubstantial withal, and cannot be provided for in any arrangement between master and assistant. A. ought to know enough of human nature to feel that no principal likes his subordinate to be too popular, or be anything else than second fiddle. It is the same, not only in businesses and professions where the arrangements are voluntary, but in the Army, Navy, and Church, in which the status of the inferior officers is defined by law. Not long ago we were talking with a clergyman who had, some time since, resigned the curacy of a large West-end parish. He said that at one time he was in great repute with a noble family; the lady had conceived herself greatly benefited by his ghostly ministrations, and entrusted him with large sums for distribution amongst the poor. Soon she asked him to come regularly night and morning, to say prayers with the family, and act as their domestic chaplain, and receive a substantial addition to his income. Our friend was delighted at the proposition, but said he must mention it to the rector, which he did, and, to his disgust, was told by the rector that he would think it over and write himself to Lady ——. So he did, recommending another of his curates for the job. Our friend thought himself ill-used, and appealed to the present Archbishop of Canterbury, then Bishop of London; but it was of no use. He had to learn that the persons who have the responsibility have the choice of executants—much more must this be so in the case of a private Practitioner and his assistant.

F.R.S.—The founder of the Croonian lecture on Muscular Motion at the Royal Society was Dr. Croone, an able anatomist in extensive practice in London. He was elected Reader in Anatomy to the Company of Surgeons in 1670, an appointment he held until his death.

Grenadier Guards.—The late Mr. Guthrie, who died on May 1, 1856, was succeeded on the Court of Examiners by the late Mr. Joseph Hodgson. Neither gentleman made any bequests to the College of Surgeons.

The Effects of Alcohol on Animal Temperature.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I have read with the greatest interest Dr. Richardson's lecture on alcohols, and, seeing good reason to dissent from some of his conclusions, may perhaps be allowed to show sufficient evidence for so doing.

Dr. Richardson says that after the administration of ethylic alcohol, at no stage of the intoxication is there "increase of power in the organism." That "against the idea of active combustion of alcohols in the body is the overwhelming fact of reduction of temperature." That, "speaking honestly, I cannot, by the argument yet presented to me, admit the alcohols through any gate that might distinguish them as apart from other chemical bodies. I can no more accept them as food than I can chloroform, or ether, or methylol. That they produce a temporary excitement is true, but as their general action is to reduce animal heat, I cannot see how they can supply animal force;" and "that they give strength—*i.e.*, that they supply material for construction of fine tissue, or throw force into tissues supplied by other material—must be an error as solemn as it is wide-spread."

Now, as the experiments made by Dr. Richardson, when viewed in the light of recent physiological research, point to opposite conclusions, and at the same time explain in the most satisfactory manner the anomalous action of alcohol in regard to temperature, it seems strange to me that facts which tend so much to illustrate these difficulties should not even be deemed worth mentioning. Dr. Beale, in a recent work on life, force, and matter, details facts relative to the action of alcohol which cannot be ignored. For example, it is well known that alcohol, when applied to the tissues, hardens them, constricts their pores, and renders them less permeable by fluids, etc. It is also equally true that if we seriously diminish the quantity of pabulum which passes through the walls of the vascular system, we must lessen in like proportion all the ordinary phenomena of life in an organism. To go no further at present with these plain facts before us, had we never seen or heard of a single dose of alcohol

having been given to any animal, there would not be much difficulty in conjecturing that if given in large doses or small doses often repeated, or in smaller doses when it is directly injected into the circulation, it should produce its ordinary effects—lessen considerably the amount of pabulum permeating the tissues, proportionally lower the temperature and the natural force of the body. On the other hand, if alcohol be given in sufficiently small doses, or if we regard the animal in that stage after a large dose, before sufficient alcohol has washed through the tissues to produce its usual results, knowing it to be oxidisable—indeed, as much so as ordinary food in the state it is sent into the circulation—it would not be a far-fetched conjecture to say, under these conditions, alcohol will increase the temperature and force of the body. Dr. Richardson's experiments entirely support these views. He is not willing to admit increase of force under any circumstances.

Does Dr. Richardson seriously affirm that neither in his experience nor in that of any other, after partaking of a moderate quantity of good wine, there is such a thing as increased power of faculties, mental and physical? The best way to reply to such an assertion is to use Bishop Butler's argument as to the existence of free will—we know that it is. How can Dr. Richardson correlate loss of force with decrease of heat, and decline to believe in increase of force, while he admits in certain cases the temperature is raised by the administration of alcohol? If, however, we go further with Dr. Beale, the foregoing conclusions are not only forced upon us, but much valuable information is gained in regard to the therapeutic action of other agents in the human organism. I may be permitted here to say that since the publication of Dr. Beale's little work I have seen and exhibited to others preparations showing some of the most interesting phenomena delineated in his book, all of which, I feel bound to say, are most faithfully pictured. Any person with a good microscope who chooses to work in this direction with an unbiassed mind will inevitably arrive at Dr. Beale's conclusions from personal observation of unmistakable facts.

I am, &c.

Maidstone, December 18. W. Smyth, L.R.C.P.

Ohio.—Mr. Lee uses from 10 to 20 grains of calomel.

A. N.—Lumley's Manual for Poor-law Medical Officers.

L.S.A., Southampton.—You will find an account of the utter failure of "Dr. Warburg's fever drops" in the *Medical Times*, vol. xxvii. p. 171.

Dr. O'Flaherty, Clapham-road.—The man is an arrant quack. It was the celebrated Coleridge who said "There unquestionably ought to be a declaratory Act withdrawing expressly from the St. John Longs and other quacks the protection which the law is inclined to throw around the mistakes or miscarriages of the regularly educated Physician." ("Table Talk," vol. ii. p. 97.)

The Apothecaries' Licence.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—You would oblige me very much by replying to the following questions in your next issue of the *Medical Times and Gazette*:—

1. Does the licence of the Apothecaries' Hall, London, qualify the holder of it to practise as an apothecary in Ireland?
2. Will a candidate, who is a Licentiate in Midwifery of the College of Surgeons, Ireland, as well as a graduate in Medicine of a University, be examined in midwifery for the Licence of the Hall?
3. Will such a candidate be examined in chemistry, botany, or pharmacy?
4. Must a candidate for the licence of the Apothecaries' Hall, London, produce a certificate of having been a pupil to a L.S.A., or is it sufficient that he has been a pupil to any registered Practitioner?

December 18. I am, &c. L. H. A.

[1. Yes, if registered. 2. We believe not. 3. Not if a holder of a *British* degree of M.D. 4. We believe that a pupilage to any registered general Practitioner would be accepted.]

COMMUNICATIONS have been received from—

Dr. J. C. L. Carson; Dr. Griffith; Messrs. Letts, Son, and Co.; Dr. F. J. Brown; Mr. C. Reeve; F.; Mr. B. H. Paul; Dr. Thomas Stevenson; L. H. A.; Dr. W. Smyth; Dr. Joseph Rogers; Mr. Berkeley Hill; Dr. E. L. Fenn; Dr. T. Sympson; A Scientific Doctor; A.; Dr. Clough; Dr. S. Griffith; A Country Practitioner; Mr. T. S. Hosford; Dr. H. Osborn; Dr. W. A. Guy; Dr. P. Campbell; Dr. George Johnson; Dr. Lawson; Mr. J. Chatto.

BOOKS RECEIVED—

Hill's Essentials of Bandaging, second edition—Die epidemische Diphtheritis, von Dr. Alban Lutz—Bourne's Indian Works and English Engineers—California Medical Gazette.

NEWSPAPERS RECEIVED—

New York Medical Gazette—Shepton Mallet Journal—Aris's Birmingham Gazette—Western Mail—The London Mirror—North British Daily Mail—Medical Press and Circular—Winchester Herald.

VITAL STATISTICS OF LONDON.

Week ending Saturday, December 18, 1869.

BIRTHS.

Births of Boys, 1145; Girls, 1084; Total, 2229.

Average of 10 corresponding weeks, 1859-68, 2004·0.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	793	773	1566
Average of the ten years 1858-67	714·8	686·1	1400·9
Average corrected to increased population	...	...	1541
Deaths of people above 90	...	...	...

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-cough.	Fever.	Diarrhœa.	Cholera.
West	463388	...	5	11	2	9	7	4	...
North	618210	2	2	40	...	16	9	3	...
Central	378058	1	4	8	...	1	2	3	...
East	571158	4	8	61	2	16	9	1	...
South	773175	1	7	66	4	20	17	3	...
Total	2803989	8	26	186	8	62	41	14	...

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, December 18, 1869, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the year 1869.	Persons to an Acre. (1869.)	Births Registered during the week ending Dec. 18.	Deaths. Corrected Average Weekly Number.	Deaths. Registered during the week ending Dec. 18.	Temperature of Air (Fahr.) Highest during the Week.	Temperature of Air (Fahr.) Lowest during the Week.	Temperature of Air (Fahr.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3170754	40·7	2229	1462	1566	55·8	33·8	44·7	1·23	124
Bristol (City)	169423	36·1	109	76	*96	56·7	31·9	15·2	2·54	257
Birmingham (Boro')	360846	46·1	247	175	199	56·6	31·5	44·1	2·25	227
Liverpool (Boro')	509052	99·7	326	295	321	56·4	34·2	44·3	1·81	183
Manchester (City)	370892	82·7	244	210	*232	55·0	30·6	41·2	2·75	278
Salford (Borough)	119350	23·1	78	60	73	55·9	30·4	41·4	2·54	257
Sheffield (Borough)	239752	10·5	178	126	158	55·2	30·0	41·8	2·76	279
Bradford (Borough)	138522	21·0	91	71	80	...	...	...	...	...
Leeds (Borough)	253110	11·7	226	129	146	55·0	31·0	41·7	2 22	224
Hull (Borough)	126682	35·6	74	59	70	53·0	28·0	38·9	1·77	179
Nwestl-on-Tyne, do.	130503	24·5	86	69	66	54·0	33·0	40·7	0·96	97
Edinburgh (City)	178002	40·2	146	86	124	55·7	32·0	41·3	0·80	81
Glasgow (City)	458937	90·6	355	268	351	53·6	31·5	39·9	2·32	234
Dublin (City, etc.†)	320762	32·9	141	158	148	59·0	33·5	43·7	1·31	132
Total of 14 large Towns	6546587	35·5	4530	3244	3630	59·0	28·0	42·2	1·94	196
Paris (City)	1889842	...	...	...	955 Week ending Dec. 11.	...	...	...	...	...
Vienna (City)	605200	...	...	...	...	Week ending Dec. 11. ...	...	...	...	...

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·360 in. The barometrical reading increased from 28·77 in. on Thursday, Dec. 16, to 29·75 in. on Friday, Dec. 17.

The general direction of the wind was W.S.W., S.W., and S.S.W.

Note.—The population of Cities and Boroughs in 1869 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous.

* The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

† Inclusive of some suburbs.

APPOINTMENTS FOR THE WEEK.

December 25. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 2 p.m.

27. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 1½ p.m.; St. Peter's Hospital for Stone, 2½ p.m.

28. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.

Royal Institution, 3 p.m. Prof. Tyndall, "On Light" (Juvenile Lectures).

29. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.

30. *Thursday.*

Operations at St. George's, 1 p.m. Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

Royal Institution, 3 p.m. Prof. Tyndall, "On Light" (Juvenile Lectures).

31. *Friday.*

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

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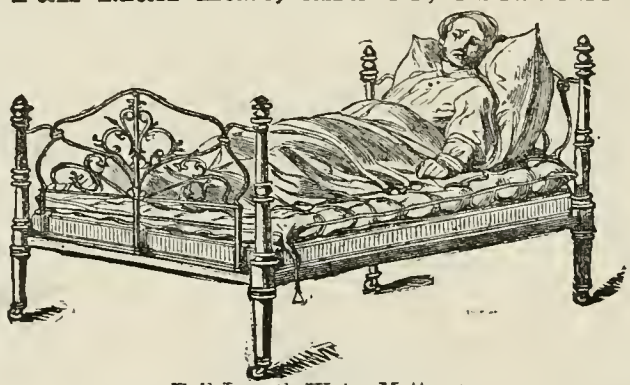

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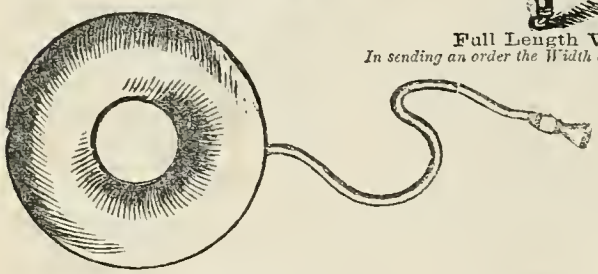
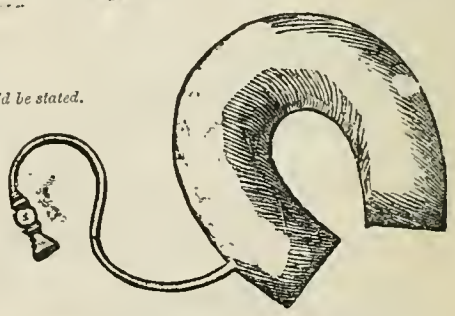


Circular Water Cushion, for sitting on.



Crescent Water Cushion, for the Sacrum.

ELASTIC BAGS, for applying dry cold or dry heat, maintaining their elasticity under all temperatures, from zero to 212° Fahr.

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